The information in this preliminary prospectus supplement is not complete and may be changed. A registration statement relating to these securities has been declared effective by the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JULY 31, 2020

Prospectus Supplement (To Prospectus Dated September 30, 2019, as amended)



Shares of Common Stock

We are offering shares of our common stock pursuant to this prospectus supplement and accompanying prospectus.

Our common stock is presently traded on the Nasdaq Capital Market under the symbol "VTGN." On July 30, 2020, the last reported sale price of our common stock was \$0.87 per share.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page S-4 of this prospectus supplement and under similar headings in the documents incorporated by reference into this prospectus supplement.

| | Per Share | Total |
|---|-----------|-------|
| Public Offering Price | \$ | \$ |
| Underwriting Discounts and Commissions (1) | \$ | \$ |
| Proceeds to VistaGen Therapeutics, Inc. before expenses | \$ | \$ |

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

The underwriters may also purchase up to an additional shares of common stock from us, at the public offering price, less the underwriting discount, within 45 days from the date of this prospectus supplement.

As of July 29, 2020, the aggregate market value of our voting and non-voting common stock held by non-affiliates pursuant to General Instruction I.B.6. of Form S-3 was \$51,388,645 which was calculated based on 55,857,223 outstanding shares of our common stock held by non-affiliates and at a price of \$0.92 per share, the closing sale price of our common stock reported on the Nasdaq Capital Market on July 29, 2020. As a result, we are eligible to offer and sell up to an aggregate of \$14,377,835 of shares of our common stock pursuant to General Instruction I.B.6. of Form S-3. Following this offering, we will have sold securities with an aggregate market value of \$,

including this offering, pursuant to General Instruction I.B.6. of Form S-3 during the prior 12 calendar month period that ends on, and includes, the date of this 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.

Delivery of the shares of common stock will be made on or about , 2020, subject to the satisfaction of certain closing conditions.

Sole Book-running Manager

Maxim Group LLC

, 2020

The date of this prospectus supplement is

VISTAGEN THERAPEUTICS, INC.

TABLE OF CONTENTS

Prospectus Supplement

| | Page |
|---|---------------------------------------|
| About This Prospectus Supplement | S-1 |
| Prospectus Supplement Summary | S-2 |
| Risk Factors | S-4 |
| Cautionary Notes Regarding Forward-Looking Statements | S-7 |
| Use of Proceeds | S-8 |
| Dividend Policy | S-9 |
| Capitalization | S-10 |
| Dilution | S-11 |
| Material U.S. Federal Income Tax Consequences to Non-U.S. Holder | S-12 |
| Underwriting | S-16 |
| Legal Matters | S-20 |
| Experts | S-20 |
| Where You Can Find More Information | S-21 |
| Incorporation of Certain Information by Reference | S-21 |
| Prospectus | Page |
| About This Prospectus | 1 |
| Company Overview | 2 |
| Risk Factors | 6 |
| Cautionary Notes Regarding Forward-Looking Statements | 7 |
| | |
| Use of Proceeds | 8 |
| | 8 9 |
| Description of our Capital Stock | |
| Description of our Capital Stock Description of our Warrants Description of our Units | 9 |
| Description of our Capital Stock Description of our Warrants Description of our Units Description of Certain Provisions of Nevada Law and our Articles of Incorporation and Bylaws | 9 15 |
| Description of our Capital Stock Description of our Warrants Description of our Units | 9 15 18 |
| Description of our Capital Stock Description of our Warrants Description of our Units Description of Certain Provisions of Nevada Law and our Articles of Incorporation and Bylaws | 9 15 18 19 |
| Description of our Capital Stock Description of our Warrants Description of our Units Description of Certain Provisions of Nevada Law and our Articles of Incorporation and Bylaws Plan of Distribution Legal Matters Experts | 9 15 18 19 20 21 21 |
| Description of our Capital Stock Description of our Warrants Description of our Units Description of Certain Provisions of Nevada Law and our Articles of Incorporation and Bylaws Plan of Distribution Legal Matters | 9 15 18 19 20 21 |

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus form a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the SEC) utilizing a "shelf" registration process. This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of this offering. The second part, the accompanying prospectus, provides more general information about the securities we may offer from time to time, some of which may not apply to the securities offered by this prospectus supplement. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. Before you invest, you should carefully read this prospectus supplement, the accompanying prospectus, all information incorporated by reference herein and therein, and the additional information described under "Where You Can Find More Information" on page S-21 of this prospectus supplement. These documents contain information you should consider when making your investment decision. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference therein.

