

PROSPECTUS

SINTX TECHNOLOGIES, INC.

**Subscription Rights to Purchase Up to 10,000 Units
Consisting of an Aggregate of Up to 10,000 Shares of Series D Convertible Preferred Stock
and 54,260,000 Warrants to Purchase Shares of Common Stock
at a Subscription Price of \$1,000 Per Unit and
Up to 27,130,000 Shares of Common Stock Issuable upon the Conversion of
Series D Convertible Preferred Stock Included in the Units and
Up to 54,260,000 Shares of Common Stock Issuable upon the Exercise of
Warrants Included in the Units**

This prospectus relates to our distribution to holders of our common stock, Series B Preferred Stock, Series C Preferred Stock and certain outstanding warrants, which we refer to as the Participating Warrants, at no charge, non-transferable subscription rights to purchase units. Each unit, which we refer to as a Unit, consists of (i) one share of Series D Convertible Preferred Stock, which we refer to as the Preferred Stock, and, based on the Estimated Conversion Price (as defined below), (ii) 2,713 common stock purchase warrants expiring five years from the date of issuance, which we refer to as the Class A Warrants, and (iii) 2,713 common stock purchase warrants expiring three years from the date of issuance, which we refer to as the Class B Warrants and, together with the Class A Warrants, the Warrants. The actual number of Class A Warrants included in each Unit will be calculated as the quotient obtained by dividing \$1,000 by the Conversion Price. The actual number of Class B Warrants included in each Unit will be calculated as the quotient obtained by dividing \$1,000 by the Conversion Price. Each share of Preferred Stock is convertible, at the option of the holder at any time, into a number of shares of our common stock equal to the quotient of the stated value of the Preferred Stock (\$1,000) divided by the Conversion Price (initially, the Conversion Price will be equal to 90% of the lowest closing price for a share of our common stock as quoted on the Nasdaq Capital Market, during the five (5) trading days prior to the expiration of the Subscription Period (including the last day of the Subscription Period). Each Warrant will be exercisable for one share of our common stock at an exercise price per share equal to the Conversion Price. For purposes of this preliminary prospectus, we have assumed an estimated Conversion Price of \$0.36864 which is equal to 90% of the closing price of our common stock on September 19, 2022 (the “Estimated Conversion Price”). As noted elsewhere in this prospectus, the Estimated Conversion Price is subject to change when calculated on the expiration date of this offering.

We refer to the offering that is the subject of this prospectus as the Rights Offering. In the Rights Offering, you will receive one subscription right for every share of common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock, and exercise of Participating Warrants) owned at 5:00 p.m., Eastern Time, on September 23, 2022, the record date of the Rights Offering, or the Record Date. The Preferred Stock and the Warrants comprising the Units will separate upon the expiration of the Rights Offering and will be issued separately but may only be purchased as a Unit, and the Units will not trade as a separate security. The subscription rights will not be tradable. Holders as of the Record Date of Series B Preferred Stock, Series C Preferred Stock, and Participating Warrants, will also receive subscription rights pursuant to the terms of those Series B Preferred Stock, Series C Preferred Stock, and Participating Warrants.

Each subscription right will entitle you to purchase one Unit, which we refer to as the Basic Subscription Right, at a subscription price per Unit of \$1,000, which we refer to as the Subscription Price. If you exercise your Basic Subscription Rights in full, and any portion of the Units remain available under the Rights Offering, you will be entitled to an over-subscription privilege to purchase a portion of the unsubscribed Units at the Subscription Price, subject to proration and ownership limitations, which we refer to as the Over-Subscription Privilege. Each subscription right consists of a Basic Subscription Right and an Over-Subscription Privilege, which we refer to as the Subscription Right.

The Subscription Rights will expire if they are not exercised by 5:00 p.m., Eastern Time, on October 12, 2022, unless the Rights Offering is extended or earlier terminated by us. If we elect to extend the Rights Offering, we will issue a press release announcing the extension no later than 9:00 a.m., Eastern Time, on the next business day after the most recently announced expiration date of the Rights Offering. We may extend the Rights Offering for additional periods in our sole discretion for any reason up to an additional 45 days. Once made, all exercises of Subscription Rights are irrevocable.

We have not entered into any standby purchase agreement or other similar arrangement in connection with the Rights Offering. The Rights Offering is being conducted on a best-efforts basis and there is no minimum amount of proceeds necessary to be received in order for us to close the Rights Offering.

We have engaged Maxim Group LLC to act as dealer-manager in the Rights Offering.

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 13 of this prospectus. You should carefully consider these risk factors, as well as the information contained in this prospectus, before you invest.

Our stock transfer agent, American Stock Transfer & Trust Company, LLC, will serve as the Subscription Agent and D.F. King & Co., Inc., will serve as Information Agent for the Rights Offering. The Subscription Agent will hold the funds we receive from subscribers until we complete, abandon or terminate the Rights Offering. If you want to participate in this Rights Offering and you are the record holder of your shares, we recommend that you submit your subscription documents to the Subscription Agent well before the deadline. If you want to participate in this Rights Offering and you hold shares of our common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants through your broker, dealer, bank or other nominee, you should promptly contact your broker, dealer, bank or other nominee and submit your subscription documents in accordance with the instructions and within the time period provided by your broker, dealer, bank or other nominee. For a detailed discussion, see “The Rights Offering - The Subscription Rights.”

Our board of directors reserves the right to terminate the Rights Offering for any reason any time before the expiration of the Rights Offering. If we terminate the Rights Offering, all subscription payments received will be returned within 10 business days, without interest or deduction. We expect the Rights Offering to expire on or about October 12, 2022, subject to our right to extend the Rights Offering as described above, and that we would close on subscriptions within five business days of such date.

Our common stock is listed on the Nasdaq Capital Market, or Nasdaq, under the symbol “SINT.” On September 22, 2022, the last reported sale price of our common stock was \$0.4145 per share. There is no public trading market for the Preferred Stock or the Warrants and they will not be listed for trading on Nasdaq or any other securities exchange or market. The Subscription Rights are non-transferable and will not be listed for trading on Nasdaq or any other securities exchange or market. You are urged to obtain a current price quote for our common stock before exercising your Subscription Rights.

	Per Unit	Total(2)
Subscription price	\$ 1,000	\$ 10,000,000
Dealer-Manager fees and expenses (1)	\$ 80	\$ 800,000
Proceeds to us, before expenses	\$ 920	\$ 9,200,000

- (1) In connection with this Rights Offering, we have agreed to pay to Maxim Group LLC as the dealer-manager an aggregate cash fee equal to 7.0% of the gross proceeds received by us directly from exercises of the Subscription Rights. We agreed to reimburse expenses of Maxim Group LLC in the Rights Offering, up to \$100,000. We have also agreed to issue Maxim Group LLC a warrant covering a number of shares of our common stock equal to 4.0% of the total number of shares of common stock issuable upon the conversion of the Preferred Stock issued in the Rights Offering. We have also agreed that a portion of this compensation may be paid to Ascendant Capital Markets, LLC. See “Plan of Distribution.”
- (2) Assumes the Rights Offering is fully subscribed but excludes proceeds from the exercise of Warrants included within the Units.

Our board of directors is making no recommendation regarding your exercise of the Subscription Rights. You should carefully consider whether to exercise your Subscription Rights before the expiration date. You may not revoke or revise any exercises of Subscription Rights once made.

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

Dealer-Manager
Maxim Group LLC

The date of this Prospectus is September 23, 2022

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ABOUT THIS PROSPECTUS

The registration statement of which this prospectus forms a part that we have filed with the Securities and Exchange Commission, or SEC, includes exhibits that provide more detail of the matters discussed in this prospectus. You should read this prospectus and the related exhibits filed with the SEC, together with the additional information described under the headings “Where You Can Find More Information” and “Incorporation by Reference” before making your investment decision.

You should rely only on the information provided in this prospectus or in a prospectus supplement or any free writing prospectuses or amendments thereto. Neither we nor the dealer-manager have authorized anyone else to provide you with different information. We do not, and the dealer-manager and its affiliates do not, take any responsibility for, and can provide no assurance as to the reliability of, any information that others may provide to you. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information in this prospectus is accurate only as of the date hereof, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

We are not, and the dealer-manager is not, offering to sell or seeking offers to purchase these securities in any jurisdiction where the offer or sale is not permitted. We and the dealer-manager have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities as to distribution of the prospectus outside of the United States.

Unless the context otherwise requires, references in this prospectus to “SINTX,” “the Company,” “we,” “us” and “our” refer to SINTX Technologies, Inc. and our subsidiaries. Solely for convenience, trademarks and tradenames referred to in this prospectus may appear without the ® or ™ symbols, but such 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 trademarks and tradenames.

PROSPECTUS SUMMARY

This summary contains basic information about us and this offering. Because it is a summary, it does not contain all of the information that you should consider before investing. Before you decide to invest in our Units, you should read this entire prospectus carefully, including the section entitled “Risk Factors” and any information incorporated by reference herein.

Company Overview

SINTX Technologies is a 25-year-old advanced materials company formed in December 1996, that develops and commercializes advanced ceramics for biomedical, industrial, and antipathogenic applications. We have grown from focusing primarily on the research, development and commercialization of medical devices manufactured with silicon nitride to becoming an advanced ceramics company engaged in diverse fields, including biomedical, industrial and antipathogenic applications. This diversification enables us to focus on our core competencies which are the manufacturing, research, and development of products comprised from advanced ceramic materials for external partners. We seek to connect with new customers, partners and manufacturers to help them realize the goal of leveraging our expertise in advanced ceramics to create new, innovative products across these sectors.

SINTX Core Business

Biomedical Applications: Since its inception, SINTX has been focused on medical grade silicon nitride. SINTX silicon nitride products are biocompatible, bioactive, antipathogenic, and have shown superb bone affinity. Spinal implants made from SINTX silicon nitride have been successfully implanted in humans since 2008 in the US, Europe, Brazil, and Taiwan. This established use, along with its inherent resistance to bacterial adhesion and bone affinity – mean that it may also be suitable in other fusion

device applications such as hip, knee and dental implants. Bacterial infection of any biomaterial implants is always a concern. SINTX silicon nitride is inherently resistant to bacterial colonization and biofilm formation, making it antibacterial. SINTX silicon nitride products can be polished to a smooth and wear-resistant surface for articulating applications, such as bearings for hip and knee replacements.

We believe that silicon nitride has a superb combination of properties that make it suited for long-term human implantation. Other biomaterials are based on bone grafts, metal alloys, and polymers- all of which have well-known practical limitations and disadvantages. In contrast, silicon nitride has a legacy of success in the most demanding and extreme industrial environments. As a human implant material, silicon nitride offers bone ingrowth, resistance to bacterial and viral infection, ease of diagnostic imaging, resistance to corrosion, and superior strength and fracture resistance, among other advantages, all of which claims are validated in our large and growing inventory of peer-reviewed, published literature reports. We believe that our versatile silicon nitride manufacturing expertise positions us favorably to introduce new and innovative devices in the medical and non-medical fields.

In June 2022, the Company acquired Technology Assessment and Transfer, Inc. (TA&T). TA&T is a nearly 40-year-old business, and TA&T's mission is to transition advanced materials and process technologies from a laboratory environment to commercial products and services. TA&T has supplied ceramics for use in several biomedical applications. These products were made via 3D printing and include components for surgical instruments as well as conceptual and prototype dental implants.

Industrial Applications: It is the belief of SINTX that its silicon nitride has the best combination of mechanical, thermal, and electrical properties of any technical ceramic material. It is a high-performance technical ceramic with high strength, toughness, and hardness, and is extremely resistant to thermal shock and impact. It is also an electrically insulating ceramic material. Typically, it is used in applications where high load-bearing capacity, thermal stability, and wear resistance are required. The Company has obtained AS9100D certification and ITAR registration to facilitate entry into the aerospace portion of this market.

SINTX has recently entered the ceramic armor market through the purchase of assets from B4C, LLC and a technology partnership with Precision Ceramics USA. SINTX intends to develop and manufacture high-performance ceramics for personnel, aircraft, and vehicle armor including a 100% Boron Carbide material for ultimate lightweight performance in ballistic applications, and a composite material made of Boron Carbide and Silicon Carbide for exceptional multi-hit performance against ballistic threats. SINTX has signed a 10-year lease at a building near its headquarters in Salt Lake City, UT to house development and manufacturing activities for SINTX Armor.

TA&T's primary area of expertise is material processing and fabrication know how for a broad spectrum of monolithic ceramic, ceramic composite, and coating materials. Primary technologies include Additive Manufacturing (3D Printing) of ceramics and metals, low-cost fabrication of fiber reinforced ceramic matrix composites (CMCs) and refractory chemical vapor deposited (CVD) coatings, transparent ceramics for ballistic armor and optical applications, and magnetron sputtered (PVD) coatings for lubrication, wear resistance and environmental barrier coatings for CMCs. TA&T also provides a host of services that include 3D printing, PVD-CVD coatings, material processing-CMCs, CIP, PS, HP, HIP, and material characterization for powders and finished parts-TGA/DSC, PSD, SA, Dilatometry, UV-VIS and FTIR transmission, haze and clarity.

