

PROSPECTUS SUPPLEMENT
(To Prospectus dated December 4, 2020)



765,000 Shares of Common Stock
Pre-Funded Warrants to Purchase up to 1,849,380 Shares of Common Stock
Warrants to Purchase up to 2,614,380 Shares of Common Stock

We are offering 765,000 shares of our common stock (the “Common Stock”), Pre-Funded Warrants (as defined below) exercisable for up to an aggregate of 1,849,380 shares of Common Stock and warrants exercisable for up to an aggregate of 2,614,380 shares of our common stock (the “Warrants”) to a single institutional investor pursuant to this prospectus supplement and the accompanying prospectus and a securities purchase agreement, dated November 16, 2022 (the “Securities Purchase Agreement”). Each Warrant will have an exercise price of \$2.95 per share of common stock and will be exercisable immediately on the date of issuance and will expire five (5) years after the date of issuance. See “Description of Securities We Are Offering” in this prospectus supplement for additional information. We are also registering an aggregate of up to 2,614,380 shares of our common stock issuable upon the exercise of the Warrants and the Pre-Funded Warrants (the “Warrant Shares”, and collectively with the Common Stock, the Pre-Funded Warrants and the Warrants, the “Securities”). We are offering pre-funded warrants (the “Pre-Funded Warrants”) to purchase up to 1,849,380 with its affiliates shares of our common stock to result in the investor, whose purchase of additional Common Stock in this offering would otherwise result in the investor, together with its affiliates and certain related parties, beneficially owning more than 9.99% of our outstanding common stock immediately following the consummation of this offering. The purchase price of each Pre-Funded Warrant is equal to \$3.0590, which is equal to the sale price of the Common Stock *minus* \$0.001, the exercise price of each Pre-Funded Warrant. The Pre-Funded Warrants are immediately exercisable and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full.

The Shares, Pre-Funded Warrants and Warrants can only be purchased together in this offering but will be issued separately and will be immediately separable upon issuance.

We have engaged H.C. Wainwright & Co., LLC (the “Placement Agent”) as our exclusive placement agent to use its reasonable best efforts to solicit offers to purchase the Securities being offered pursuant to this prospectus supplement and accompanying prospectus. The Placement Agent has no obligation to buy any of the Securities from us or to arrange for the purchase or sale of any specific number or dollar amount of Securities. We have agreed to pay the Placement Agent the fees set forth in the table below.

Our common stock is listed on The Nasdaq Capital Market, or Nasdaq, under the symbol “TRVN.” The last reported sale price of our common stock on The Nasdaq Capital Market on November 15, 2022, was \$3.46 per share. There is no established public trading market for the Pre-Funded Warrants or the Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Pre-Funded Warrants or the Warrants on any national securities exchange or other trading market. Without an active market, the liquidity of the Pre-Funded Warrants and the Warrants will be limited.

Investing in our Securities involves a high degree of risk. See “[Risk Factors](#)” beginning on page S-7 of this prospectus supplement, page 7 of the accompanying prospectus and under similar headings in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

	Per Share	Per Pre-Funded Warrant	Total
Offering Price	\$ 3.06	\$ 3.0590	\$ 7,997,388.42
Placement Agent fees(1)	\$ 0.1836	\$ 0.1836	\$ 480,000.17
Proceeds, before expenses, to us	\$ 2.8764	\$ 2.8754	\$ 7,517,388.25

(1) We have agreed to pay the Placement Agent: (i) a cash fee equal to 6.0% of the aggregate gross proceeds raised in this offering and (ii) to reimburse the Placement Agent \$25,000 for non-accountable expenses and up to \$50,000 for reasonable and documented fees and expenses of legal counsel and other actual out-of-pocket expenses. See “Plan of Distribution” beginning on page S-17 of this prospectus supplement for additional information with respect to the compensation we will pay the Placement Agent.

We anticipate that delivery of the shares of Common Stock, Pre-Funded Warrants and Warrants will be made on or about November 18, 2022, subject to satisfaction of customary closing conditions.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS SUPPLEMENT IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

H.C. Wainwright & Co.

The date of this prospectus supplement is November 16, 2022

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”), utilizing a “shelf” registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer only to the “prospectus supplement,” we are referring to both parts combined. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference herein or 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 herein and therein. You should read this prospectus supplement and the accompanying prospectus, including the information incorporated by reference herein and therein, and any related free writing prospectus that we have authorized for use in connection with this offering.

You should rely only on the information that we have included or incorporated by reference in this prospectus supplement, the accompanying prospectus and any related free writing prospectus that we may authorize to be provided to you. We have not authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any related free writing prospectus that we may authorize to be provided to you. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any related free writing prospectus. This prospectus supplement, the accompanying prospectus and any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus supplement, the accompanying prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus supplement, the accompanying prospectus or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference herein or therein is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus supplement, the accompanying prospectus or any related free writing prospectus is delivered, or securities are sold, on a later date.

This prospectus supplement contains or incorporates by reference 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 or will be filed or have been or will be incorporated by reference as exhibits to the registration statement of which this prospectus supplement forms a part, and you may obtain copies of those documents as described in this prospectus supplement under the heading “Where You Can Find More Information.”

The distribution of this prospectus supplement and the accompanying prospectus and the offering of the Securities in certain jurisdictions may be restricted by law. We are not making an offer of the Securities in any jurisdiction where the offer is not permitted. Persons who come into possession of this prospectus supplement and the accompanying prospectus should inform themselves about and observe any such restrictions. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to any person to whom it is unlawful to make such offer or solicitation.

Solely for convenience, tradenames referred to in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference appear without the ® symbol, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or that the applicable owner will not assert its rights, to these tradenames.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus supplement, the accompanying prospectus or the documents incorporated herein or therein by reference regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. In particular, we caution you that our forward-looking statements are subject to the ongoing and developing circumstances related to the COVID-19 pandemic, which may have a material adverse effect on our business, operations and future financial results. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “will,” “would,” “could,” “should,” “potential,” “seek,” “evaluate,” “pursue,” “continue,” “design,” “impact,” “affect,” “forecast,” “target,” “outlook,” “initiative,” “objective,” “designed,” “priorities,” “goal,” or the negative of such terms and similar expressions are in some cases intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus supplement and the accompanying prospectus supplement, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain.

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

- our ability to successfully commercialize OLINVYK and any other product candidates for which we may obtain regulatory approval;
- our sales, marketing and manufacturing capabilities and strategies;
- any ongoing or planned clinical trials and nonclinical studies for our product candidates;
- the extent of future clinical trials potentially required by the U.S. Food and Drug Administration for our product candidates;
- our ability to fund future operating expenses and capital expenditures with our current cash resources or to secure additional funding in the future;
- the timing and likelihood of obtaining and maintaining regulatory approvals for our product candidates;
- our plan to develop and potentially commercialize our product candidates;
- the clinical utility and potential market acceptance of our product candidates, particularly in light of existing and future competition;
- the size of the markets for our product candidates;
- the performance of third-parties upon which we depend, including contract manufacturing organizations, suppliers, contract research organizations, distributors and logistics providers;
- our ability to identify or acquire additional product candidates with significant commercial potential that are consistent with our commercial objectives;
- our ability to forecast future demand for OLINVYK in order to manage product inventory effectively and avoid inventory valuation adjustments;
- the extent to which health epidemics and other outbreaks of communicable diseases, including the ongoing COVID-19 pandemic and the effects to mitigate it, could disrupt our operations and/or materially and adversely affect our business and financial conditions;
- our intellectual property position and our ability to obtain and maintain patent protection and defend our intellectual property rights against third parties;
- our ability to make interest or principal payments on our indebtedness when due, and to comply with certain restrictive covenants in our loan agreements; and
- our ability to satisfy all applicable Nasdaq continued listing requirements.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus supplement, particularly under “Risk Factors,” 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, collaborations or investments we may make.

You should read this prospectus supplement, the accompanying prospectus and the documents that we incorporate by reference herein and therein completely and with the understanding that our actual future results may be materially different from what we expect. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained in other parts of this prospectus supplement and the accompanying prospectus and in the documents we incorporate by reference. Because it is only a summary, it does not contain all of the information that you should consider before investing in our securities and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus supplement, the accompanying prospectus, any applicable free writing prospectus and the documents incorporated by reference herein and therein. You should read all such documents carefully, especially the risk factors and our consolidated financial statements and the related notes included or incorporated by reference herein or therein, before deciding to invest in our securities. Unless the context requires otherwise, references in this prospectus supplement to “Trevena,” “we,” “us” and “our” refer to Trevena, Inc. and our subsidiaries.

Overview

We are a biopharmaceutical company focused on developing and commercializing novel medicines for patients affected by central nervous system, or CNS, disorders.