We have not authorized any other person to provide you with any information that is different. We are offering to sell, and seeking offers to buy, our securities only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and/or the accompanying prospectus about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus supplement and/or the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

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

PROS PECTUS 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, the accompanying prospectus and the financial statements and the notes thereto 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 new generation therapies for anxiety, depression and certain additional central nervous system (*CNS*) disorders for which we believe current treatment options are inadequate, resulting in high unmet need in large and growing markets worldwide. Our pipeline includes three CNS product candidates, PH94B, PH10 and AV-101, each with a differentiated mechanism of action, an exceptional safety profile in all clinical studies to date, and therapeutic potential in multiple CNS indications. We are currently preparing PH94B for Phase 3 clinical development for the acute treatment of adult patients with social anxiety disorder (*SAD*). We are also preparing PH94B for an exploratory Phase 2A open-label study in adult patients experiencing adjustment disorder with anxiety (*AjDA*). PH10 has completed successful exploratory Phase 2A development as a novel treatment for major depressive disorder (*MDD*). We are currently preparing PH10 for Phase 2B development as a potential stand-alone treatment for MDD. In several clinical studies, we have established that AV-101 is orally available and has an excellent safety profile. Based on successful preclinical studies involving AV-101 alone and in combination with probenecid, we are currently assessing potential Phase 1B and subsequent Phase 2A development of AV-101, in combination with probenecid, for treatment of depression and several other CNS indications involving the NMDAR (*N-methyl-D-aspartate receptor*). Additionally, our subsidiary, VistaStem Therapeutics (*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 medicine for large and growing neuropsychiatry and neurology marke

Our Product Candidates

We believe that PH94B is a novel, first-in-class neuroactive nasal spray with therapeutic potential in a wide range of indications involving anxiety or phobia. Self-administered in microgram doses, PH94B does not require systemic uptake and distribution to produce its rapid-onset anti-anxiety effects. We are initially developing PH94B as a potential fast-acting, non-sedating, non-addictive new generation acute treatment of SAD, as well as AjDA. With its rapid-onset pharmacology, lack of systemic exposure and excellent safety profile, we believe that PH94B also has potential as a novel treatment for postpartum anxiety (*PPA*), post-traumatic stress disorder (*PTSD*), preoperative anxiety (*POA*), panic disorder and other anxiety-related disorders.

PH10 is an odorless, fast-acting synthetic neurosteroid delivered intranasally that has therapeutic potential in a wide range of neuropsychiatric indications involving depression. Self-administered in microgram doses, PH10 does not require systemic uptake and distribution to produce its rapid-onset antidepressant effects. We are initially developing PH10 as a potential fast-acting, non-sedating, non-addictive new generation treatment of MDD. With its rapid-onset pharmacology, lack of systemic exposure an exceptional safety profile, we believe that PH10 also has potential as a novel treatment for postpartum depression (*PPD*), treatment-resistant depression (*TRD*) and suicidal ideation (*SI*).

We believe that AV-101 (4-Cl-KYN) is a novel, oral prodrug that targets 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 (7-Cl-KYNA), is 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 receptor like ketamine and other NMDAR antagonists. We have demonstrated in clinical trials that AV-101 is orally-available, well-tolerated and does not cause dissociative or hallucinogenic psychological side effects or safety concerns similar to those that may be caused by other NMDAR antagonists. With just a few side effects and excellent safety profile, we believe that AV-101 has potential to be 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 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 assessing AV-101's potential in combination with probenecid, to treat both MDD and NP, as well as dyskinesia associated with levodopa therapy for Parkinson's disease, epilepsy and suicidal ideation.

VistaStem is applying pluripotent stem cell (*hPSC*) technology and CardioSafe 3D, our customized cardiac bioassay system, to discover and develop, novel 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.

VistaStem, a California corporation, is our wholly-owned subsidiary. 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

Spring 2020 Private Placement

During April 2020, in a self-placed private placement and pursuant to a subscription agreement between us and an accredited investor, we sold to such investor units, at a purchase price of \$0.40 per unit, consisting of 125,000 unregistered shares of our common stock and warrants to purchase up to 125,000 unregistered shares of our common stock at an exercise price of \$0.50 per share and a term through April 30, 2024 (the *Spring 2020 Private Placement*).

Common Stock Purchase Agreement with Lincoln Park

On March 24, 2020, we entered into a purchase agreement and a registration rights agreement with Lincoln Park Capital Fund (*LPC*) pursuant to which LPC committed to purchase up to \$10,250,000 of our common stock at market-based prices over a period of 24 months (the LPC Agreement). On March 24, 2020, we sold 500,000 unregistered shares of our common stock (the *Initial Purchase Shares*) to LPC under the purchase agreement at a price of \$0.50 per share for gross cash proceeds of \$250,000 (the *Initial Purchase*) and we also issued 750,000 unregistered shares of our common stock to LPC under the terms of the LPC Agreement (the *Commitment Shares*). To satisfy our obligations under the registration rights agreement, we filed a Registration Statement on Form S-1 (File No. 333-237514) (the *LPC Registration Statement*) with the SEC on March 31, 2020, which the SEC declared effective on April 14, 2020 (the *Commencement Date*). The LPC Registration Statement included registration of the Initial Purchase Shares and the Commitment Shares. Subsequent to the Commencement Date and through July 30, 2020, we sold an additional 6,301,995 registered shares of our common stock to LPC and received aggregate gross cash proceeds of \$2,891,200 (the *Lincoln Park Agreement Shares*). At July 30, 2020, there were approximately 2.0 million registered shares of common stock remaining available for sale under the LPC Agreement.