Antipathogenic Applications: Today, there is a global need to improve protection against pathogens in everyday life. SINTX believes that by incorporating its unique composition of silicon nitride antipathogenic powder into products such as face masks, filters, and wound care devices, it is possible to manufacture surfaces that inactivate pathogens, thereby limiting the spread of infection and disease. The discovery in 2020 that SINTX silicon nitride inactivates SARS-CoV-2, the virus which causes the disease COVID-19, has opened new markets and applications for our material and we have refocused many of our resources on these opportunities.

SINTX presently manufactures advanced ceramic powders and components in our manufacturing facilities based in Salt Lake City, Utah.

Our Strategy

Our goal is to become a leading advanced ceramics company. Key elements of our strategy to achieve this goal are the following:

- *Develop new products with anti-pathogenic properties, including inactivation of the SARS-CoV-2 virus, utilizing our silicon nitride technology.* We have conducted multiple tests over the last nine years which have identified and verified the antipathogenic properties of our silicon nitride powders, fully dense components, and silicon nitride-containing composites. Our research has explored the fundamental mechanisms responsible for these antipathogenic properties with the objective of developing commercial products and revenue from them. We have several partnerships exploring opportunities in face masks, filters, wound care, and coatings.
- *Develop additional commercial opportunities outside of the medical device market.* We have pursued the development of non-medical uses for our silicon nitride since selling the retail spine business in 2018. In 2019, we became ITAR-registered and obtained AS9100D certification of our quality management system. We have hired experienced business development employees to identify new markets and applications for our materials and develop commercial relationships. We made the first shipments of non-medical products in our history in 2020. These were primarily prototype orders, and we expect some of these to transition into regular production orders. We expect to generate revenue from new products with the launch of SINTX Armor and the acquisition of TA&T. The potential use of our silicon nitride in antipathogenic applications has also opened up the potential to enter many new markets.
- *Develop new silicon nitride manufacturing technologies.* Our current manufacturing process has allowed us to successfully produce spinal implants for over 10 years. We have made advancements in our processes – including the purchase of new manufacturing equipment – which we have leveraged to develop new porous and textured implants. In 2021, SINTX purchased new equipment for its research and development team to develop new composite products of silicon nitride with rigid polymers and fabrics.
- *Apply our silicon nitride technology platform to new medical opportunities.* We believe our biomaterial expertise, flexible manufacturing process, and strong intellectual property will allow us to transition currently available medical device products made of inferior biomaterials and manufacture them using silicon nitride and our technology platform to improve their characteristics. We are seeking partnerships to utilize our capabilities and manufacture products for medical OEM and private label partnerships. We see specific opportunities in markets such as foot and ankle, dental, maxillofacial, and arthroplasty.

Intellectual Property

We rely on a combination of patents, trademarks, trade secrets, nondisclosure agreements, proprietary information ownership agreements and other intellectual property measures to protect our intellectual property rights. We believe that to have a competitive advantage, we must continue to develop and maintain the proprietary aspects of our technologies.

We have fourteen issued U.S. patents, one foreign patent, eighteen pending U.S. non-provisional patent applications, one pending U.S. provisional patent application, thirty-three pending foreign applications and eleven pending PCT patent applications. Our first issued patent expired in 2016, with the last of these patents expiring in 2039. We have seven U.S. patents directed to articulating implants using our high-strength, high toughness doped silicon nitride solid ceramic. The issued patents, which include US 6,881,229; US 7,666,229; US 7,780,738; US 8,123,812; US 8,133,284; US 9,051,639; and US 9,517,136 begin to expire in June 2022.

We also have two U.S. patents related to our CSC technology that are directed to implants that have both a dense load-bearing, or cortical, component and a porous, or cancellous, component, together with a surface coating. These issued patents, US 8,133,284 and US 9,649,197 will expire in June 2022 and 2035, respectively.

In addition, U.S. Patent No. 10,806,831 directed to antibacterial implants and U.S. Patent No. 11,191,787 directed to antipathogenic devices were recently issued which will expire in 2037 and 2039, respectively.

With respect to PCT patent application serial no. PCT/US2018/014781 directed to antibacterial biomedical implants, we entered the national stage in Europe, Australia, Brazil, Canada, China, Japan, Hong Kong, and South Korea as well as two divisional patent applications filed in Australia and Japan to seek potential patent protection for our proprietary technologies in those countries.

With respect to PCT patent application serial no. PCT/US2019/026789 directed to methods for improving the wear performance of ceramic-polyethylene or ceramic-ceramic articulation couples utilized in orthopaedic joint prostheses, we entered the national stage in Australia, Brazil, Canada, Europe, Japan, Korea, and Mexico to seek proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2019/048072 directed to antipathogenic devices and methods, we entered the national stage in Europe, Japan, Mexico, Australia, Brazil, Canada, South Korea, China and India to seek proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2020/037170 directed to methods of surface functionalization of zirconia-toughened alumina with silicon nitride, we entered the national stage in Europe, Australia, Brazil, Canada, China, India, Japan, Mexico, and the United States to seek proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/014725 directed to antifungal composites and methods thereof, we plan on entering the national stage before the statutory deadline on July 24, 2022 in Europe, Brazil, Australia, Canada, China, India, Mexico, and South Korea to seek proprietary technologies in those countries.

In relation to the sale of our spine implant business to CTL Medical under the Asset Purchase Agreement dated September 5, 2018 we assigned our entire right to forty-eight (48) U.S. patents, two (2) foreign patents and three (3) pending patent applications from our patent portfolio to CTL Medical under that transaction. In addition, three (3) U.S. patents (U.S. patent nos. 9,399,309; 9,517,136; and 9,649,197) directed to silicon nitride manufacturing processes were licensed to CTL Medical under an irrevocable, fully paid-up, worldwide license for a ten-year term with CTL Medical also having a Right of First Negotiation to acquire these patents if SINTX decides to later sell these IP assets to a third party.

Our remaining issued patents and pending applications are directed to additional aspects of our products and technologies including, among other things:

- designs for intervertebral fusion devices;
- designs for hip implants;
- designs for knee implants;
- implants with improved antibacterial characteristics;
- implants with improved wear performance and surface functionalization
- antipathogenic, antibacterial, antimicrobial, antifungal, and antiviral compositions, devices, and methods; and
- methods and systems for laser cladding, laser coating, and laser sintering of silicon nitride.

We also expect to rely on trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our intellectual property position. However, trade secrets are difficult to protect. We seek to protect the trade secrets in our proprietary technology and processes, in part, by entering into confidentiality agreements with commercial partners, collaborators, employees, consultants, scientific advisors and other contractors and into invention assignment agreements with our employees and some of our commercial partners and consultants. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of the technologies that are developed.

Corporate Information

Our headquarters is located at 1885 West 2100 South, Salt Lake City, Utah 84119, and our telephone number is (801) 839-3500. We maintain a website at <https://www.sintx.com>. Information on the website is not incorporated by reference and is not a part of this prospectus.

Summary of the Rights Offering

Securities to be Offered

We are distributing to you, at no charge, one non-transferable Subscription Right to purchase one Unit for every share of our common stock (or share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of the Participating Warrants) that you owned on the Record Date. Each Unit consists of one share of our Preferred Stock and approximately 5,426 Warrants, based on the Estimated Conversion Price. The actual number of Warrants that will be included in the Units will depend on the Conversion Price determined at the expiration of the Rights Offering. The actual number of Class A Warrants included in each Unit will be calculated as the quotient obtained by dividing \$1,000 by the Conversion Price. The actual number of Class B Warrants included in each Unit will be calculated as the quotient obtained by dividing \$1,000 by the Conversion Price. The Units will separate upon the closing of the Rights Offering and the Preferred Stock and Warrants will be issued separately, however, they may only be purchased as a Unit, and the Unit will not trade as a separate security.

Size of Offering

10,000 Units.

Subscription Price

\$1,000 per Unit.

Series D Convertible Preferred Stock	Each share of Preferred Stock will be convertible, at the option of the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Preferred Stock by a conversion price equal to 90% of the lowest closing price for a share of our common stock as quoted on the Nasdaq Capital Market, during the five (5) trading days prior to the expiration of the Subscription Period (including the last day of the Subscription Period), subject to adjustment (the "Conversion Price"). For purposes of this preliminary prospectus, we have assumed an estimated Conversion Price of \$0.36864 which is equal to 90% of the closing price of our common stock on September 19, 2022 (the "Estimated Conversion Price"). Based on the Estimated Conversion Price, the Preferred Stock included in the Units would be initially convertible into an aggregate of 27,130,000 shares of common stock. The actual number of shares that the Preferred Stock may be converted into will depend on the Conversion Price determined on the expiration date. Because the actual Conversion Price will be determined on the expiration date, rights holders will not know the Conversion Price, nor will they know the number of shares of common stock underlying the Preferred Stock, at the time of exercise. The Preferred Stock has certain conversion rights and dividend rights.
Warrants	Each Class A Warrant entitles the holder to purchase one share of our common stock at an exercise price equal to the Conversion Price, subject to adjustment, from the date of issuance through its expiration five years from the date of issuance. Each Class B Warrant entitles the holder to purchase one share of our common stock at an exercise price equal to the Conversion Price, subject to adjustment, from the date of issuance through its expiration three years from the date of issuance. Based on the Estimated Conversion Price, the Warrants included in the Units would be initially exercisable for an aggregate of 54,260,000 shares of common stock. The actual number of shares that the Warrants may be exercised for will depend on the Conversion Price determined on the expiration date. The actual number of Class A Warrants included in each Unit will be calculated as the quotient obtained by dividing \$1,000 by the Conversion Price. The actual number of Class B Warrants included in each Unit will be calculated as the quotient obtained by dividing \$1,000 by the Conversion Price. Because the actual Conversion Price will be determined on the expiration date, rights holders will not know the Conversion Price, nor will they know the number of shares of common stock underlying the Warrants, at the time of exercise. The Warrants will be exercisable for cash, or, solely during any period when a registration statement for the exercise of the Warrants is not in effect, on a cashless basis, at any time and from time to time after the date of issuance.
Record Date	5:00 p.m., Eastern Time, September 23, 2022.
Basic Subscription Rights	Your Basic Subscription Right will entitle you to purchase one Unit at the Subscription Price. You may exercise your Basic Subscription Right for some or all of your Subscription Rights, or you may choose not to exercise your Subscription Rights. If you choose to exercise your Subscription Rights, there is no minimum number of Units you must purchase. We are distributing Basic Subscription Rights to purchase an aggregate of 25,896,283 Units, but are only selling 10,000 Units in the Rights Offering. In the event that the Rights Offering is over-subscribed, rights holders will be entitled to their pro rata portion of the Units.
Over-Subscription Privilege	If you exercise your Basic Subscription Rights in full, you may also choose to exercise an over-subscription privilege to purchase a portion of any Units that are not purchased by our other common, Series B Preferred, and Series C Preferred stockholders or Participating Warrant holders through the exercise of their Basic Subscription Rights, subject to proration and stock ownership limitations described elsewhere in this prospectus. The subscription agent will return any excess payments by mail without interest or deduction promptly after expiration of the subscription period.
Expiration Date	The Subscription Rights will expire at 5:00 p.m., Eastern Time, on October 12, 2022.
Procedure for Exercising Subscription Rights	To exercise your Subscription Rights, you must take the following steps: If you are a record holder, as of the Record Date, of our common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants, you must deliver payment and a properly completed Rights Certificate to the Subscription Agent to be received before 5:00 p.m., Eastern Time, on October 12, 2022. You may deliver the documents and payments by first class mail or courier service. If you use first class mail for this purpose, we recommend using registered mail, properly insured, with return receipt requested. If as of the Record Date you are a beneficial owner of shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants that are registered in the name of a broker, dealer, bank or other nominee, you should instruct your broker, dealer, bank or other nominee to exercise your Subscription Rights on your behalf. Please follow the instructions of your nominee, who may require that you meet a deadline earlier than 5:00 p.m., Eastern Time, on October 12, 2022.