Our product, OLINVYK® (oliceridine) injection, or OLINVYK, was approved by the United States Food and Drug Administration, or FDA, in August 2020. We initiated commercial launch of OLINVYK in the first quarter of 2021. OLINVYK is an opioid agonist for use in adults for the management of acute pain severe enough to require an intravenous opioid analgesic and for whom alternative treatments are inadequate. OLINVYK is the first new chemical entity, or NCE, in this intravenous, or IV-, drug class in decades and it offers a differentiated profile that addresses unmet needs in the acute pain management landscape. OLINVYK delivers IV opioid efficacy with a rapid 1-3 minute median onset of action. In addition, OLINVYK requires no dosage adjustments in patients with renal impairment, a large patient population with significant medical complications. The U.S. Drug Enforcement Administration, or DEA, has classified oliceridine as a Schedule II controlled substance.

Using our proprietary product platform, we also have identified and are developing the following product candidates (none of these product candidates have been approved by the FDA for commercialization):

- **TRV045:** We are evaluating a set of novel sphingosine-1-phosphate, or S1P, modulators that may offer a new, non-opioid approach to managing chronic neuropathic pain and epilepsy. Our lead candidate is TRV045. TRV045 targets the S1P subtype 1 receptor and nonclinical data suggests that TRV045 effectively reverses neuropathic pain without the immune-suppressing activity observed with currently approved therapeutics targeting S1P receptors.

In September 2021, we submitted an IND for TRV045 and subsequently received a clinical hold letter from the FDA regarding certain Phase 1 study design elements. We promptly responded to the FDA's comments, and in December 2021, we announced advancement of TRV045 into Phase 1 clinical development, initially for diabetic neuropathic pain, or DNP. DNP affects up to a quarter of people with diabetes, and currently approved therapeutics fail to provide adequate relief or are poorly tolerated among approximately half of all DNP patients.

On November 9, 2022 we announced positive topline results from the Phase 1 study of TRV045. The study included single-ascending dose, food effect and multiple dose phases. TRV045 was well tolerated, with no serious adverse events reported. The PK profile of TRV045 showed a half-life consistent with anticipated once-daily dosing. Based on the PK exposure, the calculated free plasma concentrations of TRV045 exceeded the targeted efficacy range based on nonclinical measures of in vitro and in vivo pharmacodynamics. A targeted set of laboratory measures were studied to characterize the tolerability of TRV045, including total lymphocyte counts, ECGs, and ophthalmologic examinations, as these adverse events have been associated with existing S1P-targeted compounds. No lymphopenia, cardiac, pulmonary or ophthalmologic adverse events were reported in the Phase 1 study for TRV045.

- **TRV250:** We are developing TRV250, a G-protein biased delta-opioid receptor, or DOR, agonist as a compound with a potential first-in-class novel mechanism for the treatment of acute migraine. TRV250 also may have utility in a range of other CNS indications. Because TRV250 selectively targets the DOR, we believe it will not have the addiction liability of conventional opioids or have other mu-opioid related adverse effects like respiratory depression and constipation. Data from our first-in-human Phase 1 study of TRV250 showed a favorable tolerability profile and pharmacokinetics. In March 2021, we announced that we identified a novel process to support oral dose formulation for TRV250. The process development work to evaluate the acceptability of the oral formulation has the potential to extend the patent for TRV250 by an additional five years to 2041.

- **TRV734:** We also have identified and have completed the initial Phase 1 studies for TRV734, an NCE targeting the same novel mechanism of action at the mu opioid receptor, or MOR, as OLINVYK. TRV734 was designed to be orally available, and its mechanism of action suggests it may offer valuable benefits for two distinct areas of important unmet medical need: acute and chronic pain, and maintenance-assisted therapy for patients with opioid use disorder, or OUD. We are collaborating with the National Institute on Drug Abuse, or NIDA, to further evaluate TRV734 for the management of OUD, and NIDA initiated a proof-of-concept study for this indication in December 2019. In June 2021, we announced that the study, which had been paused due to the global COVID-19 pandemic, had resumed recruiting patients. We intend to continue to focus our efforts for TRV734 on securing a development and commercialization partner for this asset.

Recent Developments

Reverse Stock Split

At a special meeting of stockholders held on September 8, 2022, our stockholders approved a proposal to authorize our board to amend our amended and restated certificate of incorporation (the “Certificate of Incorporation”) to effect a reverse stock split of our outstanding shares of our common stock by a ratio of any whole number between 1-for-2 to 1-for-25, at any time prior to December 19, 2022, with the exact ratio to be set within that range by the board. On September 13, 2022, the board approved a 1-for-25 reverse stock split of the outstanding share of our common stock (the “Reverse Stock Split”). On November 9, 2022, we filed a certificate of amendment (the “Amendment”) to our Certificate of Incorporation with the Secretary of State of the State of Delaware to effect the Reverse Stock Split, effective as of 5:01 p.m. on November 9, 2022. The Amendment did not change the number of authorized shares of our common stock.

Corporate Information

We were incorporated as a Delaware corporation in 2007. Our principal executive offices are located at 955 Chesterbrook Boulevard, Suite 110, Chesterbrook, PA 19087, and our telephone number is (610) 354-8840.

Available Information

Our website address is www.trevena.com. Any information contained on, or that can be accessed through, our website is not incorporated by reference into, nor is it in any way part of this prospectus supplement and should not be relied upon in connection with making any decision with respect to an investment in our securities. We are required to file annual, quarterly and current reports, proxy statements and other information with the SEC. You may obtain any of the documents filed by us with the SEC at no cost from the SEC’s website at www.sec.gov.

THE OFFERING

Common stock offered by us	765,000 shares
Pre-Funded Warrants offered by us	Pre-Funded Warrants to purchase up to 1,849,380 shares of our Common Stock to the investor whose purchase of additional Shares in this offering would otherwise result in such investor, together with its affiliates and certain related parties, beneficially owning more than 9.99% of our outstanding common stock immediately following the consummation of this offering. The purchase price of each Pre-Funded Warrant is equal to \$3.0590, which is equal to the purchase price of the Shares minus \$0.001, the exercise price of each Pre-Funded Warrant. The Pre-Funded Warrants are immediately exercisable and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full. This offering also relates to the shares of common stock issuable upon exercise of any Pre-Funded Warrants sold in this offering.
Warrants offered by us	Warrants to purchase up to an aggregate of 2,614,380 shares of our common stock. Each warrant has an exercise price of \$2.95 per share, will become exercisable immediately on the date of issuance and will expire upon the five (5) year anniversary of the date of issuance. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the Warrants.
Common stock outstanding before this offering	6,948,962 shares
Common stock to be outstanding after this offering	7,713,962 shares
Best Efforts	We have agreed to issue and sell the Securities offered hereby to the investor through the Placement Agent, and the Placement Agent has agreed to offer and sell such Securities on a reasonable “best efforts” basis. The Placement Agent is not required to sell any specific number or dollar amount of the Securities offered hereby, but will use its reasonable best efforts to sell such Securities. See “Plan of Distribution” on page S-17 of this prospectus supplement.
Use of proceeds	We currently intend to use the net proceeds from this offering for general corporate purposes. See “Use of Proceeds.”
Risk Factors	An investment in our securities involves a high degree of risk. See “Risk Factors” beginning on page S-8 of this prospectus supplement and page 5 of the accompanying prospectus and the similarly titled sections in the documents incorporated by reference into this prospectus supplement.
The Nasdaq Capital Market symbol	Our common stock is traded on The Nasdaq Capital Market under the symbol “TRVN”.

The number of shares of our common stock to be outstanding immediately after this offering is based on 6,948,962 shares of our common stock outstanding as of November 16, 2022, and excludes as of such date:

- 344,560 shares of our common stock issuable upon the exercise of stock options outstanding, at a weighted-average exercise price of \$49.27 per share;
- 188,096 shares of our common stock issuable upon the vesting and settlement of restricted stock units outstanding;
- 540,655 shares of our common stock available for future issuance under our 2013 Equity Incentive Plan;
- 12,000 shares of our common stock available for future issuance under our Inducement Plan;
- 9,032 shares of our common stock available for future issuance under our 2013 Employee Stock Purchase Plan;
- 2,614,380 shares of our common stock issuable upon the exercise of the Warrants to be issued pursuant to this prospectus supplement with an exercise price of \$2.95 per share; and
- 211,017 shares of our common stock issuable upon the exercise of warrants outstanding as of November 16, 2022 with a weighted-average exercise price of \$23.44 per share.

Except as otherwise indicated, all information in this prospectus supplement assumes no exercise of the outstanding stock options or warrants or settlement of the restricted stock units described above.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities you should carefully consider the risks described below and those discussed under the section captioned "Risk Factors" contained in our [Annual Report on Form 10-K for the fiscal year ended December 31, 2021](#) and [Quarterly Reports on Form 10-Q for the quarters ended March 31, 2022, June 30, 2022 and September 30, 2022](#), as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which are incorporated by reference in this prospectus supplement and the accompanying prospectus, together with other information in this prospectus supplement, the accompanying prospectus, the information and documents incorporated by reference herein and therein, and in any free writing prospectus that we have authorized for use in connection with this offering. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.