PH94B Sublicense Agreement with EverInsight Therapeutics

On June 24, 2020, we entered into a strategic licensing and collaboration agreement for the clinical development and commercialization of PH94B with EverInsight Therapeutics Inc., a biopharmaceutical company focused on developing and commercializing transformative pharmaceutical products for patients in Greater China and other parts of Asia (the *EverInsight Agreement*). Under the terms of the EverInsight Agreement, EverInsight will be responsible for clinical development, regulatory submissions and commercialization of PH94B for treatment of SAD, and potentially other anxiety-related indications, in markets in Greater China, South Korea and Southeast Asia. EverInsight will make a non-dilutive upfront payment of \$5.0 million to us, and we are eligible to receive additional development and commercial milestone payments in the future, upon successful attainment of specific milestones. We expect to receive net cash proceeds of approximately \$4.655 million, after sublicense and consulting payments which we are obligated to make pursuant to our PH94B license from Pherin Pharmaceuticals and a business development consulting agreement. On June 24, 2020, we issued 233,645 unregistered shares of our common stock, valued at \$125,000, as partial compensation to a consultant for business development services related to the EverInsight Agreement (the *EverInsight Services Shares*).

2019 Employee Stock Purchase Plan

Following the approval of our 2019 Employee Stock Purchase Plan (the 2019 ESPP) by our stockholders in September 2019, the 2019 ESPP became operational effective January 1, 2020. Under our 2019 ESPP, shares of our common stock are available for purchase by eligible employees who participate in the plan. Eligible employees are entitled to purchase, by means of payroll deductions, limited amounts of our common stock at a discount to the market price during periodic option periods under the 2019 ESPP. The initial option period under the 2019 ESPP was completed on June 30, 2020 and participating employees purchased an aggregate of 28,125 shares of our registered common stock (the ESPP Shares) at a price of \$0.448 per share in accordance with the provisions of the 2019 ESPP.

Warrant Exercises

During July 2020, certain holders of outstanding warrants to purchase shares of our common stock at an exercise price of \$0.50 per share exercised such warrants to purchase 228,000 registered shares of our common stock (the *Warrant Exercise Shares*). We received aggregate cash proceeds of \$114,000 from such exercise.

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*. 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

VistaGen Therapeutics, Inc. Common Stock Offered by Us shares if the underwriters exercise in full their option to purchase additional shares (or

shares).

Option to Purchase Additional Shares We have granted the underwriters a 45-day option to purchase up to additional shares of common stock

at the public offering price, less underwriting discounts and commissions.

Common Stock to be Outstanding Immediately After this Offering

Issuer

Risk Factors

shares (or shares if the underwriters exercise in full their option to purchase additional shares).

Use of Proceeds We intend to use the net proceeds from this offering primarily for research and development expenses

associated with continuing development of PH94B, PH10, AV-101, potential drug rescue candidates, and

for other working capital and capital expenditures. See "Use of Proceeds" on page S-8.

Investing in our common stock 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" in 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."

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 56,159,807 shares outstanding as of July 30, 2020. The number of shares outstanding as of July 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 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;
- 26,361,834 shares of common stock that have been reserved for issuance upon exercise of outstanding warrants, with a weighted average exercise price of \$1.65 per share:
- 11,948,088 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 \$1.21 per share;
- 4,785,162 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.

Unless otherwise indicated, this prospectus supplement reflects and assumes no exercise by the underwriters of their option to purchase additional shares of common stock and no exercise and/or conversion of any outstanding derivative securities as of July 30, 2020.

RISK FACTORS

Our Annual Report on Form 10-K for the fiscal year ended March 31, 2020, 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, and may continue to adversely impact our business.

In recent months, a new strain of coronavirus (*COVID-19*) has spread to many countries in the world and the outbreak has 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 U.S. in response to the outbreak. Considerable uncertainty still surrounds the COVID-19 virus 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 coronavirus 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 ultimate geographic spread of the virus, the severity of the disease, the duration of the outbreak, and the length and scope of the travel restrictions and business closures imposed by the governments of impacted countries. The continued outbreak of COVID-19, or another infectious disease with similar characteristics, 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 outbreak has had an impact on our business, and a continuing outbreak or future outbreaks may have several adverse effects on our business, results of operations and financial condition.

- **Delayed product development:** We have, 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 U.S. 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.
- Negative impacts on our suppliers and employees: COVID-19 or similar infectious diseases 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 market conditions and general economic environment. 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. Continued outbreaks of COVID-19 or a significant outbreak of contagious diseases 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 shares of our common stock sold in this offering, you will experience immediate and substantial dilution in your investment. In addition, we may issue additional equity or equity-linked securities in the future, which may result in additional dilution to you.