Payment Adjustments	If you send a payment that is insufficient to purchase the number of Units requested, or if the number of Units requested is not specified in the Rights Certificate, the payment received will be applied to exercise Subscription Rights to the extent of the payment. If the payment exceeds the amount necessary for the full exercise of your Subscription Rights, including any over-subscription privilege exercised and permitted, the excess will be returned to you promptly in cash. You will not receive interest or a deduction on any payments refunded to you under the Rights Offering.
Delivery of Shares and Warrants	As soon as practicable after the expiration of the Rights Offering, and within five business days thereof, we expect to close on subscriptions and for the Subscription Agent to arrange for the issuance of the shares of Preferred Stock and Warrants purchased pursuant to the Rights Offering. All shares and Warrants that are purchased in the Rights Offering will be issued in book-entry, or uncertificated, form meaning that you will receive a direct registration, or DRS, account statement from our transfer agent reflecting ownership of these securities if you are a holder of record. If you hold your shares or Participating Warrants in the name of a bank, broker, dealer, or other nominee, DTC will credit your account with your nominee with the securities you purchased in the Rights Offering.
Non-transferability of Subscription Rights	The Subscription Rights may not be sold, transferred, assigned or given away to anyone. The Subscription Rights will not be listed for trading on any stock exchange or market.
Transferability of Warrants	The Class A Warrants will be separately transferable following their issuance and through their expiration five years from the date of issuance. The Class B Warrants will be separately transferable following their issuance and through their expiration three years from the date of issuance.

No Board Recommendation	Our board of directors is not making a recommendation regarding your exercise of the Subscription Rights. You are urged to make your decision to invest based on your own assessment of our business and financial condition, our prospects for the future, the terms of the Rights Offering, the information in this prospectus and other information relevant to your circumstances. Please see “Risk Factors” for a discussion of some of the risks involved in investing in our securities.
No Revocation	Except as described below, all exercises of Subscription Rights are irrevocable, even if you later learn of information that you consider to be unfavorable to the exercise of your Subscription Rights.
Use of Proceeds	Assuming the exercise of Subscription Rights to purchase all Units of the Rights Offering, after deducting fees and expenses payable to the dealer-manager, before deducting other estimated expenses payable by us and excluding any proceeds received upon exercise of any Warrants, we estimate the net proceeds of the Rights Offering will be approximately \$9.2 million. We intend to use the net proceeds from the exercise of Subscription Rights for general corporate purposes and to fund ongoing operations and expansion of our business. See “Use of Proceeds.”

Material U.S. Federal Income Tax Consequences	For U.S. federal income tax purposes, we do not believe you should recognize income or loss upon receipt or exercise of a Subscription Right, but the receipt and exercise of the Subscription Rights is unclear in certain respects. You should consult your own tax advisor as to the tax consequences of the Rights Offering in light of your particular circumstances. See “Material U.S. Federal Income Tax Consequences.”
Extension, Amendment and Termination	<p>Although we do not presently intend to do so, we may extend the Rights Offering for additional time in our sole discretion for any reason for up to an additional 45 days. For example, we may decide that changes in the market price of our common stock warrant an extension, or we may decide that the degree of stockholder participation in the Rights Offering is less than the level we desire. In the event that we decide to extend the Rights Offering and you have already exercised your Subscription Rights, your subscription payment will remain with the Subscription Agent until such time as the Rights Offering closes or is terminated. We also reserve the right to amend or modify the terms of the Rights Offering, as appropriate. Our board of directors may for any reason terminate the Rights Offering at any time before the expiration of the Rights Offering. In the event that the Rights Offering is cancelled, all subscription payments received by the Subscription Agent will be returned, without interest or deduction, as soon as practicable.</p> <p>If we should make any fundamental changes to the terms set forth in this prospectus, we will (i) file a post-effective amendment to the registration statement of which this prospectus forms a part, (ii) offer potential purchasers who have subscribed for rights the opportunity to cancel such subscriptions and issue a refund of any money advanced by such stockholder or eligible warrant holder, and (iii) recirculate an updated prospectus after the post-effective amendment is declared effective with the SEC.</p>
Subscription Agent	American Stock Transfer & Trust Company, LLC
Information Agent	D.F. King & Co., Inc.
Questions	If you have any questions about the Rights Offering, please contact the Information Agent, D.F. King & Co., Inc., toll free at (866) 620-2536, by mail at D.F. King & Co., Inc., 48 Wall Street, 22nd Floor, New York, NY 10005 or by email at sintx@dfking.com .
Market for Common Stock	Our common stock is listed on Nasdaq under the symbol “SINT.”
Market for Series D Preferred Stock	There is no established public trading market for the Series D Preferred Stock, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Series D Preferred Stock on any securities exchange or recognized trading system.
Market for Warrants	There is no established public trading market for the Warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Warrants on any securities exchange or recognized trading system.
Dealer-manager	Maxim Group LLC will act as dealer-manager for the Rights Offering.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus the information in other documents that we file with it. This means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information contained in documents filed earlier with the SEC or contained in this prospectus. We incorporate by reference in this prospectus the documents listed below and any future filings that we may make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act prior to the termination of the offering under this prospectus; provided, however, that we are not incorporating, in each case, any documents or information deemed to have been furnished and not filed in accordance with SEC rules:

- our Annual Report on [Form 10-K](#) for the year ended December 31, 2021;
- our Quarterly Report on [Form 10-Q](#) for the quarter ended March 31, 2022;
- our Quarterly Report on [Form 10-Q](#) for the quarter ended June 30, 2022;

- our Current Report on [Form 8-K](#) filed on January 4, 2022;
- our Current Report on [Form 8-K](#) filed on July 6, 2022;
- our Current Report on [Form 8-K](#) filed on July 11, 2022;
- the description of our common stock, which is contained in the Registration Statement on [Form 8-A](#), as filed with the SEC on February 7, 2014, as updated by the description of our common stock contained in [Exhibit 4.11](#) to our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2021 and including any amendment or report filed for the purpose of updating such description.

Additionally, all documents filed by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) prior to effectiveness of this registration statement, and (ii) after the effective date of this registration statement and before the termination or completion of any offering hereunder, shall be deemed to be incorporated by reference into this prospectus from the respective dates of filing of such documents, except that we do not incorporate any document or portion of a document that is “furnished” to the SEC, but not deemed “filed.”

Any statement contained in this prospectus supplement, the accompanying prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus will 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 and the accompanying prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus modifies or supersedes the statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement and the accompanying prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus, including exhibits to these documents. You should direct any requests for documents to SINTX Technologies, Inc., Attention: Investor Relations, 1885 West 2100 South, Salt Lake City, Utah 84119 or by calling (801) 839-3500.

You also may access these filings on our website at www.sintx.com. We do not incorporate the information on our website into this prospectus supplement or the accompanying prospectus and you should not consider any information on, or that can be accessed through, our website as part of this prospectus supplement or the accompanying prospectus (other than those filings with the SEC that we specifically incorporate by reference into this prospectus supplement and the accompanying prospectus).

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-1 with the SEC under the Securities Act of 1933, as amended. This prospectus is part of the registration statement, but the registration statement includes additional information and exhibits. We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a web site that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The website address is www.sec.gov. The information on the SEC’s website is not part of this prospectus, and any references to this website or any other website are inactive textual references only.

QUESTIONS AND ANSWERS RELATING TO THE RIGHTS OFFERING

The following are examples of what we anticipate will be common questions about this Rights Offering. The answers are based on selected information included elsewhere in this prospectus. The following questions and answers do not contain all of the information that may be important to you and may not address all of the questions that you may have about the Rights Offering. This prospectus and the documents incorporated by reference into this prospectus contain more detailed descriptions of the terms and conditions of the Rights Offering and provides additional information about us and our business, including potential risks related to the Rights Offering, the Units offered hereby, and our business. We urge you to read this entire prospectus and the documents incorporated by reference into this prospectus.

Why are we conducting the Rights Offering?

We are conducting the Rights Offering to raise additional capital for general corporate purposes and to fund ongoing operations and expansion of our business.

What is a Unit?

Each Unit consists of one share of Series D Convertible Preferred Stock and, based on the Estimated Conversion Price, 5,426 warrants to purchase common stock, at a subscription price of \$1,000 per Unit. No fractional Units will be issued. Each share of Preferred Stock will have a stated value of \$1,000 and will be convertible into shares of our common stock at a conversion price equal to the Conversion Price determined on the expiration date. Each Class A Warrant entitles you to purchase one share of common stock at a per share exercise price equal to the Conversion Price, from the date of issuance through its expiration five years after the date of issuance. Each Class B Warrant entitles you to purchase one share of common stock at a per share exercise price equal to the Conversion Price, from the date of issuance through its expiration three years after the date of issuance. The Preferred Stock do not generally have any voting rights and will not be certificated. The shares of Preferred Stock and warrants that comprise each Unit are immediately separable and will be issued separately in this Rights Offering, however, they may only be purchased as a Unit, and the Units will not trade as a separate security.

What is the Rights Offering?

We are distributing, at no charge, to holders of our common stock, Series B Preferred Stock, Series C Preferred Stock and holders of the Participating Warrants, as of the Record Date, non-transferable Subscription Rights to purchase Units at a price of \$1,000 per Unit. The Subscription Rights will not be tradable. Each Unit consists of one share of our Preferred Stock and, based on the Estimated Conversion Price, 5,426 Warrants. See “Are there risks in exercising my Subscription Rights?” below. Each Warrant will be exercisable for one share of our common stock. Upon expiration of the Rights Offering, the Preferred Stock and Warrants comprising the Units will immediately separate and will be issued separately but may only be purchased as a Unit, and the Units will not trade as a separate security. There is no public trading market for the Preferred Stock or the Warrants and they will not be listed for trading on Nasdaq or any other securities exchange or market. The common stock to be issued upon conversion of the Preferred Stock or exercise of the Warrants, like our existing shares of common stock, will be traded on the NASDAQ Capital Market under the symbol “SINT.” You will receive one Subscription Right for every share of common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) that you owned as of 5:00 p.m., Eastern Time, on the Record Date. Each Subscription Right entitles the record holder to a Basic Subscription Right and an Over-Subscription Privilege. The Subscription Rights will expire if they are not exercised by 5:00 p.m., Eastern Time, on October 12, 2022, unless we extend or earlier terminate the Rights Offering.

What are the Basic Subscription Rights?

For every share you owned (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) as of the Record Date, you will receive one Basic Subscription Right, which gives you the opportunity to purchase one Unit, consisting of one share of our Preferred Stock and, based on the Estimated Conversion Price, 5,426 Warrants, for a price of \$1,000 per Unit. For example, if you owned 100 shares of common stock as of the Record Date, you will receive 100 Subscription Rights and will have the right to purchase 100 shares of our Preferred Stock and, based on the Estimated Conversion Price, Warrants to purchase 542,600 shares of our common stock for \$1,000 per Unit (or a total payment of \$100,000). You may exercise all or a portion of your Basic Subscription Rights or you may choose not to exercise any Basic Subscription Rights at all.

If you are a record holder of our common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants, the number of shares you may purchase pursuant to your Basic Subscription Rights is indicated on the enclosed Rights Certificate. If you hold your common shares, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants in the name of a broker, dealer, bank or other nominee who uses the services of the Depository Trust Company, or DTC, you will not receive a Rights Certificate. Instead, DTC will issue one Subscription Right to your nominee record holder for each share of our common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) that you beneficially own as of the Record Date. If you are not contacted by your nominee, you should contact your nominee as soon as possible.

What is the Over-Subscription Privilege?

If you exercise your Basic Subscription Rights in full, you may also choose to exercise your Over-Subscription Privilege to purchase a portion of any Units that are not purchased by other holders of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrant holders and remain available under the Rights Offering. You should indicate on your Rights Certificate, or the form provided by your nominee if your shares are held in the name of a nominee, how many additional Units you would like to purchase pursuant to your Over-Subscription Privilege, which we refer to as your Over-Subscription Request.

Subject to stock ownership limitations, if enough Units are available, we will seek to honor your Over-Subscription Request in full. If Over-Subscription Requests exceed the number of Units available, however, we will allocate the available Units pro-rata among the stockholders and warrant holders exercising the Over-Subscription Privilege in proportion to the number of shares of our common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) each of those stockholders and warrant holders owned on the Record Date, relative to the number of shares (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) owned on the Record Date by all record holders exercising the Over-Subscription Privilege. If this pro-rata allocation results in any stockholders or warrant holders receiving a greater number of Units than the stockholder or warrant holders subscribed for pursuant to the exercise of the Over-Subscription Privilege, then such stockholder or warrant holder will be allocated only that number of Units for which the stockholder or warrant holder oversubscribed, and the remaining Units will be allocated among all other stockholders and warrant holders exercising the Over-Subscription Privilege on the same pro rata basis described above. The proration process will be repeated until all Units have been allocated. See “The Rights Offering- Limitation on the Purchase of Units” for a description of certain stock ownership limitations.

To properly exercise your Over-Subscription Privilege, you must deliver to the Subscription Agent the subscription payment related to your Over-Subscription Privilege before the Rights Offering expires. Because we will not know the total number of unsubscribed Units before the expiration of the Rights Offering, if you wish to maximize the number of Units you purchase pursuant to your over-subscription privilege, you will need to deliver payment in an amount equal to the aggregate Subscription Price for the maximum number of Units available, assuming that no common, Series B or Series C stockholder or warrant holders other than you has purchased any Units pursuant to such stockholder’s or warrant holder’s basic subscription right and over-subscription privilege. See “The Rights Offering- The Subscription Rights-Over-Subscription Privilege.” To the extent you properly exercise your Over-Subscription Privilege for a number of Units that exceeds the number of unsubscribed Units available to you, any excess subscription payments will be returned to you within 10 business days after the expiration of the Rights Offering, without interest or deduction.