The market price for our common stock has been volatile and may continue to fluctuate or may decline significantly in the future.

An active, liquid and orderly market for our common stock may not be sustained, which could depress the trading price of our common stock or cause it to continue to be highly volatile or subject to wide fluctuations. Some of the factors that could negatively affect our share price or result in fluctuations in the price or trading volume of our common stock include, among other things:

- our ability to successfully commercialize OLINVYK;
- our ability to identify a strategic partner with appropriate sales and marketing capabilities and to enter into a strategic partnership on commercially acceptable terms with such partner to commercialize OLINVYK outside the United States;
- our ability to effectively manage the levels of production, distribution and delivery of OLINVYK through our supply chain;
- our ability to leverage our development experience to progress our other pipeline product candidates;
- our ability to identify and successfully acquire or in-license new product candidates on acceptable terms;
- FDA, state or international regulatory actions, including actions on regulatory applications for ANJESO or any of our product candidates;
- legislative or regulatory changes;
- judicial pronouncements interpreting laws and regulations;
- changes in government programs;
- announcements of new products, services or technologies, commercial relationships, acquisitions or other events by us or our competitors;
- market conditions in the pharmaceutical and biotechnology sectors;
- fluctuations in stock market prices and trading volumes of similar companies;
- changes in accounting principles;
- litigation or public concern about the safety of our products or product candidates or similar products or product candidates;
- sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders;
- our announcement of financing transactions, including debt, convertible notes, warrant exchanges, etc.;
- our ability to have sufficient authorized shares of our common stock available;
- the ability to effectuate a reverse stock split or other similar change to our capital structure;
- the continued negative effects of the COVID-19 pandemic on the global economy; and
- actions by institutional stockholders.

These broad market and industry factors may decrease the market price of our common stock, regardless of our actual operating performance. The stock market in general has from time to time experienced extreme price and volume fluctuations, including recently. In addition, in the past, following periods of volatility in the overall market and decreases in the market price of a company's securities, securities class action litigation has often been instituted against these companies. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

Risks Related to This Offering

Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion with respect to the use of proceeds of this offering, including for any of the purposes described in the section of this prospectus supplement entitled "Use of Proceeds." You will be relying on the judgment of our management regarding the application of the proceeds of this offering. The results and effectiveness of the use of proceeds are uncertain, and we could spend the proceeds in ways that you do not agree with or that do not improve our results of operations or enhance the value of our common stock. Our failure to apply these funds effectively could harm our business, delay the development of our pipeline product candidates and cause the price of our common stock to decline.

Purchasers of our common stock will experience immediate and substantial dilution in the net tangible book value per share of the common stock they purchase.

Investors purchasing shares of common stock in this offering will incur immediate dilution in the net tangible book value of the common stock purchased of \$0.01 per share, representing the difference between the offering price of \$3.06 per share and our net tangible book value as of September 30, 2022 after giving effect to this offering. The exercise of outstanding stock options, restricted stock units and warrants would result in further dilution of your investment. See the section entitled "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering.

Issuances of shares of common stock or securities convertible into or exercisable for shares of common stock following this offering, as well as the exercise of options outstanding, will dilute your ownership interests and may adversely affect the future market price of our common stock.

We may need additional capital to fund the development, registration and commercialization of our product candidates. We may seek additional capital through a combination of private and public equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements, which may cause your ownership interest to be diluted. In addition, we have a significant number of options to purchase shares of our common stock outstanding. If these securities are exercised, you may incur further dilution. Moreover, to the extent that we issue additional options to purchase, or securities convertible into, exercisable or exchangeable for, shares of our common stock in the future and those options or other securities are exercised, converted or exchanged, stockholders may experience further dilution.

The Pre-Funded Warrants and Warrants are not listed for trading on any exchange, so the ability to trade the Pre-Funded Warrants or Warrants is limited.

There is no established public trading market for the Pre-Funded Warrants or the Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing the Pre-Funded Warrants or the Warrants on any national securities exchange or other trading market. Without an active market, the liquidity of the Pre-Funded Warrants and the Warrants will be limited.

Holders of Pre-Funded Warrants and Warrants purchased in this offering will have no rights as common stockholders until such holders exercise their Pre-Funded Warrants or Warrants and acquire our common stock, except as set forth in the Pre-Funded Warrants and Warrants.

Until holders of the Pre-Funded Warrants and the Warrants acquire shares of our common stock upon exercise of such Pre-Funded Warrants or Warrants, the holders will have no rights with respect to the shares of our common stock underlying such Pre-Funded Warrants or Warrants, except as set forth in the Pre-Funded Warrants or Warrants. Upon exercise of the Pre-Funded Warrants or the Warrants, the holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise.

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

Following this offering, a large number of shares of our common stock issuable upon exercise of the Pre-Funded Warrants and Warrants sold in this offering may be sold in the market, which may depress the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market following this offering could cause the market price of our common stock to decline. We are unable to predict the effect that sales may have on the prevailing market price of our common stock. A substantial majority of the outstanding shares of our common stock are, and the shares of common stock sold in this offering upon issuance will be, freely tradable without restriction or further registration under the Securities Act of 1933, as amended (the “Securities Act”), unless owned or purchased by our “affiliates” as that term is defined in Rule 144 under the Securities Act.

This offering is being conducted on a reasonable “best efforts” basis.

The Placement Agent is offering the securities on a reasonable “best efforts” basis, and the Placement Agent is under no obligation to purchase any shares for its own account. The Placement Agent is not required to sell any specific number or dollar amount of our securities in this offering but will use its reasonable best efforts to sell the securities offered in this prospectus supplement. As a reasonable “best efforts” offering, there can be no assurance that the offering contemplated hereby will ultimately be consummated.

We could lose our listing on the Nasdaq Capital Market if the closing bid price of our common stock does not return to above \$1.00 for ten consecutive days during the 180 days ending December 19, 2022. The loss of the Nasdaq listing would make our common stock significantly less liquid and would affect its value.

As initially disclosed on the Current Report on Form 8-K filed on December 23, 2021 with the SEC, we received written notification from Nasdaq notifying us that we had failed to comply with Nasdaq Listing Rule 5550(a)(2) (the “Minimum Bid Price Requirement”) because the bid price for our common stock for 30 consecutive business days prior to such date had closed below the minimum \$1.00 per share requirement for continued listing. Nasdaq initially granted us 180 calendar days, or until June 20, 2022, to regain compliance with the Minimum Bid Price Requirement. As subsequently reported on a Form 8-K filed with the SEC on June 21, 2022, on June 21, 2022, Nasdaq granted us an additional 180 calendar days, or until December 19, 2022 (the “Extension Period”), to regain compliance with the Minimum Bid Requirement. The extension had no immediate effect on the listing or trading of the common stock on the Nasdaq Capital Market. If, at any time before December 19, 2022, the bid price of our common stock closes at or above \$1.00 per share for a minimum of 10 consecutive business days, Nasdaq will provide written notification that we have achieved compliance with the Rule. If compliance with the Rule cannot be demonstrated by December 19, 2022, Nasdaq will provide written notification that our common stock will be delisted. At that time, we may appeal Nasdaq’s determination to a Hearings Panel. Our stockholders approved a reverse stock split on September 8, 2022. On September 13, 2022, our board of directors approved a reverse stock split of 1-for-25, which was implemented on November 9, 2022. The last reported sales price of our common stock on the Nasdaq Stock Market on November 15, 2022 was \$3.46 per share. There can be no assurance that the bid price of our common stock closes at or above \$1.00 per share for a minimum of 10 consecutive business days allowing us to regain compliance with the Minimum Bid Price Requirement during the 180-day extension period.

Upon delisting from the Nasdaq Capital Market, our stock would be traded over-the-counter inter-dealer quotation system, more commonly known as the OTC. OTC transactions involve risks in addition to those associated with transactions in securities traded on the securities exchanges, such as the Nasdaq Capital Market (together, “Exchange-listed Stocks”). Many OTC stocks trade less frequently and in smaller volumes than Exchange-listed Stocks. Accordingly, our stock would be less liquid than it would be otherwise. Also, the values of OTC stocks are often more volatile than Exchange-listed Stocks. Additionally, institutional investors are usually prohibited from investing in OTC stocks, and it might be more challenging to raise capital when needed.

We will continue to monitor the closing bid price of our common stock and seek to regain compliance with the Minimum Bid Price Requirement within the allotted compliance period; however, there can be no assurance that we will regain compliance with the Minimum Bid Requirement or that if we do appeal a subsequent delisting determination, that such appeal would be successful

If our common stock becomes subject to the penny stock rules, it may be more difficult to sell our common stock.