The price per share of our common stock 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 share and our net tangible book value as of March 31, 2020 of approximately \$(0.12) per share, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of approximately \$ per share, representing the difference between the public offering price per share and the net tangible book value per share of our common stock as of March 31, 2020 after giving effect to this offering. See the section entitled "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, 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 July 30, 2020, we have 56,129,807 shares of common stock outstanding, as well as outstanding options to purchase an aggregate of 11,948,088 shares of our common stock at a weighted average exercise price of \$1.21 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 preferred stock, and outstanding warrants to purchase up to an aggregate of

26,361,834 shares of our common stock at a weighted average exercise price of \$1.65 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 the net proceeds from this offering in ways that you and other stockholders may not approve.

Our management will have broad discretion in the use of the net proceeds, including for any of the purposes described in the section entitled "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.

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.

This offering could result in a significant limitation on our ability to utilize our net operating loss carryforwards to offset future taxable income.

As of March 31, 2020, we had federal and state net operating loss carryforwards (*NOLs*) of approximately \$125.1 million and \$64.1 million, respectively, which begin to expire in our fiscal year ending March 31, 2021. Under Section 382 of the Internal Revenue Code of 1986, as amended (the *Code*) changes in our ownership may limit the amount of our net operating loss carryforwards that could be utilized annually to offset our future taxable income, if any. This limitation would generally apply in the event of a cumulative change in ownership of our stock (for Code Section 382 purposes) of more than 50% within a three-year period. Any such limitation may significantly reduce our ability to utilize our net operating loss carryforwards and tax credit carryforwards before they expire and could have a material adverse effect on our results of operations in future years. We have not assessed whether such an ownership change has previously occurred and it is possible that this offering could result in an ownership change.

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 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) for continued listing on the Nasdaq Capital Market. Nasdaq Listing Rule 5550(a)(2) 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 Nasdaq Listing Rule 5550(a)(2) (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 now have until October 12, 2020 to regain compliance with the Bid Price Rule. If we do not regain compliance with the Bid Price Rule by October 12, 2020, an additional 180 days may be granted to regain compliance, so long as we meet the Nasdaq Capital Market continued listing requirements (including the MVLS Rule (defined below)) and notify Nasdaq in writing of our intention to cure the deficiency during the second compliance period. If we do not qualify for the second compliance period or 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.

In addition, on March 30, 2020, we were notified by Nasdaq that we were 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. Under Nasdaq Listing Rule 5810(c)(3)(C), we have a period of 180 calendar days, or until September 28, 2020, to regain compliance with the MVLS Rule. To regain compliance, during this 180-day compliance period, the market value of our listed securities must be \$35 million or more for a minimum of 10 consecutive business days.

No assurance can be given that we will meet applicable Nasdaq continued listing standards. Failure to meet applicable Nasdaq continued listing standards could result in a delisting of our common stock, which could materially reduce the liquidity of our common stock and result in a corresponding material reduction in the price of our common stock. In addition, delisting could harm our ability to raise capital through alternative financing sources on terms acceptable to us, or at all, and may result in the inability to advance our drug development programs, potential loss of confidence by investors and employees, and fewer business development opportunities.

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 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;
- 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 U.S. and foreign countries;
- the performance of our third-party contractors involved with the manufacturer 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; 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, 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 (or approximately \$\) million if the underwriters exercise their option to purchase additional shares in full), in each case, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

We currently intend to use the net proceeds from the sale of the shares of common stock offered by this prospectus supplement to fund continued development of our CNS pipeline programs, and for general research and development, working capital and general corporate purposes.

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.

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 July 31, 2020, accrued dividends on our Series B 10% Convertible Preferred Stock total approximately \$5.46 million.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of March 31, 2020:

- on an actual basis;
- on a pro forma basis giving effect to the issuance of shares of common stock and warrants and the receipt of proceeds, each as applicable, in connection with the Spring 2020 Private Placement, the Lincoln Park Agreement Shares, the EverInsight Services Shares, the ESPP Shares and the Warrant Exercise Shares; and
- on a pro forma, as adjusted basis giving effect to the sale and issuance by us of shares of common stock in this offering, at a public offering price of \$ per share, after deducting the underwriting discount and commissions, and estimated offering expenses payable by us.

| As of March 31, 2020 | | | | Pro forma, as |
|--|---------------|----|-----------|---------------|
| (amounts in dollars and in thousands, except share and per share amounts) | Actual | Pı | ro forma | adjusted |
| Cash and cash equivalents | \$ 1,355 | \$ | 4,361 | \$ |
| | | | | |
| Stockholders' equity (deficit): | | | | |
| Preferred stock, \$0.001 par value, 10,000,000 shares authorized: | | | | |
| Series A Preferred, 500,000 shares authorized and outstanding, actual, pro forma and pro forma, as adjusted | \$ 1 | \$ | 1 | \$ 1 |
| Series B Preferred, 4,000,000 shares authorized and 1,160,240 shares outstanding, actual, pro forma and pro | | | | |
| forma, as adjusted | 1 | | 1 | 1 |
| Series C Preferred, 3,000,000 shares authorized and 2,318,012 shares outstanding, actual, pro forma and pro | | | | |
| forma, as adjusted | 2 | | 2 | 2 |
| Common stock, \$0.001 par value, 175,000,000 shares authorized; 49,348,707 shares issued, actual; 56,265,472 | | | | |
| shares issued, pro forma; shares issued, pro forma, as adjusted | 49 | | 56 | |
| Additional paid-in capital | 200,093 | | 203,184 | |
| Treasury stock, at cost, 135,665 shares, actual, pro forma and pro forma, as adjusted | (3,968) | | (3,968) | |
| Accumulated deficit | (201,907) | | (202,032) | |
| Total stockholders' equity (deficit) | \$ (5,729) | \$ | (2,756) | |
| Total capitalization | \$ (5,729) | \$ | (2,756) | |