American Stock Transfer & Trust Company, LLC, our Subscription Agent for the Rights Offering, will determine the allocation of Over-Subscription Requests based on the formula described above.

May the Subscription Rights that I exercise be reduced for any reason?

Yes. While we are distributing to holders of our common stock, Series B Preferred Stock, Series C Preferred Stock, and holders of the Participating Warrants, one Subscription Right for every share of common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) owned on the Record Date, we are only seeking to raise \$10 million in gross proceeds in this Rights Offering. As a result, based on 24,727,789 shares of common stock outstanding as of August 31, 2022, 19,306 shares of common stock issuable upon conversion of 26 shares of Series B Preferred Stock, 33,753 shares of common stock issuable upon conversion of 50 shares of Series C Preferred Stock and 1,115,729 shares of common stock issuable upon exercise of Participating Warrants, we would grant Subscription Rights to acquire 25,896,283 Units but will only accept subscriptions for 10,000 Units. Accordingly, enough Units may not be available to honor your subscription in full. If exercises of Basic Subscription Rights exceed the number of Units available in the Rights Offering, we will allocate the available Units pro-rata among the record holders exercising the Basic Subscription Rights in proportion to the number of shares of our common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) each of those record holders owned on the Record Date, relative to the number of shares owned on the Record Date by all record holders exercising the Basic Subscription Right. If this pro-rata allocation results in any record holders receiving a greater number of Units than the record holder subscribed for pursuant to the exercise of the Basic Subscription Rights, then such record holder will be allocated only that number of Units for which the record holder subscribed, and the remaining Units will be allocated among all other record holders exercising their Basic Subscription Rights on the same pro rata basis described above. The proration process will be repeated until all Units have been allocated. Please also see the discussion under “The Rights Offering- The Subscription Rights-Over-Subscription Privilege” and “The Rights Offering-Limitation on the Purchase of Units” for a description potential proration as to the Over-Subscription Privilege and certain stock ownership limitations.

If for any reason the number of Units allocated to you is less than you have subscribed for, then the excess funds held by the Subscription Agent on your behalf will be returned to you, without interest, as soon as practicable after the Rights Offering has expired and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected, and we will have no further obligations to you.

What are the terms of the Series D Convertible Preferred Stock?

Each share of Preferred Stock will be convertible at the option of the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Preferred Stock by a conversion price equal to the Conversion Price determined on the expiration date. The Preferred Stock has certain conversion rights and dividend rights as described in more detail herein.

What are the terms of the Warrants?

Each Class A Warrant entitles the holder to purchase one share of our common stock at a per share exercise price equal to the Conversion Price from the date of issuance through its expiration five years from the date of issuance. Each Class B Warrant entitles the holder to purchase one share of our common stock at a per share exercise price equal to the Conversion Price from the date of issuance through its expiration three years from the date of issuance. The Warrants will be exercisable for cash, or, solely during any period when a registration statement for the exercise of the Warrants is not in effect, on a cashless basis.

Are the Preferred Stock or Warrants listed?

There is no public trading market for the Preferred Stock or Warrants and they will not be listed for trading on Nasdaq or any other securities exchange or market. The Warrants will be issued in registered form under a warrant agent agreement with American Stock Transfer & Trust Company, LLC, as warrant agent.

Will fractional shares be issued upon exercise of Subscription Rights, the conversion of Preferred Stock, or the exercise of Warrants?

No. We will not issue fractional shares of common stock in the Rights Offering. We will only distribute Subscription Rights to acquire whole Units, rounded down to the nearest whole number of underlying common shares giving rise to such Subscription Rights. Any excess subscription payments received by the Subscription Agent will be returned within 10 business days after expiration of the Rights Offering, without interest or deduction.

Additionally, no fractional shares of common stock will be issued as a result of the conversion of shares of Preferred Stock or the exercise of Warrants. Instead, for any such fractional share that would otherwise have been issuable upon conversion of shares of Preferred Stock, we may, at our election, pay a cash payment equal to such fraction multiplied by the conversion price or round up to the next whole share, and for any such fractional share that would have otherwise been issued upon exercise of Warrants, we will round up such fraction to the next whole share.

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What effect will the Rights Offering have on our outstanding common stock?

Assuming no other transactions by us involving our capital stock prior to the expiration of the Rights Offering, and if the Rights Offering is fully subscribed, upon consummation of the Rights Offering we will have, based on shares of common stock outstanding as of August 31, 2022, 24,727,789 shares of common stock issued and outstanding, 26 shares of Series B Preferred Stock issued and outstanding convertible into an aggregate of 19,306 shares of our common stock, 50 shares of Series C Preferred Stock issued and outstanding convertible into an aggregate of 33,753 shares of our common stock, and 10,000 shares of Preferred Stock issued and outstanding convertible into an aggregate of 27,130,000 shares of our common stock, based on the Estimated Conversion Price, and Warrants to purchase an additional 54,260,000 shares of our common stock, based on the Estimated Conversion Price, issued and outstanding. The exact number of shares of Preferred Stock and Warrants that we will issue in this offering will depend on the number of Units that are subscribed for in the Rights Offering. In addition, because the Conversion Price will be determined on the expiration date, the actual number of shares of common stock underlying the Preferred Stock and Warrants will not be known until the expiration date.

How was the Subscription Price determined?

In determining the Subscription Price, the directors considered, among other things, the following factors:

- the current and historical trading prices of our common stock;
- the price at which stockholders might be willing to participate in the Rights Offering;
- the value of the common stock issuable upon conversion of the Preferred Stock being issued as a component of the Unit;
- the value of the Warrant being issued as a component of the Unit;
- our need for additional capital and liquidity;
- the cost of capital from other sources; and
- comparable precedent transactions, including the percentage of shares offered, the terms of the subscription rights being offered, the subscription price and the discount that the subscription price represented to the immediately prevailing closing prices for those offerings.

In conjunction with the review of these factors, the board of directors also reviewed our history and prospects, including our past and present earnings and cash requirements, our prospects for the future, the outlook for our industry and our current financial condition. The board of directors also believed that the Subscription Price should be designed to provide an incentive to our current stockholders to participate in the Rights Offering and exercise their Basic Subscription Right and their Over-Subscription Privilege.

The Subscription Price does not necessarily bear any relationship to any established criteria for value. You should not consider the Subscription Price as an indication of actual value of our company or our common stock. The market price of our common stock may decline during or after the Rights Offering. You should obtain a current price quote for our common stock and perform an independent assessment of our Preferred Stock and Warrants before exercising your Subscription Rights and make your own assessment of our business and financial condition, our prospects for the future, the terms of the Rights Offering, the information in this prospectus and the other considerations relevant to your circumstances. Once made, all exercises of Subscription Rights are irrevocable. In addition, there is no established trading market for the Preferred Stock or the Warrants to be issued pursuant to this offering, and the Preferred Stock and the Warrants may not be widely distributed.

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Am I required to exercise all the Basic Subscription Rights I receive in the Rights Offering?

No. You may exercise any number of your Basic Subscription Rights, or you may choose not to exercise any Basic Subscription Rights. If you do not exercise any Basic Subscription Rights, the number of shares of our common stock you own (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) will not change. However, if you choose to not exercise your Basic Subscription Rights in full and other holders of Subscription Rights do exercise, your proportionate ownership interest in our company will decrease. If you do not exercise your Basic Subscription Rights in full, you will not be entitled to exercise your Over-Subscription Privilege.

How soon must I act to exercise my Subscription Rights?

If you received a Rights Certificate and elect to exercise any or all of your Subscription Rights, the Subscription Agent must receive your completed and signed Rights Certificate and payment for both your Basic Subscription Rights and any Over-Subscription Privilege you elect to exercise before the Rights Offering expires on October 12, 2022, at 5:00 p.m., Eastern Time, unless we extend or earlier terminate the Rights Offering. If you hold your common shares, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants in the name of a broker, dealer, bank or other nominee, your nominee may establish a deadline before the expiration of the Rights Offering by which you must provide it with your instructions to exercise your Subscription Rights, along with the required subscription payment.

May I transfer my Subscription Rights?

No. The Subscription Rights may be exercised only by the common, Series B Preferred and Series C Preferred stockholders and Participating Warrant holders to whom they are

distributed, and they may not be sold, transferred, assigned or given away to anyone else, other than by operation of law. As a result, Rights Certificates may be completed only by the stockholder or warrant holder who receives the certificate. We do not intend to apply for the listing of the Subscription Rights on any securities exchange or recognized trading market.

Will our directors and executive officers participate in the Rights Offering?

To the extent they hold common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants as of the Record Date, our directors and executive officers will be entitled to participate in the Rights Offering on the same terms and conditions applicable to other Rights holders.

Are we requiring a minimum subscription to complete the Rights Offering?

There is no aggregate minimum we must receive to complete the Rights Offering.

Has the board of directors made a recommendation to stockholders regarding the Rights Offering?

No. Our board of directors is making no recommendation regarding your exercise of the Subscription Rights. Rights holders who exercise Subscription Rights will incur investment risk on new money invested. We cannot predict the price at which our shares of common stock will trade after the Rights Offering. On September 22, 2022, the last reported sale price of our common stock on Nasdaq was \$0.4145 per share. You should make your decision based on your assessment of our business and financial condition, our prospects for the future, the terms of the Rights Offering, the information contained in this prospectus and other considerations relevant to your circumstances. See “Risk Factors” for discussion of some of the risks involved in investing in our securities.

How do I exercise my Subscription Rights?

If you are a common or Series B Preferred or Series C Preferred stockholder or Participating Warrant holder of record (meaning you hold your shares of our common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants in your name and not through a broker, dealer, bank or other nominee) and you wish to participate in the Rights Offering, you must deliver a properly completed and signed Rights Certificate, together with payment of the Subscription Price for both your Basic Subscription Rights and any Over-Subscription Privilege you elect to exercise, to the Subscription Agent before 5:00 p.m., Eastern Time, on October 12, 2022. If you are exercising your Subscription Rights through your broker, dealer, bank or other nominee, you should promptly contact your broker, dealer, bank or other nominee and submit your subscription documents and payment for the Units subscribed for in accordance with the instructions and within the time period provided by your broker, dealer, bank or other nominee.

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What if my shares are held in “street name”?

If you hold your shares of our common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants in the name of a broker, dealer, bank or other nominee, then your broker, dealer, bank or other nominee is the record holder of the shares you beneficially own. The record holder must exercise the Subscription Rights on your behalf. Therefore, you will need to have your record holder act for you.

If you wish to participate in this Rights Offering and purchase Units, please promptly contact the record holder of your shares or Participating Warrants. We will ask the record holder of your shares or Participating Warrants, who may be your broker, dealer, bank or other nominee, to notify you of this Rights Offering.

What form of payment is required?

You must timely pay the full Subscription Price for the full number of Units you wish to acquire pursuant to the exercise of Subscription Rights by delivering to the Subscription Agent a:

- personal check drawn on a U.S. bank;
- certified check drawn on a U.S. bank;
- U.S. Postal money order; or
- wire transfer.

If you send payment by personal uncertified check, payment will not be deemed to have been delivered to the Subscription Agent until the check has cleared. As such, any payments made by personal check should be delivered to the Subscription Agent no fewer than three business days prior to the expiration date.

If you send a payment that is insufficient to purchase the number of Units you requested, or if the number of Units you requested is not specified in the forms, the payment received will be applied to exercise your Subscription Rights to the fullest extent possible based on the amount of the payment received.

Will I receive interest on any funds I deposit with the Subscription Agent?

No. You will not be entitled to any interest on any funds that are deposited with the Subscription Agent pending completion or cancellation of the Rights Offering. If the Rights Offering is cancelled for any reason, the Subscription Agent will return this money to subscribers, without interest or penalty, as soon as practicable.

When will I receive my new shares of Preferred Stock and Warrants?

As soon as practicable after the expiration of the Rights Offering, and within five business days thereof, we expect to close on subscriptions and for the Subscription Agent to arrange for the issuance of the shares of Preferred Stock and Warrants purchased in the Rights Offering. At closing, all prorating calculations and reductions contemplated by the terms of the Rights Offering will have been effected and payment to us for the subscribed-for Units will have cleared. All shares and Warrants that you purchase in the Rights Offering will be issued in book-entry, or uncertificated, form meaning that you will receive a direct registration, or DRS, account statement from our transfer agent reflecting ownership of these securities if you are a holder of record. If you hold your common, Series B Preferred or Series C Preferred Stock or Participating Warrants in the name of a broker, dealer, bank or other nominee, DTC will credit your account with your nominee with the securities you purchase in the Rights Offering. American Stock Transfer & Trust Company, LLC, is acting as the warrant agent in this offering.