The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than \$5.00 (other than securities registered on certain national securities exchanges or authorized for quotation on certain automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system). The OTC Bulletin Board does not meet such requirements and if the price of our common stock is less than \$5.00 and our common stock is no longer listed on a national securities exchange such as Nasdaq, our stock may be deemed a penny stock. The penny stock rules require a broker-dealer, at least two business days prior to a transaction in a penny stock not otherwise exempt from those rules, to deliver to the customer a standardized risk disclosure document containing specified information and to obtain from the customer a signed and dated acknowledgment of receipt of that document. In addition, the penny stock rules require that prior to effecting any transaction in a penny stock not otherwise exempt from those rules, a broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive: (i) the purchaser's written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks; and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our common stock, and therefore stockholders may have difficulty selling their shares.

If our common stock is delisted, your ability to transfer or sell the Pre-Funded Warrants or the Warrants may be limited and the value of the Pre-Funded Warrants or the Warrants will be materially adversely affected.

The Pre-Funded Warrants and Warrants do not contain provisions that protect you if our common stock is delisted. If our common stock is delisted, your ability to transfer or sell the Pre-Funded Warrants, the Warrants or common stock underlying Pre-Funded Warrants and the Warrants may be limited and the value of the securities will be materially adversely affected.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of Common Stock, Pre-Funded Warrants and Warrants in this offering will be approximately \$7.4 million after deducting the Placement Agent fees and estimated offering expenses payable by us.

We intend to use the net proceeds of the offering for general corporate purposes, which may include working capital and general and administrative expenses.

These expected uses represent our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of and results from clinical trials, as well as any new collaborations that we may enter into with third parties for our product candidates, the commercialization of our products or our product candidates, if approved, and any unforeseen cash needs. As a result, our management will have broad discretion in the application of the net proceeds from this offering, and the investors will be relying on the judgment of our management regarding the application of the net proceeds from this offering. Pending application of the net proceeds as described above, we intend to invest the net proceeds of this offering in short-term, investment-grade, interest-bearing securities.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our common stock. We currently intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends on our common stock will be made at the discretion of our board of directors and will depend on various factors, including applicable laws, our results of operations, financial condition, future prospects, anticipated cash needs, plans for expansion and any other factors deemed relevant by our board of directors.

DESCRIPTION OF SECURITIES WE ARE OFFERING

We are offering 765,000 shares of our common stock, Pre-Funded Warrants to purchase 1,849,380 shares of our common stock and Warrants to purchase up to 2,614,380 shares of our common stock pursuant to this prospectus supplement and the accompanying prospectus. The Common Stock, Pre-Funded Warrants and accompanying Warrants will be issued separately. We are also registering the shares of common stock issuable from time to time upon exercise of the Pre-Funded Warrants and Warrants offered hereby. The material terms and provisions of our common stock are described under the caption "Description of Capital Stock" in the accompanying prospectus. The transfer agent for our common stock is Continental Stock Transfer & Trust Company.

The following summary of certain terms and provisions of the Pre-Funded Warrants and the Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Pre-Funded Warrants and Warrants, the forms of which will be filed as exhibits to a Current Report on Form 8-K in connection with this offering and incorporated by reference into the registration statement of which this prospectus supplement forms a part. Prospective investors should carefully review the terms and provisions of the form of warrant for a complete description of the terms and conditions of the Pre-Funded Warrants and the Warrants. Pre-Funded Warrants and Warrants will be issued in certificated form only.

Pre-Funded Warrants

The following summary of certain terms and provisions of Pre-Funded Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Pre-Funded Warrant, the form of which will be filed as an exhibit to a Current Report on Form 8-K in connection with this offering and incorporated by reference into the registration statement of which this prospectus supplement forms a part. Prospective investors should carefully review the terms and provisions of the form of Pre-Funded Warrant for a complete description of the terms and conditions of the Pre-Funded Warrants.

Pre-Funded warrants will be issued in certificated form only.

Duration and Exercise Price

Each Pre-Funded Warrant offered hereby will have an initial exercise price per share equal to \$0.0001. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations, or similar events affecting our common stock and the exercise price. The Pre-Funded Warrants do not expire.

Exercisability

The Pre-Funded Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of such holder's Pre-Funded Warrant to the extent that the holder would own more than 4.99% (or, at the election of the purchaser, 9.99%) of the outstanding shares of common stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding shares of common stock after exercising the holder's Pre-Funded Warrants up to 9.99% 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 Pre-Funded Warrants. No fractional shares of common stock will be issued in connection with the exercise of a Pre-Funded Warrant. In lieu of fractional shares, we will either pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

Cashless Exercise

In lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Pre-Funded Warrants.

Fundamental Transactions

In the event of any fundamental transaction, as described in the Pre-Funded Warrants and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our shares of common stock, then upon any subsequent exercise of a Pre-Funded Warrant, the holder will have the right to receive as alternative consideration, for each share of common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation or of our company, if it is the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of common stock for which the Pre-Funded Warrant is exercisable immediately prior to such event.

Transferability

Subject to applicable laws, a Pre-Funded Warrant may be transferred at the option of the holder upon surrender of the Pre-Funded Warrant to us together with the appropriate instruments of transfer and payment of funds sufficient to pay any transfer taxes (if applicable).

Exchange Listing

There is no established trading market for the Pre-Funded Warrants on any securities exchange or nationally recognized trading system. We do not intend to list the Pre-Funded Warrants on any securities exchange or nationally recognized trading system.

Rights as a Stockholder

Except as otherwise provided in the Pre-Funded Warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the Pre-Funded Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until such Pre-Funded Warrant holders exercise their Pre-Funded Warrants.

Warrants

Duration and Exercise Price

Each Warrant will have an exercise price of \$2.95 and will be exercisable immediately on the date of issuance. The Warrants will expire five (5) years after the date of issuance. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price.

Exercisability

The Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). No fractional shares of common stock will be issued in connection with the exercise of a Warrant. In lieu of fractional shares, we will either pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

Cashless Exercise

If, at the time a holder exercises its Warrants, a registration statement registering the issuance of the shares of common stock underlying the Warrants under the Securities Act is not then effective or available, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Warrants.

Fundamental Transaction

In the event of any fundamental transaction, as described in the Warrants and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our shares of common stock, then upon any subsequent exercise of a Warrant, the holder will have the right to receive as alternative consideration, for each share of common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation of our company, if it is the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of common stock for which the Warrant is exercisable immediately prior to such event. Notwithstanding the foregoing, in the event of a fundamental transaction, the holders of the Warrants have the right to require us or a successor entity to redeem the Warrants for cash in the amount of the Black Scholes Value (as defined in each Warrant) of the unexercised portion of the Warrants concurrently with or within 30 days following the consummation of a fundamental transaction. However, in the event of a fundamental transaction which is not in our control, including a fundamental transaction not approved by our board of directors, the holders of the Warrants will only be entitled to receive from us or our successor entity, as of the date of consummation of such fundamental transaction the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of the Warrant, that is being offered and paid to the holders of our common stock in connection with the fundamental transaction, whether that consideration is in the form of cash, stock or any combination of cash and stock, or whether the holders of our common stock are given the choice to receive alternative forms of consideration in connection with the fundamental transaction.

Transferability

Subject to applicable laws, a Warrant may be transferred at the option of the holder upon surrender of the Warrant to us together with the appropriate instruments of transfer and payment of funds sufficient to pay any transfer taxes (if applicable).

Exchange Listing

There is no trading market available for the Warrants on any securities exchange or nationally recognized trading system. We do not intend to list the Warrants on The Nasdaq Capital Market or any securities exchange or nationally recognized trading system.

Right as a Stockholder

Except as otherwise provided in the Warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their Warrants.

PLAN OF DISTRIBUTION

Pursuant to an engagement agreement, dated November 7, 2022 (the “Engagement Agreement”), we have engaged H.C. Wainwright & Co., LLC (the “Placement Agent”), to act as our exclusive placement agent, on a reasonable best efforts basis, in connection with this offering pursuant to this prospectus supplement and the accompanying prospectus. The terms of this offering are subject to market conditions and negotiations between us, the Placement Agent, and prospective investor. The Engagement Agreement does not give rise to any commitment by the Placement Agent to purchase any of the securities, and the Placement Agent will have no authority to bind us by virtue of the Engagement Agreement. The Placement Agent is not purchasing the securities offered by us in this offering and are not required to sell any specific number or dollar amount of shares of common stock or Warrants, but will assist us in this offering on a reasonable best-efforts basis. Further, the Placement Agent does not guarantee that it will be able to raise new capital in any prospective offering. The Placement Agent may engage sub-agents or selected dealers to assist with the offering.

On November 16, 2022, we entered into a Securities Purchase Agreement directly with the investor in connection with this offering who has agreed to purchase the shares of common stock, the Pre-Funded Warrants and the Warrants in this offering. We will only sell the Securities offered hereunder to the investor who has entered into a Securities Purchase Agreement.