The above discussion and table are based on 49,213,042 shares of common stock outstanding as of March 31, 2020 and excludes the following securities:

- 750,000 shares of common stock reserved for issuance upon conversion of 500,000 shares 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 B10% 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;
- 26,555,281 shares of common stock that have been reserved for issuance upon exercise of outstanding warrants, with a weighted average exercise price of \$1.64 per share;
- 10,003,088 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 \$1.36 per share;
- 6,730,162 shares of common stock reserved for future issuance in connection with future grants under our 2019 Omnibus Equity Incentive Plan;
- 1,000,000 shares of common stock reserved for future issuance in connection with the 2019 ESPP; and
- the underwriters' option to purchase additional shares of common stock.

DI LUTION

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 March 31, 2020, our net tangible book value was approximately \$(5,726,400), or approximately \$(0.12) per share.

Pro forma net tangible book value per share represents our total tangible assets less our total liabilities, divided by the number of shares of common stock outstanding as of March 31, 2020, after giving effect to the receipt of net proceeds and issuance of shares of common stock, as applicable, in connection with the Spring 2020 Private Placement, the Lincoln Park Agreement Shares, the EverInsight Services Shares, the ESPP Shares and the Warrant Exercise Shares.

After further giving effect to (i) the pro forma adjustment described above, and (ii) the sale by us of shares of common stock in this offering at a public offering price of \$ per share, after deducting the underwriting discount and commissions, and estimated offering expenses payable by us, our pro forma, as adjusted net tangible book value as of March 31, 2020 would have been 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:

| Public offering price per share: | | \$ |
|---|--------------|----|
| Net tangible book value per share as of March 31, 2020 | \$ (0.12) | |
| Pro forma increase in net tangible book value per share attributable to the (i) Spring 2020 Private Placement, (ii) the Lincoln Park Agreement Shares;(iii) the EverInsight Services Shares;(iv) the ESPP Shares; and (v) the Warrant Exercise Shares | 0.07 | |
| Pro forma net tangible book value per share as of March 31, 2020 | \$ (0.05) | |
| Increase in pro forma, as adjusted, net tangible book value per share after this offering | | |
| | | |
| Pro forma, as adjusted net tangible book value per share after this offering | | |
| | | |
| Dilution in pro forma, as adjusted net tangible book value per share to new investors in this offering | | \$ |

If the underwriters exercise their option to purchase additional shares in full, the pro forma net tangible book value would increase to approximately \$ per share, representing an increase to existing stockholders of approximately \$ per share, and there would be an immediate dilution of approximately \$ per share to new investors.

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 49,213,042 shares of common stock outstanding as of March 31, 2020 and excludes the following securities:

- 750,000 shares of common stock reserved for issuance upon conversion of 500,000 shares 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 B10% 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;
- 26,555,281 shares of common stock that have been reserved for issuance upon exercise of outstanding warrants, with a weighted average exercise price of \$1.64 per share;
- 10,003,088 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 \$1.36 per share;
- 6,730,162 shares of common stock reserved for future issuance in connection with future grants under our 2019 Omnibus Equity Incentive Plan;
- 1,000,000 shares of common stock reserved for future issuance in connection with the 2019 ESPP; and
- the underwriters' option to purchase additional shares of common stock.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a general discussion of the material U.S. federal income tax consequences applicable to non-U.S. holders (as defined herein) with respect to their purchase, ownership and disposition of shares of our common stock issued pursuant to this offering. All prospective non-U.S. holders of our common stock should consult their own tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock.

In general, a non-U.S. holder means a beneficial owner of our common stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or an entity treated as a corporation for U.S. federal income tax purposes, created or organized in the United States or under the laws of the
 United States or of 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 if (i) a U.S. court can exercise primary supervision over the trust's administration and one or more U.S. persons have the authority to control all of the trust's substantial decisions or (ii) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended (the *Code*), existing U.S. Treasury Regulations promulgated thereunder, published administrative pronouncements and rulings of the U.S. Internal Revenue Service, which we refer to as the IRS, and judicial decisions, all as in effect as of the date of this prospectus supplement. These authorities are subject to change and to differing interpretation, possibly with retroactive effect. Any change or differing interpretation could alter the tax consequences to non-U.S. holders described in this discussion.