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After I send in my payment and Rights Certificate to the Subscription Agent, may I cancel my exercise of Subscription Rights?

No. Exercises of Subscription Rights are irrevocable, even if you later learn information that you consider to be unfavorable to the exercise of your Subscription Rights. You should not exercise your Subscription Rights unless you are certain that you wish to purchase Units at the Subscription Price.

How much will our company receive from the Rights Offering?

Assuming that all Units are sold in the Rights Offering, we estimate that the net proceeds from the Rights Offering will be approximately \$9.2 million, based on the Subscription Price of \$1,000 per Unit, after deducting fees and expenses payable to the dealer-manager, before deducting other estimated expenses payable by us and excluding any proceeds received upon exercise of any Warrants. If all Warrants included in the Units are exercised for cash at the Estimated Conversion Price of \$0.36864 per share, we will receive an additional approximately \$20 million. We intend to use the net proceeds for general corporate purposes and to fund ongoing operations and expansion of our business. See "Use of Proceeds."

Are there risks in exercising my Subscription Rights?

Yes. The exercise of your Subscription Rights involves risks. Exercising your Subscription Rights involves the purchase of shares of our Preferred Stock and Warrants to purchase common stock and you should consider this investment as carefully as you would consider any other investment. In addition, our Preferred Stock and Warrants will not be listed on Nasdaq and a market for the Preferred Stock and Warrants does not exist. See "Risk Factors" for discussion of additional risks involved in investing in our securities.

Can the board of directors terminate, extend or amend the Rights Offering?

Yes. Our board of directors may decide to terminate the Rights Offering at any time and for any reason before the expiration of the Rights Offering. We also have the right to extend the Rights Offering for additional periods in our sole discretion for up to an additional 45 days. We do not presently intend to extend the Rights Offering. We will notify stockholders and the public if the Rights Offering is terminated or extended by issuing a press release announcing the extension no later than 9:00 a.m., Eastern Time, on the next business day after the most recently announced expiration date of the Rights Offering. In the event that we decide to extend the Rights Offering and you have already exercised your Subscription Rights, your subscription payment will remain with the Subscription Agent until such time as the Rights Offering closes or is terminated.

Our board of directors also reserves the right to amend or modify the terms of the Rights Offering in its sole discretion. If we should make any fundamental changes to the terms of the Rights Offering set forth in this prospectus, we will file a post-effective amendment to the registration statement in which this prospectus is included, offer potential purchasers who have subscribed for rights the opportunity to cancel such subscriptions and issue a refund of any money advanced by such stockholder and recirculate an updated prospectus after the post-effective amendment is declared effective by the SEC. In addition, upon such event, we may extend the Expiration Date of the Rights Offering to allow holders of rights ample time to make new investment decisions and for us to recirculate updated documentation. Promptly following any such occurrence, we will issue a press release announcing any changes with respect to the Rights Offering and the new expiration date. The terms of the Rights Offering cannot be modified or amended after the Expiration Date of the Rights Offering. Although we do not presently intend to do so, we may choose to amend or modify the terms of the Rights Offering for any reason, including, without limitation, in order to increase participation in the Rights Offering. Such amendments or modifications may include a change in the subscription price, although no such change is presently contemplated. If we should make any fundamental changes to the terms set forth in this prospectus, we will (i) file a post-effective amendment to the registration statement of which this prospectus forms a part, (ii) offer potential purchasers who have subscribed for rights the opportunity to cancel such subscriptions, and (iii) issue a refund of any money advanced by such stockholder or eligible warrant holder and recirculate an updated prospectus after the post-effective amendment is declared effective with the SEC.

If the Rights Offering is not completed or is terminated, will my subscription payment be refunded to me?

Yes. The Subscription Agent will hold all funds it receives in a segregated bank account until completion of the Rights Offering. If we do not complete the Rights Offering, all subscription payments received by the Subscription Agent will be returned within 10 business days after the termination or expiration of the Rights Offering, without interest or deduction. If you own shares in "street name," it may take longer for you to receive your subscription payment because the Subscription Agent will return payments through the record holder of your shares. In addition, if we should make any fundamental changes to the terms set forth in this prospectus, we will (i) file a post-effective amendment to the registration statement of which this prospectus forms a part, (ii) offer potential purchasers who have subscribed for rights the opportunity to cancel such subscriptions, and (iii) issue a refund of any money advanced by such stockholder or eligible warrant holder and recirculate an updated prospectus after the post-effective amendment is declared effective with the SEC.

How do I exercise my Rights if I live outside the United States?

The Subscription Agent will hold Rights Certificates for stockholders having addresses outside the United States. To exercise Subscription Rights, foreign stockholders must notify the Subscription Agent and timely follow other procedures described in the section entitled "The Rights Offering - Foreign Stockholders."

What fees or charges apply if I purchase shares in the Rights Offering?

We are not charging any fee or sales commission to issue Subscription Rights to you or to issue shares of Preferred Stock or Warrants to you if you exercise your Subscription Rights. If you exercise your Subscription Rights through a broker, dealer, bank or other nominee, you are responsible for paying any fees your broker, dealer, bank or other nominee may charge you.

What are the U.S. federal income tax consequences of receiving and/or exercising my Subscription Rights?

For U.S. federal income tax purposes, we do not believe you should recognize income or loss in connection with the receipt or exercise of Subscription Rights in the Rights Offering, but the receipt and exercise of the Subscription Rights is unclear in certain respects. You should consult your own tax advisor as to your tax consequences resulting from the receipt and exercise of Subscription Rights, including the receipt, ownership and disposition of our Preferred Stock, Warrants, and common stock received upon the conversion of Preferred Stock or the exercise of Warrants. For further information, see "Material U.S. Federal Income Tax Consequences."

To whom should I send my forms and payment?

If your shares of common stock, Series B Preferred stock, Series C Preferred stock, or Participating Warrants are held in the name of a broker, dealer, bank or other nominee, then you should send your subscription documents and subscription payment to that broker, dealer, bank or other nominee. If you are the record holder, then you should send your subscription documents, Rights Certificate, and subscription payment to the Subscription Agent by hand delivery, first class mail or courier service to:

If delivering by mail, hand or overnight courier:
American Stock Transfer & Trust Company, LLC
Operations Center
Attn: Reorganization Department
6201 15th Avenue
Brooklyn, New York 11219

You or, if applicable, your nominee are solely responsible for completing delivery to the Subscription Agent of your subscription documents, Rights Certificate and payment. You should allow sufficient time for delivery of your subscription materials to the Subscription Agent and clearance of payment before the expiration of the Rights Offering at 5:00 p.m. Eastern Time on October 12, 2022.

Whom should I contact if I have other questions?

If you have other questions or need assistance, please contact the Information Agent: D.F. King & Co., Inc., toll free at (866) 620-2536, by mail at D.F. King & Co., Inc., 48 Wall Street, 22nd Floor, New York, NY 10005 or by email at sintx@dfking.com.

Who is the dealer-manager?

Maxim Group LLC is acting as the sole dealer-manager for the Rights Offering. Under the terms and subject to the conditions contained in the dealer-manager agreement, the dealer-manager will use its best efforts to solicit the exercise of Subscription Rights. We have agreed to pay the dealer-manager certain fees for acting as dealer-manager and to reimburse the dealer-manager for certain out-of-pocket expenses incurred in connection with this offering. The dealer-manager is not underwriting or placing any of the Subscription Rights or the shares of our Preferred Stock or Warrants being issued in the Rights Offering and is not making any recommendation with respect to such Subscription Rights (including with respect to the exercise or expiration of such Subscription Rights), shares of Preferred Stock or Warrants.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment decision with respect to our securities, we urge you to carefully consider the risks described in the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2021 and our subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference into this prospectus. These risk factors relate to our business, intellectual property, regulatory matters, and ownership of our common stock. In addition, the following risk factors present material risks and uncertainties associated with the Rights Offering. The risks and uncertainties incorporated by reference into this prospectus or described below are not the only ones we face. Additional risks and uncertainties not presently known or which we consider immaterial as of the date hereof may also have an adverse effect on our business. If any of the matters discussed in the following risk factors were to occur, our business, financial condition, results of operations, cash flows or prospects could be materially adversely affected, the market price of our common stock could decline and you could lose all or part of your investment in our securities.

Risks Related to the Rights Offering

Our management will have broad discretion over the use of the net proceeds from this offering, you may not agree with how we use the proceeds and the proceeds may not be invested successfully.

Our management will have broad discretion as to the use of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of commencement of this offering. Accordingly, you will be relying on the judgment of our management regarding the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that, pending their use, we may invest the net proceeds in a way that does not yield a favorable, or any, return for us. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flows.

Your interest in our company may be diluted as a result of this Rights Offering.

Stockholders and warrant holders who do not fully exercise their Subscription Rights should expect that they will, at the completion of this offering, own a smaller proportional interest in our company on a fully-diluted basis than would otherwise be the case had they fully exercised their Subscription Rights. Further, the shares issuable upon the exercise of the Warrants to be issued pursuant to the Rights Offering will dilute the ownership interest of stockholders not participating in this offering or holders of Warrants who have not exercised them.

Further, if you purchase Units in this offering at the Subscription Price, you may suffer immediate and substantial dilution in the net tangible book value of our common stock. See "Dilution" in this prospectus for a more detailed discussion of the dilution which may incur in connection with this offering.

Completion of the Rights Offering is not subject to us raising a minimum offering amount.

Completion of the Rights Offering is not subject to us raising a minimum offering amount and, therefore, proceeds may be insufficient to meet our objectives, thereby increasing the risk to investors in this offering, including investing in a company that continues to require capital. See "Use of Proceeds."

This Rights Offering may cause the trading price of our common stock to decrease.

The Subscription Price, together with the number of shares of common stock issuable upon conversion of the Preferred Stock and Warrants we propose to issue and ultimately will issue if this Rights Offering is completed, may result in an immediate decrease in the market price of our common stock. This decrease may continue after the completion of this Rights Offering. If that occurs, you may have committed to buy shares of our common stock at a price greater than the prevailing market price. We cannot predict the effect, if any, that the availability of shares for future sale represented by the Warrants issued in connection with the Rights Offering will have on the market price of our common stock from time to time. Further, if a substantial number of Subscription Rights are exercised and the holders of the shares received upon exercise of those Subscription Rights or the related Warrants choose to sell some or all of the shares underlying the Subscription Rights or the related Warrants, the resulting sales could depress the market price of our common stock.

Certain of our outstanding shares of convertible preferred stock and warrants contain full-ratchet anti-dilution protection, which may cause significant dilution to our stockholders.

As of September 7, 2022, we had outstanding 24,727,789 shares of common stock. As of that date we had outstanding 26 shares of Series B convertible preferred stock convertible into an aggregate of 19,306 shares of common stock and warrants issued in May 2018 that are exercisable for an aggregate of 310,585 shares of common stock. The Series B convertible preferred stock and May 2018 warrants contain full-ratchet anti-dilution provisions which, subject to limited exceptions, would reduce the conversion price of the Series B preferred stock (and increase the number of shares issuable under the Series B preferred stock) and reduce the exercise price of the May 2018 warrants in the event that we in the future issue common stock, or securities convertible into or exercisable to purchase common stock, at a price per share lower than the conversion price or exercise price then in effect. Our outstanding 26 shares of Series B preferred stock are, prior to this offering, convertible into 19,306 shares of Common Stock at a conversion price of \$1.4814 per share. The May 2018 warrants currently are exercisable at an exercise price of \$1.4814 per share. These full ratchet anti-dilution provisions will likely be triggered by the issuance of the Preferred Stock and the Warrants in the Rights Offering.

Holders of our Preferred Stock and Warrants will have no rights as a common stockholder until such holders convert or exercise their Preferred Stock or Warrants, respectively, and acquire our common stock.

Until holders of Preferred Stock or Warrants acquire shares of our common stock upon conversion or exercise of the Preferred Stock or Warrants, respectively, holders of such securities will have no rights with respect to the shares of our common stock underlying such Preferred Stock or Warrants. Upon conversion or exercise of the Preferred Stock

or Warrants, respectively, the holders thereof will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date. Prior to conversion, holders of Preferred Stock will have limited voting rights.

The number of shares of common stock underlying the Preferred Stock and Warrants included in the Units will not be known until the expiration date of the rights offering.

Because the actual Conversion Price will be determined on the expiration date, rights holders will not know the Conversion Price, nor will they know the number of shares underlying the Preferred Stock and the Warrants, at the time of exercise. The actual number of shares of common stock underlying the Preferred Stock and the Warrants may be significantly different from the number expected based on the current trading price of our common stock.

If we terminate this offering for any reason, we will have no obligation other than to return subscription monies within 10 business days.