We expect to deliver the Common Stock, the Pre-Funded Warrants and Warrants being offered pursuant to this prospectus supplement and accompanying prospectus on or about November 18, 2022, subject to satisfaction of customary closing conditions.

Fees and Expenses

We have agreed to pay to the Placement Agent: (i) a cash fee equal to 6.0% of the aggregate gross proceeds raised in this offering (subject to certain reductions), (ii) to pay the Placement Agent \$25,000 for non-accountable expenses and up to \$50,000 for reasonable and documented fees and expenses of legal counsel and (iii) \$15,950 for clearing fees.

	<u>Per Share</u>	<u>Per Pre-Funded Warrant</u>	<u>Total</u>
Offering price	\$ 3.06	\$ 3.0590	\$ 7,997,388.42
Placement agent fee	\$ 0.1836	\$ 0.1836	\$ 480,000.17
Proceeds to us, before expenses	<u>\$ 2.8764</u>	<u>\$ 2.8754</u>	<u>\$ 7,517,388.25</u>

We estimate the total expenses payable by us for this offering to be approximately \$620,950, which amount includes (i) a Placement Agent’s fee of \$480,000, assuming the purchase of all of the Securities we are offering; (ii) a \$25,000 non-accountable expense allowance payable to the Placement Agent; (iii) up to \$50,000 for reasonable and documented fees and expenses of legal counsel and other actual out-of-pocket expenses, (iv) \$15,950 for clearing costs, and (v) and other estimated expenses of approximately \$50,000 which include legal, accounting, printing costs and various fees associated with the registration and listing of our shares. Cantor Fitzgerald & Co. is acting as an independent financial advisor to us, and we will pay a customary advisory fee which is included in the total fee payable for this offering.

Indemnification

We have agreed to indemnify the Placement Agent and specified other persons against certain liabilities, including liabilities under the Securities Act, and the Exchange Act, and to contribute to payments that the Placement Agent may be required to make in respect of such liabilities.

Regulation M

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

Lock-up Restrictions

In the Securities Purchase Agreement, we have agreed to a limitation on the issuance and sale of our securities for ninety (90) days following the closing date of this offering, subject to certain exceptions. In addition, we have agreed to not issue any securities that are subject to a price reset based on the trading prices of our common stock or upon a specified or contingent event in the future or enter into any agreement to issue securities at a future determined price for a period of one (1) year following the closing date of this offering, subject to an exception.

Other Relationships

H.C. Wainwright & Co. acted as our placement agent for the registered direct offering we consummated in January 2019, as our sales agent for our at-the-market facility, as an underwriter in connection with an underwritten public offering that we consummated in August 2020, and as our placement agent for the registered direct offering we consummated in July 2022, in each case for which it received compensation.

From time to time, the Placement Agent may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which it may receive customary fees and commissions. Except as disclosed in this prospectus supplement, we have no present arrangements with the Placement Agent for any services.

Nasdaq Capital Market Listing

Our stock is currently traded on The Nasdaq Capital Market under the symbol "TRVN". On November 15, 2022, the last reported sale price of our common stock was \$3.46 per share.

LEGAL MATTERS

The validity of the shares of securities being offered in this offering will be passed upon for us by Troutman Pepper Hamilton Sanders LLP. The Placement Agent is being represented by Duane Morris LLP, in connection with this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements included in our [Annual Report on Form 10-K for the year ended December 31, 2021](#) and the effectiveness of our internal control over financial reporting as of December 31, 2021, as set forth in their reports (which contain an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the financial statements), which are incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

The SEC maintains an Internet website at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered by this prospectus supplement and the accompanying prospectus. This prospectus supplement, filed as part of the registration statement, does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. You may access the registration statement, of which this prospectus supplement and the accompanying base prospectus forms a part, at the SEC's Internet website. Our reports on Forms 10-K, 10-Q and 8-K, and amendments to those reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act, are also available for download, free of charge, as soon as reasonably practicable after these reports are filed with the SEC, at our website at <http://www.trevena.com>. The content contained in, or that can be accessed through, our website is not incorporated by reference and is not a part of this prospectus supplement or the accompanying prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to “incorporate by reference” information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus. Information in this prospectus supplement supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus supplement.

We incorporate by reference into this prospectus supplement and the accompanying prospectus the information or documents listed below that we have filed with the SEC:

- [Our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on March 31, 2022](#);
- Our Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2022](#), [June 30, 2022](#), and [September 30, 2022](#) filed with the SEC on [May 11, 2022](#), [August 11, 2022](#) and [November 9, 2022](#), respectively;
- The information specifically incorporated by reference into our [Annual Report on Form 10-K for the year ended December 31, 2021](#) from our [Definitive Proxy Statement on Form DEF 14A, filed on May 9, 2022](#);
- Our Current Reports on Form 8-K filed with the SEC (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports that are related to such items) on [January 27, 2022](#), [March 31, 2022](#), [April 25, 2022](#), [June 13, 2022](#), [June 21, 2022](#), [July 28, 2022](#), [August 1, 2022](#), [September 12, 2022](#), [November 9, 2022](#), [November 9, 2022](#), and [November 9, 2022](#) (in each case other than any portions thereof deemed furnished and not filed); and
- [The description of our common stock contained in our Form 10-K filed with the SEC on March 12, 2020](#), including any amendment or report filed for the purpose of updating such description.

In addition, all documents that we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement and before the termination of the offering of shall be deemed incorporated by reference into this prospectus supplement and the accompanying prospectus and to be a part of this prospectus supplement and the accompanying prospectus from the respective dates of filing such documents. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed above or filed in the future, that are not deemed “Filed” with the SEC, including any information furnished pursuant to items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

Any statement contained in a document incorporated by reference in this prospectus supplement and the accompanying prospectus shall be deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document that also is or is deemed to be incorporated by reference in this prospectus supplement 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 prospectus supplement or the accompanying prospectus.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost, by contacting: Jennifer Keyser, Trevena, Inc., 955 Chesterbrook Boulevard, Suite 110, Chesterbrook, PA 19087, (610) 354-8840, email address: jkeyser@trevena.com. In addition, copies of any or all of the documents incorporated herein by reference may be accessed at our website at <http://www.trevena.com>. The information contained on, or that can be accessed through, such website is not incorporated by reference and is not a part of this prospectus supplement or the accompanying prospectus.



\$250,000,000

**Common Stock
Preferred Stock
Debt Securities
Warrants**

From time to time, we may offer up to \$250,000,000 of any combination of the securities described in this prospectus in one or more offerings. We may also offer securities as may be issuable upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable anti-dilution provisions.

This prospectus provides a general description of the securities we may offer. 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 these offerings. 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.

This prospectus may not be used to consummate a sale of any securities unless accompanied by a prospectus supplement.

Our common stock is traded on The Nasdaq Capital Market under the symbol "TRVN." On November 25, 2020, the last reported sale price of our common stock was \$2.34 per share. The applicable prospectus supplement will contain information, where applicable, as to any other listing on The Nasdaq Capital Market or any securities market or other exchange of the securities, if any, covered by the prospectus supplement.

We will sell these securities directly to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts or over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus as described on page 5 of this prospectus.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is December 4, 2020.

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ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total aggregate offering price of \$250,000,000. This prospectus provides you with a general description of the securities we may offer.

Each time we sell securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in any documents that we have incorporated by reference into this prospectus. You should read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading “Incorporation of Certain Information by Reference,” before investing in any of the securities offered.

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

Neither we, nor any agent, underwriter or dealer has authorized any person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus prepared by or on behalf of us or to which we have referred you. This prospectus, any applicable supplement to this prospectus or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus, any applicable supplement to this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered, or securities are sold, on a later date.

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.”

SUMMARY

This summary highlights selected information from this prospectus and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities discussed under the heading “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

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

Company Overview

We are a biopharmaceutical company focused on the development and commercialization of novel medicines for patients with central nervous system, or CNS, disorders.

Our lead product, OLINVYK™ (oliceridine) injection, or OLINVYK, was approved by the United States Food and Drug Administration, or the FDA, on August 7, 2020. OLINVYK is indicated in adults for the management of acute pain severe enough to require an intravenous opioid analgesic and for whom alternative treatments are inadequate. OLINVYK is an opioid agonist that is the first new chemical entity, or NCE, in this IV drug class in decades and offers a differentiated profile that addresses a significant unmet need in the acute pain management landscape. OLINVYK delivers IV opioid efficacy with a rapid 2-5 minute onset of action. In addition, OLINVYK requires no dosage adjustments in patients with renal impairment, a large patient population with significant medical complications. On October 30, 2020, we announced that the U.S. Drug Enforcement Administration, or DEA, placed oliceridine into Schedule II of the Controlled Substances Act. With DEA scheduling complete, we expect to make OLINVYK available for commercial distribution by the end of November 2020.