We assume in this discussion that a non-U.S. holder holds shares of our common 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 aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances, nor does it address any estate or gift tax consequences, or any aspects of U.S. state, local or non-U.S. taxes. This discussion also does not address consequences relevant to non-U.S. holders subject to special tax rules, such as holders that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below), corporations that accumulate earnings to avoid U.S. federal income tax, tax-exempt or governmental organizations, banks, financial institutions, insurance companies, brokers, dealers or traders in securities, commodities or currencies, tax-qualified retirement plans, holders subject to the alternative minimum tax or the Medicare contribution tax, holders holding our common stock as part of a hedge, straddle or other risk reduction strategy, conversion transaction, synthetic security or other integrated investment, holders deemed to sell our common stock under the constructive sale provisions of the Code, controlled foreign corporations, passive foreign investment companies, accrual method taxpayers subject to special tax accounting rules under Section 451(b) of the Code, and U.S. expatriates and certain former U.S. citizens or long-term residents.

In addition, this discussion does not address the tax treatment of partnerships (or entities or arrangements that are treated as partnerships for U.S. federal income tax purposes) or persons that hold their common stock through such partnerships. If a partnership, including any entity or arrangement treated as a partnership for U.S. federal income tax purposes, holds shares of our common stock, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner, the activities of the partnership and certain determinations made at the partner level. Such partners and partnerships should consult their own tax advisors regarding the tax consequences of the purchase, ownership and disposition of our common stock.

There can be no assurance that a court or the IRS will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling with respect to the U.S. federal income tax consequences to a non-U.S. holder of the purchase, ownership or disposition of our common stock.

All prospective non-U.S. holders of our common stock are urged to consult their own tax advisors with respect to the U.S. federal income tax laws to their particular situation as well as any tax consequences of the purchase, ownership and disposition of our common 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.

Distributions on Our Common Stock

As described in the section entitled "Dividend Policy," we do not expect to pay any cash dividends in the foreseeable future, but may issue shares of our common stock to pay accrued, but unpaid dividends upon conversion of outstanding shares of our Series B 10% Convertible Preferred Stock. However, if we do make distributions of cash or property on our common stock, such distributions generally 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. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a return of capital and first be applied against and reduce a non-U.S. holder's adjusted tax basis in its common stock, but not below zero. Any remaining excess will be treated as capital gain from the sale or exchange of our common stock subject to the tax treatment described below in "Gain on Sale, Exchange or Other Disposition of Our Common Stock." Any such distribution will also be subject to the discussion below under the headings "Foreign Accounts" and "Backup Withholding and Information Reporting."

Subject to the discussions below on effectively connected income, dividends paid to a non-U.S. holder of our common stock will be subject to U.S. federal withholding at a 30% rate of the gross amount of the dividend (or such lower rate as may be specified by an applicable income tax treaty between the United States and a non-U.S. holder's country of residence).

If dividends paid to a non-U.S. holder are effectively connected with a trade or business conducted by a non-U.S. holder within the United States (and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States), the non-U.S. holder will be exempt from the 30% U.S. federal withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, will be taxed at the same graduated U.S. federal income tax rates applicable to "United States persons" (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty between the United States and a non-U.S. holder's country of residence) on a portion of its effectively connected earnings and profits for the taxable year, as adjusted for certain items.

To claim a reduction or exemption from withholding, a non-U.S. holder of our common stock generally will be required to provide (a) a properly executed IRS Form W-8BEN (in the case of individuals) or W-8BEN-E (in the case of entities), or successor form, and satisfy applicable certification and other requirements to claim the benefit of an applicable income tax treaty between the United States and such holder's country of residence, or (b) a properly executed IRS Form W-8ECI stating that dividends are not subject to withholding because they are effectively connected with such non-U.S. holder's conduct of a trade or business within the United States. The tax forms referred to above must be provided to us or our paying agent prior to the payment of dividends and must be updated periodically. In the case of a non-U.S. holder that is an entity, Treasury Regulations and any relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of an income tax treaty, dividends will be treated as paid to the entity or to those holding an interest in that entity. If a non-U.S. Holder holds stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. A non-U.S. holder that is eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

Gain on Sale, Exchange or Other Disposition of Our Common Stock

Subject to the discussion below regarding backup withholding and the discussion under the heading "Foreign Accounts," in general, a non-U.S. holder will not be subject to any U.S. federal income tax on any gain realized upon such non-U.S. holder's sale, exchange or other taxable disposition of shares of our common stock unless:

- the gain is effectively connected with a U.S. trade or business of the non-U.S. holder (and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed base maintained in the United States by such non-U.S. holder), in which case the non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable to "United States persons" (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the 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, may also apply;
- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% U.S. federal income tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition, which may be offset by U.S. source capital losses of the non-U.S. holder, if any (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; or
- our common stock constitutes U.S. real property interest because we are, or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a U.S. real property holding corporation for U.S. federal income tax purposes. Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus the fair market value of its other assets used or held for use in a trade or business. We do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. However, because the determination of whether we are a U.S. real property holding corporation depends on the fair market value of our U.S. real property relative to the fair market value of our other business assets, there can be no assurance that we will not become a U.S. real property holding corporation in the future. Even if we are or become a U.S. real property holding corporation, provided that our common stock is regularly traded, as defined by applicable Treasury Regulations, on an established securities market, our common stock will be treated as a U.S. real property interest only with respect to a non-U.S. holder that holds more than 5% of our outstanding common stock, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. In such case, such non-U.S. holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to "United States persons" (as defined in the Code). No assurance can be provided that our common stock will continue to be regularly traded on an established securities market for purposes of the rules described above.