We may decide, in our sole discretion and for any reason, to cancel or terminate the Rights Offering at any time prior to the expiration date. If this offering is cancelled or terminated, we will have no obligation with respect to Subscription Rights that have been exercised except to return within 10 business days, without interest or deduction, all subscription payments deposited with the Subscription Agent. If we terminate this offering and you have not exercised any Subscription Rights, such Subscription Rights will expire and be worthless.

The Subscription Price determined for this offering is not an indication of the fair value of our common stock.

In determining the Subscription Price, our board of directors considered a number of factors, including, but not limited to, our need to raise capital in the near term to continue our operations, the current and historical trading prices of our common stock, a price that would increase the likelihood of participation in the Rights Offering, the cost of capital from other sources, the value of the Preferred Stock and Warrants being issued as components of the Unit, and comparable precedent transactions. The Subscription Price does not necessarily bear any relationship to any established criteria for value. No valuation consultant or investment banker has opined upon the fairness or adequacy of the Subscription Price. You should not consider the Subscription Price as an indication of the value of our company or our common stock.

If you do not act on a timely basis and follow subscription instructions, your exercise of Subscription Rights may be rejected.

Holders of Subscription Rights who desire to purchase shares of our Preferred Stock and Warrants in this offering must act on a timely basis to ensure that all required forms and payments are actually received by the Subscription Agent prior to 5:00 p.m., New York City time, on the expiration date, unless extended. If you are a beneficial owner of shares of common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants and you wish to exercise your Subscription Rights, you must act promptly to ensure that your broker, dealer, bank, trustee or other nominee acts for you and that all required forms and payments are actually received by your broker, dealer, bank, trustee or other nominee in sufficient time to deliver such forms and payments to the Subscription Agent to exercise the Subscription Rights granted in this offering that you beneficially own prior to 5:00 p.m., New York City time on the expiration date, as may be extended. We will not be responsible if your broker, dealer, bank, trustee or other nominee fails to ensure that all required forms and payments are received by the Subscription Agent prior to 5:00 p.m., New York City time, on the expiration date.

If you fail to complete and sign the required subscription forms, send an incorrect payment amount, or otherwise fail to follow the subscription procedures that apply to your exercise in this Rights Offering, the Subscription Agent may, depending on the circumstances, reject your subscription or accept it only to the extent of the payment received. Neither we nor the Subscription Agent undertakes to contact you concerning an incomplete or incorrect subscription form or payment, nor are we under any obligation to correct such forms or payment. We have the sole discretion to determine whether a subscription exercise properly follows the subscription procedures.

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You may not receive all of the Units for which you subscribe.

While we are distributing to holders of our common stock, Series B Preferred Stock, Series C Preferred Stock, and Participating Warrants, one Subscription Right for every share of common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock, and exercise of Participating Warrants) owned on the Record Date, we are only seeking to raise \$10 million in gross proceeds in this Rights Offering. As a result, based on 24,727,495 shares of common stock outstanding as of August 31, 2022, and 19,306 shares of common stock issuable upon conversion of 26 shares of our Series B Preferred Stock, 33,753 shares of common stock issuable upon conversion of 50 shares of our Series C Preferred Stock and 1,115,729 shares of common stock issuable upon exercise of Participating Warrants, we would grant Subscription Rights to acquire 25,896,283 Units but will only accept subscriptions for 10,000 Units. Accordingly, enough Units may not be available to honor your subscription in full. If excess Units are available after the exercise of Basic Subscription Rights, holders who fully exercise their Basic Subscription Rights will be entitled to subscribe for an additional number of Units. Over-Subscription Privileges will be allocated pro rata among Rights holders who over-subscribed, based on the number of over-subscription Units to which they have subscribed. We cannot guarantee that you will receive any or the entire number of Units for which you subscribed. If for any reason the number of Units allocated to you is less than you have subscribed for, then the excess funds held by the Subscription Agent on your behalf will be returned to you, without interest, as soon as practicable after the Rights Offering has expired and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected, and we will have no further obligations to you.

Unless we otherwise agree in writing, a person or entity, together with related persons or entities, may not exercise Subscription Rights (including Over-Subscription Privileges) to purchase Units that, when aggregated with their existing ownership, would result in such person or entity, together with any related persons or entities, owning in excess of 19.99% of our issued and outstanding shares of common stock following the closing of the transactions contemplated by this Rights Offering. If the number of shares allocated to you is less than your subscription request, then the excess funds held by the Subscription Agent on your behalf will be returned to you, without interest, as soon as practicable after the Rights Offering has expired and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected, and we will have no further obligations to you.

If you make payment of the Subscription Price by personal check, your check may not clear in sufficient time to enable you to purchase shares in this Rights Offering.

Any personal check used to pay for shares and Warrants to be issued in this Rights Offering must clear prior to the expiration date of this Rights Offering, and the clearing process may require five or more business days. If you choose to exercise your Subscription Rights, in whole or in part, and to pay for shares and Warrants by personal check and your check has not cleared prior to the expiration date of this Rights Offering, you will not have satisfied the conditions to exercise your Subscription Rights and will not receive the shares and Warrants you wish to purchase.

The receipt of Subscription Rights may be treated as a taxable distribution to you.

We believe the distribution of the Subscription Rights in this Rights Offering should be a non-taxable distribution to holders of shares of common stock, Series B Preferred Stock, Series C Preferred Stock, and holders of Participating Warrants, under Section 305(a) of the Internal Revenue Code of 1986, as amended, or the Code. Please see the discussion under the heading “Material U.S. Federal Income Tax Consequences” below. This position is not binding on the IRS, or the courts, however. If this Rights Offering is deemed to be part of a “disproportionate distribution” under Section 305 of the Code, your receipt of Subscription Rights in this Rights Offering may be treated as the receipt of a taxable distribution to you equal to the fair market value of the Subscription Rights. Any such distribution would be treated as dividend income to the extent of our current and accumulated earnings and profits, if any, with any excess being treated as a return of capital to the extent thereof and then as capital gain. Each holder of shares of common stock or Preferred Stock and each holder of Participating Warrants is urged to consult his, her or its own tax advisor with respect to the particular tax consequences of this Rights Offering.

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Proposed legislation in the U.S. Congress, including changes in U.S. tax law, and the recently enacted Inflation Reduction Act of 2022, may adversely impact the Company and the value of our Subscription Rights, shares of our common stock and Preferred Stock, and Warrants.

Changes to U.S. tax laws (which changes may have retroactive application) could adversely affect the Company or holders of our Subscription Rights, shares of our common stock and Preferred Stock, and Warrants. In recent years, many changes to U.S. federal income tax laws have been proposed and made, and additional changes to U.S. federal income tax laws are likely to continue to occur in the future.

The U.S. Congress is currently considering numerous items of legislation which may be enacted prospectively or with retroactive effect, which legislation could adversely impact the Company's financial performance and the value of our Subscription Rights, shares of our common stock and Preferred Stock and Warrants. Additionally, states in which we operate or own assets may impose new or increased taxes. If enacted, most of the proposals would be effective for 2022 or later years. The proposed legislation remains subject to change, and its impact on the Company and holders of our Subscription Rights, shares of our common stock and Preferred Stock and Warrants is uncertain.

In addition, the Inflation Reduction Act of 2022 was recently signed into law and includes provisions that will impact the U.S. federal income taxation of corporations. Among other items, this legislation includes provisions that will impose a minimum tax on the book income of certain large corporations and an excise tax on certain corporate stock repurchases that would be imposed on the corporation repurchasing such stock. It is unclear how this legislation will be implemented by the U.S. Department of the Treasury and we cannot predict how this legislation or any future changes in tax laws might affect the Company or holders of our Subscription Rights, shares of our common stock and Preferred Stock and Warrants

Exercising the Subscription Rights limits your ability to engage in certain hedging transactions that could provide you with financial benefits.

By exercising the Subscription Rights, you are representing to us that you have not entered into any short sale or similar transaction with respect to our common stock since the Record Date for the Rights Offering. In addition, the Subscription Rights provide that, upon exercise of the Subscription Right, you agree not to enter into any short sale or similar transaction with respect to our common stock for so long as you continue to hold Warrants issued in connection with the exercise of the Subscription Right. These requirements prevent you from pursuing certain investment strategies that could provide you greater financial benefits than you might have realized if the Subscription Rights did not contain these requirements.

The Subscription Rights are not transferable, and there is no market for the Subscription Rights.

You may not sell, transfer, assign or give away your Subscription Rights. Because the Subscription Rights are non-transferable, there is no market or other means for you to directly realize any value associated with the Subscription Rights. You must exercise the Subscription Rights to realize any potential value from your Subscription Rights.

There is no public market for the Preferred Stock in this offering.

There is no established public trading market for the Preferred Stock, and we do not expect a market to develop. In addition, we do not currently intend to apply for listing of the Preferred Stock on any securities exchange or recognized trading system. Purchasers of the Preferred Stock may be unable to resell their shares of Preferred Stock or sell them only at an unfavorable price for an extended period of time, if at all.

Absence of a public trading market for the Warrants may limit your ability to resell the Warrants.

There is no established trading market for the Warrants to be issued pursuant to this offering, and they will not be listed for trading on Nasdaq or any other securities exchange or market, and the Warrants may not be widely distributed. Purchasers of the Warrants may be unable to resell the Warrants or sell them only at an unfavorable price for an extended period of time, if at all.

The market price of our common stock may never exceed the exercise price of the Warrants issued in connection with this offering.

The Class A Warrants being issued in connection with this offering become exercisable upon issuance and will expire five years from the date of issuance. The Class B Warrants being issued in connection with this offering become exercisable upon issuance and will expire three years from the date of issuance. The market price of our common stock may never exceed the exercise price of the Warrants prior to their date of expiration. Any Warrants not exercised by their date of expiration will expire worthless and we will be under no further obligation to the Warrant holder.

The Warrants contain features that may reduce your economic benefit from owning them.

For so long as you continue to hold warrants, you will not be permitted to enter into any short sale or similar transaction with respect to our common stock. This could prevent you from pursuing investment strategies that could provide you greater financial benefits from owning the warrant.

The dealer-manager is not underwriting, nor acting as placement agent of, the Subscription Rights or the securities underlying the Subscription Rights.

Maxim Group LLC is acting as sole dealer-manager for the Rights Offering. As provided in the dealer-manager agreement, the dealer-manager will provide marketing assistance in connection with this offering. The dealer-manager is not underwriting or placing any of the Subscription Rights or the shares of our Preferred Stock or Warrants being issued in this offering and is not making any recommendation with respect to such Subscription Rights (including with respect to the exercise or expiration of such Subscription Rights), shares or Warrants. The dealer-manager will not be subject to any liability to us in rendering the services contemplated by the dealer-manager agreement except for any act of bad faith, gross negligence or willful misconduct by the dealer-manager. The Rights Offering may not be successful despite the services of the dealer-manager to us in this offering.

Since the Warrants are executory contracts, they may have no value in a bankruptcy or reorganization proceeding.

In the event a bankruptcy or reorganization proceeding is commenced by or against us, a bankruptcy court may hold that any unexercised Warrants are executory contracts that are subject to rejection by us with the approval of the bankruptcy court. As a result, holders of the Warrants may, even if we have sufficient funds, not be entitled to receive any consideration for their Warrants or may receive an amount less than they would be entitled to if they had exercised their Warrants prior to the commencement of any such bankruptcy or reorganization proceeding.

We may amend or modify the terms of the Rights Offering at any time prior to the expiration of the Rights Offering in our sole discretion.

Our board of directors reserves the right to amend or modify the terms of the Rights Offering in its sole discretion. If we should make any fundamental changes to the terms of the Rights Offering set forth in this prospectus, we will file a post-effective amendment to the registration statement in which this prospectus is included, offer potential purchasers who have subscribed for rights the opportunity to cancel such subscriptions and issue a refund of any money advanced by such stockholder and recirculate an updated prospectus after the post-effective amendment is declared effective by the SEC. In addition, upon such event, we may extend the Expiration Date of the Rights Offering to allow holders of rights ample time to make new investment decisions and for us to recirculate updated documentation. Promptly following any such occurrence, we will issue a press release announcing any changes with respect to the Rights Offering and the new expiration date. The terms of the Rights Offering cannot be modified or amended after the Expiration Date of the Rights Offering. Although we do not presently intend to do so, we may choose to amend or modify the terms of the Rights Offering for any reason,

including, without limitation, in order to increase participation in the Rights Offering. Such amendments or modifications may include a change in the subscription price, although no such change is presently contemplated.

Risks Related to Our Business

Investors should carefully consider the risks and uncertainties and all other information contained or incorporated by reference in this prospectus, including the risks and uncertainties discussed under “*Risk Factors*” in our most recent Annual Report on Form 10-K, as may be amended from time to time, and in subsequent filings that are incorporated herein by reference. All these risk factors are incorporated by reference herein in their entirety. These risks and uncertainties are not the only ones facing us. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. This prospectus and the incorporated documents also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks mentioned in this prospectus.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on our management’s current beliefs, expectations and assumptions about future events, conditions and results and on information currently available to us. Discussions containing these forward-looking statements may be found, among other places, in the Sections entitled “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” incorporated by reference from our most recent Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q, as well as any amendments thereto, filed with the SEC.