Using our proprietary product platform, we also have identified and are developing the following product candidates:

- **TRV027:** We are developing TRV027, a novel AT1 receptor selective agonist, for the treatment of acute lung injury contributing to acute respiratory distress syndrome, or ARDS, and abnormal blood clotting in patients with COVID-19. In a COVID-19 infection, the SARS-coronavirus-2 binds to and removes the ACE2 protein in the lungs, causing elevated levels of angiotensin II. This drives overactivation of the AT1 receptor resulting in downstream acute lung injury, which can lead to ARDS, and abnormal blood clotting, which can lead to pulmonary embolisms and strokes. TRV027 potentially counteracts the disproportionate levels of angiotensin II, by competitively binding to and rebalancing AT1 receptor activation. Additionally, its unique mechanism of action preferentially engages the signaling pathway to promote reparative effects on lung tissue.

In June 2020, we announced a collaboration with Imperial College London, or the ICL, to study TRV027 in a randomized, placebo-controlled study in approximately 60 COVID-19 patients. The primary endpoint is a coagulation cascade biomarker, which serves as a surrogate for measuring the effect of TRV027 on adverse health outcomes associated with increased mortality in COVID-19 infections. In August 2020, we announced that ICL has initiated a proof-of-concept study for TRV027 in COVID-19 patients. ICL is sponsoring and funding this study, with additional support from the British Heart Foundation. We expect to report topline data in the first quarter of 2021.

TRV027 has previously been studied in 691 individuals. It has demonstrated efficacy, potency, and selectivity at the AT1 receptor in nonclinical studies and has a well-characterized pharmacokinetic profile. In previous clinical trials, there was a low dropout rate associated with TRV027, and no significant safety issues were reported.

- **TRV250:** We are developing TRV250, a G-protein biased delta-opioid receptor, or DOR, agonist as a compound with a potential first-in-class novel mechanism for the treatment of acute migraine.

TRV250 also may have utility in a range of other central nervous system, or CNS, indications. Because TRV250 selectively targets the DOR, we believe it will not have the addiction liability of conventional opioids or have other mu-opioid related adverse effects like respiratory depression and constipation. In June 2018, we announced the completion of our first-in-human Phase 1 study of TRV250. Data from this healthy volunteer study showed a favorable tolerability profile and pharmacokinetics supporting the advancement of TRV250 to proof-of-concept evaluation in patients, which we initiated in November 2019. The study protocol required subjects to be monitored in an in-patient setting for 24 hours, and due to global COVID-19 pandemic, we paused enrolment in March 2020 and terminated the study in August 2020. We continue to investigate alternative development plans for TRV250 and our DOR program, and we expect to re-initiate clinical studies in the second half of 2021.

- **TRV734:** We also have identified and have completed the initial Phase 1 studies for TRV734, a NCE, targeting the same novel mechanism of action at the mu-opioid receptor, or MOR, as OLINVYK. TRV734 was designed to be orally available, and its mechanism of action suggests it may offer valuable benefits for two distinct areas of important unmet medical need: acute and chronic pain, and maintenance-assisted therapy for patients with opioid use disorder, or OUD. We are collaborating with the National Institute on Drug Abuse, or NIDA, to further evaluate TRV734 for the management of OUD, and NIDA initiated a proof-of-concept study for this indication in December 2019. On March 26, 2020, we announced that due to the global COVID-19 pandemic, enrollment has been paused in this trial. We intend to continue to focus our efforts for TRV734 on securing a development and commercialization partner for this asset.
- **TRV045:** We are evaluating a set of novel SIP modulators that may offer a new, non-opioid approach to managing chronic pain. In the fourth quarter of 2018, we identified a new product candidate, TRV045, a novel SIP modulator that we believe may offer a new, non-opioid approach to managing chronic pain. In the second quarter of 2019, we initiated investigational new drug, or IND, enabling work, and we will continue to evaluate the progression of this asset to an IND, either by ourselves or with a partner. In March 2020, we announced we entered into a collaboration with the U.S. National Institutes of Health (NIH) to evaluate the potential of TRV045 as a treatment for epilepsy. In May 2020, we announced we entered into a collaboration with the NIH to evaluate the potential of TRV045 as a treatment for pain. NIH is assessing TRV045 within its Epilepsy Therapy Screening Program, or ETSP, and in its Preclinical Screening Platform for Pain, or PSPP. We expect to file an IND application with the FDA for TRV045 in the first half of 2021.

Corporate Information

We were incorporated under the laws of the State of Delaware in November 2007. Our principal executive office is located at 955 Chesterbrook Blvd., Suite 110, Chesterbrook, Pennsylvania 19087. Our telephone number is (610) 354-8840. Our website address is www.trevena.com. The information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our securities.

“Trevena,” “OLINVYK,” the Trevena logo and other trademarks or service marks of Trevena, Inc. appearing in this prospectus are the property of Trevena, Inc. This prospectus contains additional trade names, trademarks and service marks of others, which are the property of their respective owner.

The Securities We May Offer

We may offer shares of our common stock and preferred stock, various series of debt securities and warrants to purchase any of such securities, up to a total aggregate offering price of \$250,000,000 from time to time in one or more offerings under this prospectus, together with any applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of the relevant offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity, if applicable;
- original issue discount, if any;
- rates and times of payment of interest or dividends, if any;
- redemption, conversion, exchange or sinking fund terms, if any;
- conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;
- ranking, if applicable;
- restrictive covenants, if any;
- voting or other rights, if any; and
- important U.S. federal income tax considerations.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

We may sell the securities directly to investors or through underwriters, dealers or agents. We, and our underwriters or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement:

- the names of those underwriters or agents;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the estimated net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. Holders of our common stock are entitled to one vote per share for the election of directors and on all other matters that require stockholder approval. Subject to any preferential rights of any then outstanding preferred stock, in the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in the assets remaining after payment of liabilities and the liquidation preferences of any then outstanding preferred stock. Our common stock does not carry any preemptive rights enabling a holder to subscribe for, or receive shares of, any class of our common stock or any other securities convertible into shares of any class of our common stock, or any redemption rights.

Preferred Stock. We may issue shares of our preferred stock from time to time, in one or more series. Under our certificate of incorporation, our board of directors has the authority, without further action by stockholders, to designate up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, qualifications and restrictions granted to or imposed upon the preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preference and sinking fund terms, any or all of which may be greater than the rights of the common stock. To date, none of the 5,000,000 authorized shares of preferred stock have been designated by our board of directors. Convertible preferred stock will be convertible into our common stock or exchangeable for our other securities. Conversion may be mandatory or at the option of the holders of our preferred stock and would be at prescribed conversion rates.

Our board of directors will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we sell under this prospectus and applicable prospectus supplements in the certificate of designation relating to that series. We will incorporate by reference into the registration statement of which this prospectus is a part the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. We urge you to read the prospectus supplements (and any related free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Debt Securities. We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into our common stock or preferred stock. Conversion may be mandatory or at the holder's option and would be at prescribed conversion rates.

The debt securities will be issued under one or more documents called indentures, which are contracts between us and a national banking association or other eligible party, as trustee. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. A form of indenture has been filed as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities 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.

Warrants. We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. Forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants being offered have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental warrant agreements and forms of warrant certificates 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 will evidence each series of warrants by warrant certificates that we will issue. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

Listing

If any securities are to be listed or quoted on a securities exchange or quotation system, the applicable prospectus supplement or any related free writing prospectus will so indicate. Our common stock is listed on The Nasdaq Capital Market and trades under the symbol "TRVN".

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described under the heading “*Risk Factors*” contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in our [Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on March 12, 2020](#) and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2019, June 30, 2020 and September 30, 2020, as filed with the SEC on [May 7, 2020](#), [August 10, 2020](#) and [November 2, 2020](#), respectively, as updated by our annual, quarterly and other reports and documents that are incorporated by reference into this prospectus, before deciding whether to purchase any of the securities being registered pursuant to the registration statement of which this prospectus is a part. Each of the risk factors could adversely affect our business, operating results, financial condition and cash flow, as well as adversely affect the value of an investment in our securities, and the occurrence of any of these risks might cause you to lose all or part of your investment. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations. Please refer to the sections entitled “Special Note Regarding Forward-Looking Statements,” “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference.”

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Exchange Act of 1934, as amended, or the Exchange Act, that involve a number of risks and uncertainties. Although our forward-looking statements reflect the good faith judgment of our management, these statements can only be based on facts and factors currently known by us. Consequently, these forward-looking statements are inherently subject to risks and uncertainties, and actual results and outcomes may differ materially from results and outcomes discussed in the forward-looking statements.

Forward-looking statements can be identified by the use of forward-looking words such as “believes,” “expects,” “hopes,” “may,” “will,” “plan,” “intends,” “estimates,” “could,” “should,” “would,” “continue,” “seeks,” “pro forma,” or “anticipates,” or other similar words (including their use in the negative), or by discussions of future matters such as the development of new products, technology enhancements, possible collaborations and other statements that are not historical. These statements include but are not limited to statements under the captions “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and in other sections incorporated by reference from our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, as applicable, as well as our other filings with the SEC. You should be aware that the occurrence of any of the events discussed under the heading “Risk Factors” in any applicable prospectus supplement and any documents incorporated by reference herein or therein could substantially harm our business, operating results and financial condition and that if any of these events occurs, it could adversely affect the value of an investment in our securities.