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

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the dividends on our common stock paid to such holder and the tax withheld, if any, with respect to such dividends. Non-U.S. holders will have to comply with specific certification procedures to establish that the holder is not a "United States person" (as defined in the Code) in order to avoid backup withholding at the applicable rate (currently at a 24% rate) with respect to dividends on our common stock. A non-U.S. holder generally will not be subject to U.S. backup withholding with respect to payments of dividends on our common stock if such non-U.S. holder certifies its non-U.S. status by providing a valid IRS Form W-8BEN (in the case of individuals) or W-8BEN-E (in the case of entities) or W-8ECI, or successor form, or otherwise establishes an exemption; provided we do not have actual knowledge or reason to know such non-U.S. holder is a "United States person" (as defined in the Code).

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the non-U.S. holder certifies its status as a non-U.S. holder as described above and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a non-U.S. broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available under the provisions of a specific 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 from a payment to a non-U.S. holder may be allowed as a credit against the non-U.S. holder's U.S. federal income tax liability, if any, and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

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 (*FATCA*)) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a U.S. federal withholding tax of 30% may be imposed on dividends on, or on the gross proceeds from the sale or other disposition of, our common stock paid to a "foreign financial institution" (as defined in the Code), unless such foreign financial institution enters into an agreement with the U.S. Department of Treasury requiring, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), or otherwise qualifies for an exemption from these rules. Additionally, U.S. federal withholding tax of 30% may be imposed on dividends on, or on the gross proceeds from the sale or other disposition of, our common stock paid to a "non-financial foreign entity" (as defined in the Code), unless such non-financial foreign entity provides the withholding agent with either a certification that it does not have any "substantial United States owners" (as defined in the Code), provides information regarding each substantial United States owner, or otherwise qualifies for an exemption from these rules. An intergovernmental agreement between the United States and an applicable foreign country where a foreign financial institution is located may modify the requirements described in this paragraph.

The withholding under FATCA described above currently applies to dividends paid on our common stock. While withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of our common stock on or after January 1, 2019, recently 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 common stock.

UNDERWRITING

We are offering the shares of common stock described in this prospectus supplement and the accompanying prospectus through the underwriters listed below. Maxim Group LLC is acting as the sole book-running manager of this offering and representative of each of the underwriters named below. The underwriters named below have agreed to buy, subject to the terms of the underwriting agreement, the number of securities listed opposite its name below. The underwriters are committed to purchase and pay for all of the securities if any are purchased, other than those securities covered by the over-allotment option described below.

| Underwriters | Number of Shares |
|-----------------|------------------|
| Maxim Group LLC | |
| Total | |

The underwriters have advised us that they propose to offer the shares of common stock to the public at a price of \$ per share. The underwriters propose to offer the shares of common stock to certain dealers at the same price less a concession of not more than \$ per share. After the offering, these figures may be changed by the underwriters.

The common stock sold in this offering are expected to be ready for delivery on or about , 2020, against payment in immediately available funds. The underwriters may reject all or part of any order.

We have granted to the underwriters an option to purchase up to an additional shares of common stock from us at the same price to the public, and with the same underwriting discount, as set forth in the table below. The underwriters may exercise this option any time during the 45-day period after the date of this prospectus supplement, but only to cover over-allotments, if any. To the extent the underwriters exercise the option, the underwriters will become obligated, subject to certain conditions, to purchase the shares of common stock for which they exercise the option.

The table below summarizes the underwriting discounts that we will pay to the underwriters. These amounts are shown assuming both no exercise and full exercise of the over-allotment option. In addition to the underwriting discount, we have agreed to pay up to \$ of the fees and expenses of the underwriters, which may include the fees and expenses of counsel to the underwriters. The fees and expenses of the underwriters that we have agreed to reimburse are not included in the underwriting discounts set forth in the table below. The underwriting discount and reimbursable expenses the underwriters will receive were determined through arms' length negotiations between us and the underwriters.

| Per Share | Over-Allotment | Allotment |
|--|----------------|-----------|
| Underwriting discount to be paid by us | \$ | \$ |

We estimate that the total expenses of this offering, excluding underwriting discounts, will be \$ This includes \$ of the fees and expenses of the underwriters. These expenses are payable by us.

We also have agreed to indemnify the underwriters against certain liabilities, including civil liabilities under the Securities Act of 1933, as amended, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

No Sales of Similar Securities

Each of our directors and officers and certain of our stockholders, have agreed not to offer, sell, agree to sell, directly or indirectly, or otherwise dispose of any shares of common stock or any securities convertible into or exchangeable for shares of common stock without the prior written consent of the underwriters for a period of four (4) months after the later of (i) the closing of this offering, and (ii) the last closing with respect to the underwriters' exercise of the over-allotment option, if any. These lock-up agreements provide limited exceptions and their restrictions may be waived at any time by the underwriters.