All statements, other than statements of historical fact, included or incorporated herein regarding our strategy, future operations, financial position, future revenues, projected costs, plans, prospects and objectives are forward-looking statements. Words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “estimate,” “think,” “may,” “could,” “will,” “would,” “should,” “continue,” “potential,” “likely,” “opportunity” and similar expressions or variations of such words are intended to identify forward-looking statements but are not the exclusive means of identifying forward-looking statements. Examples of our forward-looking statements include:

- our ability to achieve sufficient market acceptance of any of our products or product candidates;
- our ability to enter into and maintain successful OEM arrangements with third parties;
- our perception of the growth in the size of the potential market for our products and product candidates;
- our estimate of the advantages of our silicon nitride technology platform;
- our ability to become a profitable biomaterial technology company;
- our estimates regarding our needs for additional financing and our ability to obtain such additional financing on suitable terms;
- our ability to succeed in obtaining FDA clearance or approvals for our product candidates;
- our ability to receive CE Marks for our product candidates;
- the timing, costs and other limitations involved in obtaining regulatory clearance or approval for any of our product candidates and product candidates and, thereafter, continued compliance with governmental regulation of our existing products and activities;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others;
- our ability to obtain sufficient quantities and satisfactory quality of raw materials to meet our manufacturing needs;
- the availability of adequate coverage reimbursement from third-party payers in the United States;
- our estimates regarding anticipated operating losses, future product revenue, expenses, capital requirements and liquidity;
- our ability to maintain and continue to develop our sales and marketing infrastructure;
- our ability to enter into and maintain suitable arrangements with an adequate number of distributors;
- our manufacturing capacity to meet future demand;
- our ability to develop effective and cost-efficient manufacturing processes for our products;
- our reliance on third parties to supply us with raw materials and our non-silicon nitride products and instruments;
- the safety and efficacy of products and product candidates;
- the timing of and our ability to conduct clinical trials;
- potential changes to the healthcare delivery systems and payment methods in the United States or internationally;
- any potential requirement by regulatory agencies that we restructure our relationships with referring surgeons;
- our ability to develop and maintain relationships with surgeons, hospitals and marketers of our products; and
- our ability to attract and retain a qualified management team, engineering team, sales and marketing team, distribution team, design surgeons, surgeon advisors and other qualified personnel and advisors.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

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

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USE OF PROCEEDS

Assuming that all Units are subscribed for in the Rights Offering, we estimate that the net proceeds from the Rights Offering will be approximately \$9.2 million, after deducting expenses relating to this offering payable by us estimated at approximately \$0.8 million, including dealer-manager fees and expenses which include fees payable to Ascendant Capital Markets, LLC, for certain financial advisor services provided in connection with the Rights Offering, before deducting other estimated expenses payable by us and excluding any proceeds received upon exercise of any Warrants.

We intend to use the net proceeds from the exercise of Subscription Rights for general corporate purposes, which may include research and development expenses, capital expenditures, working capital and general and administrative expenses, and potential acquisitions of or investments in businesses, products and technologies that complement our business, although we have no present commitments or agreements to make any such acquisitions or investments as of the date of this prospectus. We expect to use any proceeds we receive from the exercise of Warrants for substantially the same purposes and in substantially the same manner. Pending these uses, we intend to invest the funds in short-term, investment grade, interest-bearing securities. It is possible that, pending their use, we may invest the net proceeds in a way that does not yield a favorable, or any, return for us.

Our management will have broad discretion as to the allocation of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of commencement of this offering.

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DILUTION

Purchasers of Units in the Rights Offering will experience an immediate dilution of the net tangible book value per share of our common stock. Our net tangible book value as of June 30, 2022, was approximately \$12,020,000, or \$0.49 per share of our common stock (based upon 24,719,574 shares of our common stock outstanding). Net tangible book value per share is equal to our total tangible assets less our total liabilities, divided by the number of shares of our outstanding common stock.

Dilution per share of common stock equals the difference between the amount paid by purchasers of Units in the Rights Offering (ascribing no value to the Warrants contained in the Units) and the net tangible book value per share of our common stock immediately after the Rights Offering.

Based on the sale by us in this Rights Offering of a maximum of Units at the Subscription Price of \$1,000 per Unit (assuming no exercise of the Warrants), and after deducting estimated offering expenses and dealer-manager fees and expenses payable by us, our pro forma net tangible book value as of June 30, 2022, would have been approximately \$21,009,000 million, or \$0.41 per share. This represents an immediate decrease in pro forma net tangible book value to existing stockholders of (\$0.08) per share and an immediate increase to purchasers in the Rights Offering of \$0.07 per share. The following table illustrates this per-share dilution:

Subscription Price	\$	1,000.00
Net tangible book value per share as of June 30, 2022	\$	0.49
Decrease in net tangible book value per share attributable to Rights Offering	\$	(0.08)
Pro forma net tangible book value per share as of June 30, 2022, after giving effect to Rights Offering	\$	0.41
Increase in net tangible book value per share to purchasers in the Rights Offering	\$	0.07

The information above is as of June 30, 2022 and excludes:

- 1,291,207 shares of our common stock issuable upon the exercise of stock options, with a weighted-average exercise price of \$2.38 per share, and vesting of restricted stock units;
- 19,306 shares of our common stock issuable upon the conversion of outstanding shares of Series B Preferred Stock;
- 34,428 shares of our common stock issuable upon the conversion of outstanding shares of Series C Preferred Stock;
- 1,117,575 shares of our common stock issuable upon the exercise of outstanding warrants, with a weighted-average exercise price of \$6.30 per share;
- 626,799 other shares of our common stock reserved for future issuance under our 2020 Equity Incentive Plan.

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MARKET PRICE AND DIVIDEND POLICY

Our shares of common stock are currently quoted on The Nasdaq Capital Market under the symbol "SINT". On September 22, 2022, the last reported sales price of our common stock on Nasdaq was \$0.4145.

Holders of Record

As of September 9, 2022, we had approximately 158 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, this number is not indicative of the total number of stockholders represented by these stockholders of record.

Dividends

We have not declared or paid dividends to stockholders since inception and do not plan to pay cash dividends in the foreseeable future. We currently intend to retain earnings, if any, to finance our growth.

Issuer Purchases of Equity Securities

None

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The Subscription Rights

We are distributing to the record holders of our common stock, Series B Preferred Stock, Series C Preferred Stock and Participating Warrants, at no charge, non-transferable Subscription Rights to purchase one Unit at a subscription price of \$1,000 per Unit. Each Basic Subscription Right will entitle you to purchase one share of our preferred stock and, based on the Estimated Conversion Price, 5,426 Warrants. Each share of Preferred Stock will be convertible at the option of the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Preferred Stock by the Conversion Price determined on the expiration date. Based on the Estimated Conversion Price, the Preferred Stock included in the Units would be initially convertible into an aggregate of 27,130,000 shares of common stock. The actual number of shares that the Preferred Stock may be converted into will depend on the Conversion Price determined on the expiration date. Each Class A Warrant will be exercisable for one share of our common stock at a per share exercise price equal to the Conversion Price from the date of issuance through the expiration five years from the date of issuance. Each Class B Warrant will be exercisable for one share of our common stock at a per share exercise price equal to the Conversion Price from the date of issuance through the expiration three years from the date of issuance. Based on the Estimated Conversion Price, the Warrants included in the Units would be initially exercisable for an aggregate of 54,260,000 shares of common stock. The actual number of shares that the Warrants may be exercised for will depend on the Conversion Price determined on the expiration date. The actual number of Class A Warrants included in each Unit will be calculated as the quotient obtained by dividing \$1,000 by the Conversion Price. The actual number of Class B Warrants included in each Unit will be calculated as the quotient obtained by dividing \$1,000 by the Conversion Price.

Because the actual Conversion Price will be determined on the expiration date, rights holders will not know the Conversion Price, nor will they know the number of shares of common stock underlying the Preferred Stock and the Warrants, at the time of exercise.

Each record holder of our common stock, Series B Preferred Stock, Series C Preferred Stock, and holders of Participating Warrants, will receive one Subscription Right for every share of our common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock, and exercise of Participating Warrants) owned by such record holder as of the Record Date. Each Subscription Right entitles the record holder to a Basic Subscription Right and an Over-Subscription Privilege.

Basic Subscription Rights

Your Basic Subscription Rights will entitle you to purchase Units, each comprised of one share of our Preferred Stock and, based on the Estimated Conversion Price, 5,426 Warrants. For example, if you owned 100 shares of common stock as of the Record Date, you will receive 100 Subscription Rights and will have the right to purchase 100 shares of our Preferred Stock and, based on the Estimated Conversion Price, Warrants to purchase 542,600 shares of our common stock for \$1,000 per Unit, or a total payment of \$100,000. You may exercise all or a portion of your Basic Subscription Rights, or you may choose not to exercise any of your Basic Subscription Rights. If you do not exercise your Basic Subscription Rights in full, you will not be entitled to exercise your Over-Subscription Privilege.

Additionally, sufficient Units may not be available to honor your Basic Subscription Right in full. While we are distributing one subscription right for every share of common stock owned or deemed owned on the record date, we are only seeking to raise \$10 million in gross proceeds in this Rights Offering. As a result, based on (1) 24,727,495 shares of common stock outstanding on August 31, 2022 and (2) 1,168,788 shares of common stock deemed to be owned and outstanding as of August 31, 2022, by holders of our Series B Preferred Stock, Series C Preferred Stock and Participating Warrants, we would grant subscription rights to acquire 25,896,283 Units but will only accept subscriptions for 10,000 Units.

If exercises of Basic Subscription Rights exceed the number of Units available in the Rights Offering, we will allocate the available Units pro-rata among the record holders exercising the Basic Subscription Rights in proportion to the number of shares of our common stock each of those record holders owned or were deemed to own on the record date, relative to the number of shares owned or deemed owned on the record date by all record holders exercising the basic subscription right. If this pro-rata allocation results in any record holders receiving a greater number of Units than the record holder subscribed for pursuant to the exercise of the basic subscription rights, then such record holder will be allocated only that number of Units for which the record holder subscribed, and the remaining Units will be allocated among all other record holders exercising their Basic Subscription Rights on the same pro rata basis described above. The proration process will be repeated until all shares have been allocated.

If for any reason the number of Units allocated to you is less than you have subscribed for, then the excess funds held by the Subscription Agent on your behalf will be returned to you, without interest, as soon as practicable after the Rights Offering has expired and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected, and we will have no further obligations to you.

Over-Subscription Privilege

If you exercise your Basic Subscription Rights in full, you may also choose to exercise your Over-Subscription Privilege. Subject to proration and the limitations described in this prospectus, we will seek to honor the Over-Subscription Requests in full. If Over-Subscription Requests exceed the number of Units available, however, we will allocate the available Units pro rata among the common and Series B and Series C stockholders and eligible warrant holders as of the Record Date exercising the Over-Subscription Privilege in proportion to the number of shares of our common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock, and exercise of Participating Warrants) each of those stockholders and/or warrant holders owned on the Record Date, relative to the number of shares owned on the Record Date by all stockholders and warrant holders as of the Record Date exercising the Over-Subscription Privilege. If this pro rata allocation results in any stockholder or warrant holder receiving a greater number of Units than the record holder subscribed for pursuant to the exercise of the Over-Subscription Privilege, then such record holder will be allocated only that number of Units for which the record holder oversubscribed, and the remaining Units will be allocated among all other stockholders or warrant holders exercising the Over-Subscription Privilege on the same pro rata basis described above. The proration process will be repeated until all Units have been allocated. American Stock Transfer & Trust Company, LLC, the Subscription Agent for the Rights Offering, will determine the over-subscription allocation based on the formula described above.

To the extent the aggregate subscription payment of the actual number of unsubscribed Units available to you pursuant to the Over-Subscription Privilege is less than the amount you actually paid in connection with the exercise of the Over-Subscription Privilege, you will be allocated only the number of unsubscribed Units available to you, and any excess subscription payments will be returned to you, without interest or deduction, with 10 business days after expiration of the Rights Offering.

We can provide no assurances that you will be entitled to purchase the number of Units issuable upon the exercise of your Over-Subscription Privilege in full at the expiration of the Rights Offering. We will not be able to satisfy any requests for Units pursuant to the Over-Subscription Privilege if all of our stockholders exercise their Basic Subscription Rights in full, and we will only honor an Over-Subscription Privilege to the extent sufficient Units are available following the exercise of Basic Subscription Rights.