The cautionary statements made in this prospectus are intended to be applicable to all related forward-looking statements wherever they may appear in this prospectus or in any prospectus supplement or any documents incorporated by reference herein or therein. We urge you not to place undue reliance on these forward-looking statements, which speak only as of the date they are made. Except as required by law, we assume no obligation to update our forward-looking statements, even if new information becomes available in the future.

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds from the sale of the securities offered hereby. Except as described in any prospectus supplement or any related free writing prospectus that we may authorize to be provided to you, we currently intend to use the net proceeds from the sale of the securities offered hereby for general corporate purposes, which may include expenses incurred in connection with the commercialization of our approved products (including OLINVYK), advancing our pipeline assets, research and development, capital expenditures, working capital and general and administrative expenses. We may also use a portion of the net proceeds to acquire or invest in businesses, products and technologies that are complementary to our own, although we have no current plans, commitments or agreements with respect to any acquisitions as of the date of this prospectus. We will set forth in the applicable prospectus supplement or free writing prospectus our intended use for the net proceeds received from the sale of any securities sold pursuant to the prospectus supplement or free writing prospectus. Pending these uses, we intend to invest the net proceeds primarily in a money market mutual fund with a large financial institution.

DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, our amended and restated certificate of incorporation authorizes us to issue 200,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of preferred stock, par value \$0.001 per share. As of November 25, 2020, 157,030,012 shares of common stock were outstanding and no shares of preferred stock were outstanding.

The following summary describes the material terms of our capital stock. The description of capital stock is qualified by reference to our amended and restated certificate of incorporation and our amended and restated bylaws, which are incorporated by reference as exhibits into the registration statement of which this prospectus is a part.

Common Stock

Voting. Our common stock is entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, including the election of directors, and does not have cumulative voting rights. Accordingly, the holders of a majority of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election.

Dividends. Subject to preferences that may be applicable to any then-outstanding preferred stock, the holders of common stock are entitled to receive dividends, if any, as may be declared from time to time by our Board of Directors out of legally available funds.

Liquidation. In the event of our liquidation, dissolution or winding-up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Rights and Preferences. Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Fully Paid and Nonassessable. All of our outstanding shares of common stock are fully paid and nonassessable.

Preferred Stock

Under our amended and restated certificate of incorporation, our board of directors has the authority, without further action by stockholders, to designate up to 5,000,000 shares of preferred stock in one or more series and to fix or alter, from time to time, the designations, powers and rights of each series of preferred stock and the qualifications, limitations or restrictions of any series of preferred stock, including dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices, and the liquidation preference of any wholly unissued series of preferred stock, any or all of which may be greater than the rights of the common stock, and to establish the number of shares constituting any such series. To date, none of the 5,000,000 authorized shares of preferred stock have been designated by our board of directors.

Our board of directors will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we sell under this prospectus and any applicable prospectus supplements in the certificate of designation relating to each such series. We will incorporate by reference as an exhibit to the registration statement of which this prospectus is a part or as an exhibit to one or more Current Reports on Form 8-K, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock.

If we issue and sell shares of preferred stock pursuant to this prospectus, together with any applicable prospectus supplement or free writing prospectus, the shares will be fully paid and nonassessable.

The laws of the state of Delaware, the state of our incorporation, provide that the holders of preferred stock will have the right to vote separately as a class on any proposal involving fundamental changes in the rights of holders of such preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

The issuance of preferred stock could adversely affect the voting power, conversion or other rights of holders of common stock and reduce the likelihood that common stockholders will receive dividend payments and payments upon liquidation. Preferred stock could be issued quickly with terms designed to delay, deter or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

Warrants

In connection with entering into a credit facility in September 2014, we issued to the lenders and the placement agent warrants to purchase an aggregate of 7,678 shares of our common stock, of which warrants to purchase 5,728 shares remain outstanding as of the date of this filing. These warrants are exercisable immediately and have an exercise price of \$5.8610 per share. These warrants may be exercised on a cashless basis and will terminate on the earlier of September 19, 2024 or the closing of a merger or consolidation transaction in which we are not the surviving entity. In connection with subsequent draws of additional funds under this credit facility, we issued to the lenders and the placement agent additional warrants to purchase an aggregate of 34,961 and 62,241 shares of our common stock in December 2015 and March 2017, respectively. The December 2015 warrants have substantially the same terms as those noted above, and have an exercise price of \$10.6190 per share and an expiration date of December 23, 2025. The March 2017 warrants have substantially the same terms as those noted above, and have an exercise price of \$3.6150 per share and an expiration date of March 31, 2027.

In connection with a registered direct offering, we issued to certain designees of the placement agent warrants to purchase an aggregate of 500,000 shares of our common stock, of which warrants to purchase 172,500 shares remain outstanding as of the date of this filing. These warrants are exercisable immediately and have an exercise price of \$1.25 per share. These warrants may be exercised on a cashless basis and will terminate on the earlier of January 29, 2024 or the closing of a merger or consolidation transaction in which we are not the surviving entity.

Anti-Takeover Provisions

Section 203 of the Delaware General Corporation Law. We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 $\frac{2}{3}$ % of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a “business combination” to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;

- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an “interested stockholder” as an entity or person who, together with the person’s affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

The existence of this provision generally will have an anti-takeover effect for transactions not approved in advance by the board of directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws. Our amended and restated certificate of incorporation, or our restated certificate, provides for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. Our restated certificate and our amended and restated bylaws, or our restated bylaws, also provide that directors may be removed by the stockholders only for cause upon the vote of 66²/₃% or more of our outstanding common stock. Furthermore, the authorized number of directors may be changed only by resolution of the board of directors, and vacancies and newly created directorships on the board of directors may, except as otherwise required by law or determined by the board, only be filled by a majority vote of the directors then serving on the board, even though less than a quorum.

Our restated certificate and restated bylaws also provide that all stockholder actions must be effected at a duly called meeting of stockholders and will eliminate the right of stockholders to act by written consent without a meeting. Our restated bylaws also provide that only our chairman of the board, chief executive officer or the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors may call a special meeting of stockholders.

Our restated bylaws also provide that stockholders seeking to present proposals before a meeting of stockholders to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and will specify requirements as to the form and content of a stockholder’s notice.

Our restated certificate and restated bylaws provide that the stockholders cannot amend many of the provisions described above except by a vote of 66²/₃% or more of our outstanding common stock.

The combination of these provisions makes it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to effect a change of control of our company.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging

others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company. The transfer agent's address is 1 State Street, 30th Floor, New York, New York 10004. The transfer agent for any series of preferred stock that we may offer under this prospectus will be named and described in the prospectus supplement for that series.

Listing on the Nasdaq Global Select Market

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

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indenture, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the debt securities under the indenture that we will enter into with the trustee named in the indenture. The indenture will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We have filed the form of indenture as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities 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.

The following summary of material provisions of the debt securities and the indenture is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indenture that contains the terms of the debt securities.

General

The indenture does not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize and may be in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us.

We may issue the debt securities issued under the indenture as “discount securities,” which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may be issued with “original issue discount,” or OID, for U.S. federal income tax purposes because of interest payment and other characteristics or terms of the debt securities. Material U.S. federal income tax considerations applicable to debt securities issued with OID will be described in more detail in any applicable prospectus supplement.

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title of the series of debt securities;
- any limit upon the aggregate principal amount that may be issued;
- the maturity date or dates;
- the form of the debt securities of the series;
- the applicability of any guarantees;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;
- if the price (expressed as a percentage of the aggregate principal amount thereof) at which such debt securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such debt securities that is convertible into another security or the method by which any such portion shall be determined;

- the interest rate or rates, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- if applicable, the date or dates after which, or the period or periods during which, and the price or prices at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date or dates, if any, on which, and the price or prices at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;
- whether the debt securities of the series shall be issued in whole or in part in the form of a global security or securities; the terms and conditions, if any, upon which such global security or securities may be exchanged in whole or in part for other individual securities; and the depository for such global security or securities;
- if applicable, the provisions relating to conversion or exchange of any debt securities of the series and the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange;
- if other than the full principal amount thereof, the portion of the principal amount of debt securities of the series which shall be payable upon declaration of acceleration of the maturity thereof;
- additions to or changes in the covenants applicable to the particular debt securities being issued, including, among others, the consolidation, merger or sale covenant;
- additions to or changes in the events of default with respect to the securities and any change in the right of the trustee or the holders to declare the principal, premium, if any, and interest, if any, with respect to such securities to be due and payable;
- additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;
- additions to or changes in the provisions relating to satisfaction and discharge of the indenture;
- additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of holders of debt securities issued under the indenture;
- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;
- whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;
- the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any, and principal amounts of the debt securities of the series to any holder that is not a "United States person" for federal tax purposes;
- any restrictions on transfer, sale or assignment of the debt securities of the series; and

- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, any other additions or changes in the provisions of the indenture, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to settlement upon conversion or exchange and whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indenture will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of our assets as an entirety or substantially as an entirety. However, any successor to or acquirer of such assets (other than a subsidiary of ours) must assume all of our obligations under the indenture or the debt securities, as appropriate.