In addition, we have agreed, subject to certain exceptions, not to offer, sell agree to sell, directly or indirectly or otherwise issue shares of our common stock for a period of three (3) months, or, in the case of certain variable rate transactions, four (4) months, following the later of (i) the closing of this offering, and (ii) the last closing with respect to the underwriters' exercise of the over-allotment option, if any.

Price Stabilization, Short Positions and Penalty Bids

To facilitate this offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock during and after the offering. Specifically, the underwriters may over-allot or otherwise create a short position in our common stock for its own account by selling more shares of common stock than we have sold to the underwriters. The underwriters may close out any short position by either exercising its option to purchase additional shares or purchasing shares in the open market.

In addition, the underwriters may stabilize or maintain the price of our common stock by bidding for or purchasing shares in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to broker-dealers participating in this offering are reclaimed if shares previously distributed in this offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of our common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of our common stock to the extent that it discourages resales of our common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the Nasdaq Capital Market or otherwise and, if commenced, may be discontinued at any time.

In connection with this offering, the underwriters and selling group members may also engage in passive market making transactions in our common stock on the Nasdaq Capital Market. Passive market making consists of displaying bids on the Nasdaq Capital Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the Securities and Exchange Commission limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of our common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Neither we nor 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. In addition, neither we nor the underwriters make any representation that the underwriters will engage in these transactions or that any transaction, if commenced, will not be discontinued without notice.

Affiliations

The underwriters and their 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 may in the future engage in investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. The underwriters may in the future receive customary fees and commissions for these transactions.

In the ordinary course of its various business activities, the underwriters and their 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 its own account and for the accounts of its customers, and such investment and securities activities may involve securities and/or instruments of the issuer. The underwriters and their affiliates may also make investment recommendations 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.

Electronic Offer, Sale and Distribution

In connection with this offering, the underwriters or certain of the securities dealers may distribute prospectuses by electronic means, such as e-mail. In addition, the underwriters may facilitate Internet distribution for this offering to certain of its Internet subscription customers. The underwriters may allocate a limited number of securities for sale to its online brokerage customers. An electronic prospectus is available on the Internet websites maintained by any such underwriter. Other than the prospectus in electronic format, the information on the websites of the underwriters is not part of this prospectus supplement or the accompanying prospectus.

Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol "VTGN."

Transfer Agent and Registrar

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

Selling Restrictions

Canada. The securities 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 securities 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 supplement (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 underwriters conflicts of interest in connection with this offering.

European Economic Area. In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State") an offer to the public of any securities may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any securities may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of securities shall result in a requirement for the publication by us or any underwriters of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any securities to be offered so as to enable an investor to decide to purchase any securities, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State, and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom. Each underwriter has represented and agreed that:

- it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (the FSMA) received by it in connection with the issue or sale of the securities in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

Switzerland. The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (the SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). Accordingly, no public distribution, offering or advertising, as defined in CISA, its implementing ordinances and notices, and no distribution to any non-qualified investor, as defined in CISA, its implementing ordinances and notices, shall be undertaken in or from Switzerland, and the investor protection afforded to acquirers of interests in collective investment schemes under CISA does not extend to acquirers of securities.

Australia. No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission (ASIC), in relation to the offering.

This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the *Corporations Act*) and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the securities may only be made to persons (the *Exempt Investors*) who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the securities without disclosure to investors under Chapter 6D of the Corporations Act.

The securities applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring securities must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

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. Partners of DLG beneficially own an aggregate of 74,487 registered and/or restricted shares of our common stock. Maxim Group LLC is being represented in connection with this offering by Ellenoff Grossman & Schole LLP.

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, 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 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, June 30, 2020, and July 24, 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 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 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.



\$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 September 30, 2019

VISTAGEN THERAPEUTICS, INC.

TABLE OF CONTENTS

| | PAGE |
|--|------|
| About This Prospectus | 1 |
| Company Overview | 2 |
| Risk Factors | 6 |
| Cautionary Notes Regarding Forward-Looking Statements | 7 |
| Use of Proceeds | 8 |
| Description of our Capital Stock | 9 |
| Description of our Warrants | 15 |
| Description of our Units | 18 |
| Description of Certain Provisions of Nevada Law and our Articles of Incorporation and Bylaws | 19 |
| Plan of Distribution | 20 |
| Legal Matters | 21 |
| Experts | 21 |
| Where You Can Find More Information | 21 |
| Incorporation of Certain Information by Reference | 22 |

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 antideperssant. 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 multile additional CNS indivcations, 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-tramautic 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*. 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 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, splitup, 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. Form more information, see "Decription 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 reallowed 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 reallowed 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 overallotment, 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"). Overallotment 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.

Shares Common Stock



Prospectus Supplement

Sole Book-running Manager

Maxim Group LLC

The date of this prospectus supplement is