Events of Default under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indenture with respect to any series of debt securities that we may issue:

- if we fail to pay any installment of interest on any series of debt securities, as and when the same shall become due and payable, and such default continues for a period of 90 days; provided, however, that a valid extension of an interest payment period by us in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of interest for this purpose;
- if we fail to pay the principal of, or premium, if any, on any series of debt securities as and when the same shall become due and payable whether at maturity, upon redemption, by declaration or otherwise, or in any payment required by any sinking or analogous fund established with respect to such series; provided, however, that a valid extension of the maturity of such debt securities in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of principal or premium, if any;
- if we fail to observe or perform any other covenant or agreement contained in the debt securities or the indenture, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive written notice of such failure, requiring the same to be remedied and stating that such is a notice of default thereunder, from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, of such series of debt securities due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or

events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indenture, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indenture or to appoint a receiver or trustee, or to seek other remedies only if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request;
- such holders have offered to the trustee indemnity satisfactory to it against the costs, expenses and liabilities to be incurred by the trustee in compliance with the request; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indenture.

Modification of Indenture; Waiver

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may change an indenture without the consent of any holders with respect to specific matters:

- to cure any ambiguity, defect or inconsistency in the indenture or in the debt securities of any series;
- to comply with the provisions described above under “Description of Debt Securities — Consolidation, Merger or Sale”;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add to our covenants, restrictions, conditions or provisions such new covenants, restrictions, conditions or provisions for the benefit of the holders of all or any series of debt securities, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred upon us in the indenture;
- to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;

- to make any change that does not adversely affect the interests of any holder of debt securities of any series in any material respect;
- to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided above under “Description of Debt Securities — General” to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment under any indenture by a successor trustee; or
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act.

In addition, under the indenture, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of any debt securities of any series;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any series of any debt securities; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

The indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- provide for payment;
- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- pay principal of and premium and interest on any debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- recover excess money held by the trustee;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indenture provides that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, or DTC, or another depository named by us and identified in the applicable prospectus supplement with respect to that series. To the extent the debt securities of a series are issued in global form and as book-entry, a description of terms relating to any book-entry securities will be set forth in the applicable prospectus supplement.

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any

series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indenture and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange of any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indenture at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indenture and the debt securities, and any claim, controversy or dispute arising under or related to the indenture or the debt securities, will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements and free writing prospectuses, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock or debt securities and may be issued in one or more series. Warrants may be issued independently or together with common stock, preferred stock or debt securities offered by any prospectus supplement, and may be attached to or separate from those securities. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants that we may offer in more detail in the applicable prospectus supplement and any applicable free writing prospectus. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, if any, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering. 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 and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms relating to a series of warrants being offered, including:

- the title of such securities;
- the offering price or prices and aggregate number of warrants offered;
- the currency or currencies for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- if applicable, the minimum or maximum amount of such warrants which may be exercised at any one time;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at which, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which, and the currency in which, these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- the terms of any rights to force the exercise of the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;

- the manner in which the warrant agreements and warrants may be modified;
- a discussion of any material or special U.S. federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent in connection with the exercise of the warrant.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements, and any claim, controversy or dispute arising under or related to the warrants or warrant agreements, will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee or depository maintain for this purpose as the “holders” of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as “indirect holders” of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depository on behalf of other financial institutions that participate in the depository’s book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Global securities will be registered in the name of the depository or its participants. Consequently, for global securities, we will recognize only the depository as the holder of the securities, and we will make all payments on the securities to the depository. The depository passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depository and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a global security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depository’s book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not legal holders, of the securities.

Street Name Holders

A global security may be terminated in certain situations as described under “— Special Situations When a Global Security Will Be Terminated,” or issue securities that are not issued in global form. In these cases, investors may choose to hold their securities in their own names or in “street name.” Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we or any applicable trustee or depository will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we or any such trustee or depository will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee or third party employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the legal holder, we have no further responsibility for the payment or notice even if that legal holder is required, under agreements with its participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we

may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of an indenture, or for other purposes. In such an event, we would seek approval only from the legal holders, and not the indirect holders, of the securities. Whether and how the legal holders contact the indirect holders is up to the legal holders.

Special Considerations for Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form because the securities are represented by one or more global securities or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we issue to, deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the applicable prospectus supplement, DTC will be the depositary for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depositary, its nominee or a successor depositary, unless special termination situations arise. We describe those situations below under “— Special Situations When a Global Security Will Be Terminated.” As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and legal holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a legal holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued as a global security, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations for Global Securities

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depositary that holds the global security.

If securities are issued only as global securities, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;
- an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in the global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in the global security;
- we and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in the global security, nor will we or any applicable trustee supervise the depositary in any way;
- the depositary may, and we understand that DTC will, require that those who purchase and sell interests in the global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and
- financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in the global security, may also have their own policies affecting payments, notices and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When a Global Security Will Be Terminated

In a few special situations described below, a global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own names, so that they will be direct holders. We have described the rights of holders and street name investors above.

A global security will terminate when the following special situations occur:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;
- if we notify any applicable trustee that we wish to terminate that global security; or
- if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The applicable prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and neither we nor any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

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 other than 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.

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, dealers or agents, if any;
- 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.

Only underwriters named in the 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, naming 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.

All securities we offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids. 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 stabilizing or 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. These transactions may be effected on any exchange or over-the-counter market or otherwise.

Any underwriters who are qualified market makers on The Nasdaq Capital Market may engage in passive market making transactions in the securities on The Nasdaq Capital Market 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. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon for us by Troutman Pepper Hamilton Sanders LLP. If legal matters in connection with offerings made pursuant to this prospectus are passed upon by counsel for underwriters, dealers or agents, if any, such counsel will be named in the prospectus supplement relating to such offerings.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements included in our [Annual Report on Form 10-K for the year ended December 31, 2019](#) and the effectiveness of our internal control over financial reporting as of December 31, 2019, as set forth in their reports (which contain an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the financial statements), which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement we filed with the SEC and does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. Neither we nor any agent, underwriter or dealer has authorized any person to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of the securities offered by this prospectus.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement, as well as any other document filed by us with the SEC, at the SEC's Public Reference Room at 100 F Street NE, Washington, D.C. 20549. You can also request copies of these documents by writing to the SEC and paying a fee for the copying cost. You may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330. The SEC maintains a website that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC, including Trevena. The address of the SEC website is www.sec.gov.

We maintain a website at www.trevena.com. Information contained in or accessible through our website does not constitute a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The SEC file number for the documents incorporated by reference in this prospectus is 001-36193. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this document:

- [our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the SEC on March 12, 2020](#);
- the information specifically incorporated by reference into our [Annual Report on Form 10-K for the fiscal year ended December 31, 2019](#) from our [definitive proxy statement on Schedule 14A \(other than information furnished rather than filed\) filed with the SEC on April 13, 2020](#);

- our [Quarterly Reports on Form 10-Q for the quarterly period ended on March 31, 2020, filed with the SEC on May 7, 2020](#), for the [quarterly period ended on June 30, 2020, filed with the SEC on August 10, 2020](#) and for the [quarterly period ended on September 30, 2020, filed with the SEC on November 2, 2020](#);
- our Current Reports on Form 8-K (other than information furnished rather than filed) filed with the SEC on [February 10, 2020](#), [March 4, 2020](#), [March 26, 2020](#), [April 20, 2020](#), [May 26, 2020](#), [June 2, 2020](#), [August 11, 2020](#), [August 13, 2020](#) and [October 30, 2020](#); and
- [the description of our common stock, which is registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A, filed with the SEC on November 12, 2013, including any amendments or reports filed for the purpose of updating such description.](#)

We also incorporate by reference into this prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to effectiveness of the registration statement, or (ii) after the date of this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. You should direct any requests for documents by writing us at 955 Chesterbrook Blvd., Suite 110, Chesterbrook, Pennsylvania 19087, Attn: Corporate Secretary or telephoning us at (610) 354-8840.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.



765,000 Shares of Common Stock
Pre-Funded Warrants to Purchase up to 1,849,380 Shares of Common Stock
Warrants to Purchase up to 2,614,380 Shares of Common Stock

PROSPECTUS SUPPLEMENT

H.C. Wainwright & Co.

November 16, 2022