Limitation on the Purchase of Units

You may only purchase the number of Units purchasable upon exercise of the number of Basic Subscription Rights distributed to you in the Rights Offering, plus the Over-Subscription Privilege, if any. Accordingly, the number of Units that you may purchase in the Rights Offering is limited by the number of shares of our common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock, and exercise of Participating Warrants) you held on the Record Date and by the extent to which other stockholders or warrant holders exercise their Basic Subscription Rights and Over-Subscription Privileges, all of which we cannot determine prior to completion of the Rights Offering. Unless we otherwise agree in writing, a person or entity, together with related persons or entities, may not exercise Subscription Rights (including Over-Subscription Privileges) to purchase Units that, when aggregated with their existing ownership, would result in such person or entity, together with any related persons or entities, owning in excess of 19.99% of our issued and outstanding shares of common stock following the closing of the transactions contemplated by this Rights Offering.

Subscription Price

The Subscription Price is \$1,000 per Unit. The Subscription Price does not necessarily bear any relationship to our past or expected future results of operations, cash flows, current financial condition, or any other established criteria for value. No change will be made to the Subscription Price by reason of changes in the trading price of our common stock or other factor prior to the expiration of this Rights Offering.

Determination of Subscription Price

In the determining the Subscription Price, the board of directors considered a variety of factors including those listed below:

- our need to raise capital in the near term to continue our operations;
- the current and historical trading prices of our common stock;
- a price that would increase the likelihood of participation in the Rights Offering;
- the cost of capital from other sources;
- the value of the common stock being issued as a component of the Unit;
- the value of the Warrant being issued as a component of the Unit; and
- comparable precedent transactions, including the percentage of shares offered, the terms of the subscription rights being offered, the subscription price and the discount that the subscription price represents to the immediately prevailing closing prices for these offerings.

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The Subscription Price does not necessarily bear any relationship to any established criteria for value. No valuation consultant or investment banker has opined upon the fairness or adequacy of the Subscription Price. You should not consider the Subscription Price as an indication of actual value of our company or our common stock. The market price of our common stock may decline during or after the Rights Offering. We cannot predict the price at which our shares of common stock will trade after the Rights Offering. You should obtain a current price quote for our common stock and perform an independent assessment of our Warrants before exercising your Subscription Rights and make your own assessment of our business and financial condition, our prospects for the future, and the terms of this Rights Offering. Once made, all exercises of Subscription Rights are irrevocable.

No Short-Sales

By exercising the Subscription Rights, you are representing to us that you have not entered into any short sale or similar transaction with respect to our common stock since the Record Date for the Rights Offering. In addition, the Subscription Rights provide that, upon exercise of the Subscription Right, you represent that you have not since the Record Date and, for so long as you continue to hold Preferred Stock or Warrants issued in connection with the exercise of the Subscription Right, agree to not to enter into any short sale or similar transaction with respect to our common stock. These requirements prevent you from pursuing certain investment strategies that could provide you greater financial benefits than you might have realized if the Subscription Rights did not contain these requirements.

No Recombination

The Preferred Stock and Warrants comprising the Units will separate upon the exercise of the Subscription Rights, and the Units will not trade as a separate security. Holders may not recombine shares of Preferred Stock and Warrants to receive a Unit.

Non-Transferability of Subscription Rights

The Subscription Rights are non-transferable (other than by operation of law) and, therefore, you may not sell, transfer, assign or give away your Subscription Rights to anyone. The Subscription Rights will not be listed for trading on any stock exchange or market.

Expiration Date; Extension

The subscription period, during which you may exercise your Subscription Rights, expires at 5:00 p.m., Eastern Time, on October 12, 2022, which is the expiration of the Rights Offering. If you do not exercise your Subscription Rights before that time, your Subscription Rights will expire and will no longer be exercisable. We will not be required to issue shares to you if the Subscription Agent receives your Rights Certificate or your subscription payment after that time. We have the option to extend the Rights Offering in our sole discretion for any reason up to an additional 45 days, although we do not presently intend to do so. We may extend the Rights Offering by giving oral or written notice to the Subscription Agent before the Rights Offering expires. If we elect to extend the Rights Offering, we will issue a press release announcing the extension no later than 9:00 a.m., Eastern Time, on the next business day after the most recently announced expiration date of the Rights Offering.

If you hold your shares of common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants in the name of a broker, dealer, bank or other nominee, the nominee will exercise the Subscription Rights on your behalf in accordance with your instructions. Please note that the nominee may establish a deadline that may be before 5:00 p.m., Eastern Time, on October 12, 2022, which is the expiration date that we have established for the Rights Offering.

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Termination

We may terminate the Rights Offering at any time and for any reason prior to the expiration of the Rights Offering. If we terminate the Rights Offering, we will issue a press release notifying stockholders and the public of the termination no later than 9:00 a.m., Eastern Time, on the next business day after the most recently announced expiration date of the Rights Offering.

Return of Funds upon Completion or Termination

The Subscription Agent will hold funds received in payment for shares in a segregated account pending completion of the Rights Offering. The Subscription Agent will hold this money until the Rights Offering is completed or is terminated. To the extent you properly exercise your Over-Subscription Privilege for an amount of Units that exceeds the number of unsubscribed Units available to you, any excess subscription payments will be returned to you within 10 business days after the expiration of the Rights Offering, without interest or deduction. If the Rights Offering is terminated for any reason, all subscription payments received by the Subscription Agent will be returned within 10 business days, without interest or deduction.

Shares of Our Capital Stock and Warrants Outstanding After the Rights Offering

Assuming no other transactions by us involving our capital stock prior to the expiration of the Rights Offering, and if the Rights Offering is fully subscribed, upon consummation of the Rights Offering we will have 24,727,789 shares of common stock issued and outstanding, 26 shares of Series B Preferred Stock issued and outstanding, 50 shares of Series C Preferred Stock Outstanding, 10,000 shares of Preferred Stock issued and outstanding, and, based on the Estimated Conversion Price, 54,260,000 Warrants to purchase additional shares of our common stock issued and outstanding. The exact number of shares of Preferred Stock and Warrants that we will issue in this offering will depend on the number of Units that are subscribed for in the Rights Offering.

Methods for Exercising Subscription Rights

The exercise of Subscription Rights is irrevocable and may not be cancelled or modified. You may exercise your Subscription Rights as follows:

Subscription by Record Holders

If, as of the Record Date, you are a holder of record of common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants, the number of Units you may purchase pursuant to your Subscription Rights is indicated on the enclosed Rights Certificate. You may exercise your Subscription Rights by properly completing and executing the Rights Certificate and forwarding it, together with your full payment, to the Subscription Agent at the address given below under "Subscription Agent," to be received before 5:00 p.m., Eastern Time, on October 12, 2022.

Subscription by Beneficial Owners

If as of the Record Date you are a beneficial owner of shares of our common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants that are registered in the name of a broker, dealer, bank or other nominee, you will not receive a Rights Certificate. Instead, we will issue one Subscription Right to such nominee record holder for all shares of our common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants held by such nominee at the Record Date. If you are not contacted by your nominee, you should promptly contact your nominee in order to subscribe for shares in the Rights Offering and follow the instructions provided by your nominee.

To properly exercise your Over-Subscription Privilege, you must deliver the subscription payment related to your Over-Subscription Privilege before the Rights Offering expires. Because we will not know the total number of unsubscribed Units before the Rights Offering expires, if you wish to maximize the number of shares you purchase pursuant to your Over-Subscription Privilege, you will need to deliver payment in an amount equal to the aggregate subscription payment for the maximum number of Units that you wish to purchase.

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Payment Method

Payments must be made in full in U.S. currency by personal check, certified check or bank draft, or by wire transfer, and payable to "American Stock Transfer and Trust Company, LLC, as Subscription Agent for SINTX Technologies, Inc." You must timely pay the full subscription payment, including payment for the Over-Subscription Privilege, for the full number of shares of our common stock you wish to acquire pursuant to the exercise of Subscription Rights by delivering a:

- certified or personal check drawn against a U.S. bank payable to "American Stock Transfer and Trust Company, LLC, as Subscription Agent for SINTX Technologies, Inc.;"
- U.S. Postal money order payable to "American Stock Transfer and Trust Company, LLC, as Subscription Agent for SINTX Technologies, Inc.;" or
- wire transfer of immediately available funds directly to the account maintained by American Stock Transfer and Trust Company, LLC, as Subscription Agent, for purposes of accepting subscriptions in this Rights Offering at:

If you elect to exercise your Subscription Rights, you should consider using a wire transfer or certified check drawn on a U.S. bank to ensure that the Subscription Agent receives your funds before the Rights Offering expires. If you send a personal check, payment will not be deemed to have been received by the Subscription Agent until the check has cleared. The clearinghouse may require five or more business days to clear a personal check. Accordingly, holders who wish to pay the Subscription Price by means of a personal check should make payment sufficiently in advance of the expiration of the Rights Offering to ensure that the payment is received and clears by that date. If you send a certified check, payment will be deemed to have been received by the Subscription Agent immediately upon receipt of such instrument.

You should read the instruction letter accompanying the Rights Certificate carefully and strictly follow it. **DO NOT SEND RIGHTS CERTIFICATES OR PAYMENTS DIRECTLY TO US.** We will not consider your subscription received until the Subscription Agent has received delivery of a properly completed and duly executed Rights Certificate and payment of the full subscription payment.

The method of delivery of Rights Certificates and payment of the subscription payment to the Subscription Agent will be at the risk of the holders of Subscription Rights. If sent by mail, we recommend that you send those certificates and payments by registered mail, properly insured, with return receipt requested, or by overnight courier, and that you allow a sufficient number of days to ensure delivery to the Subscription Agent and clearance of payment before the Rights Offering expires.

Missing or Incomplete Subscription Forms or Payment

If you fail to complete and sign the Rights Certificate or otherwise fail to follow the subscription procedures that apply to the exercise of your Subscription Rights before the Rights Offering expires, the Subscription Agent will reject your subscription or accept it to the extent of the payment received. Neither we nor our Subscription Agent undertakes any responsibility or action to contact you concerning an incomplete or incorrect subscription form, nor are we under any obligation to correct such forms. We have the sole discretion to determine whether a subscription exercise properly complies with the subscription procedures.

If you send a payment that is insufficient to purchase the number of shares you requested, or if the number of shares you requested is not specified in the forms, the payment received will be applied to exercise your Subscription Rights to the fullest extent possible based on the amount of the payment received. Any excess subscription payments received by the Subscription Agent will be returned, without interest or deduction, within 10 business days following the expiration of the Rights Offering.

Issuance of Preferred Stock and Warrants

The shares of Preferred Stock and Warrants that are purchased in the Rights Offering as part of the Units will be issued in book-entry, or uncertificated, form meaning that you will receive a DRS account statement from our transfer agent reflecting ownership of these securities if you are a holder of record. If you hold your shares of common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants in the name of a bank, broker, dealer, or other nominee, DTC will credit your account with your nominee with the securities you purchased in the Rights Offering.

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The Subscription Agent for the Rights Offering is American Stock Transfer & Trust Company, LLC and the Information Agent is D.F. King & Co., Inc. The address to which Rights Certificates and payments should be mailed or delivered by overnight courier is provided below. If sent by mail, we recommend that you send documents and payments by registered mail, properly insured, with return receipt requested, and that you allow a sufficient number of days to ensure delivery to the Subscription Agent and clearance or payment before the Rights Offering expires. Do not send or deliver these materials to us.

If delivering by mail, hand or overnight courier:
American Stock Transfer & Trust Company, LLC
Operations Center
Attn: Reorganization Department
6201 15th Avenue
Brooklyn, New York 11219

If you deliver the Rights Certificates in a manner different than that described in this prospectus, we may not honor the exercise of your Subscription Rights.

You should direct any questions or requests for assistance concerning the method of subscribing for the shares of our common stock or for additional copies of this prospectus to the Information Agent, D.F. King & Co., Inc., toll free at (866) 620-2536, or by mail at D.F. King & Co., Inc., 48 Wall Street, 22nd Floor, New York, NY 10005.

Warrant Agent

The warrant agent for the Warrants is American Stock Transfer & Trust Company, LLC.

No Fractional Shares

We will not issue fractional shares of common stock in the Rights Offering. We will only distribute Subscription Rights to acquire whole Units, rounded down to the nearest whole number of underlying common shares giving rise to such Subscription Rights. Any excess subscription payments received by the Subscription Agent will be returned within 10 business days after expiration of the Rights Offering, without interest or deduction. Similarly, no fractional shares of common stock will be issued in connection with the conversion of the Preferred Stock or the exercise of a Warrant. Instead, for any such fractional share that would otherwise have been issuable upon conversion of shares of Preferred Stock, we may, at our election, pay a cash payment equal to such fraction multiplied by the conversion price or round up to the next whole share, and for any such fractional share that would have otherwise been issued upon exercise of Warrants, we will round up such fraction to the next whole share.

Notice to Brokers and Nominees

If you are a broker, dealer, bank or other nominee holder that holds shares of our common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants for the account of others on the Record Date, you should notify the beneficial owners for whom you are the nominee of the Rights Offering as soon as possible to learn their intentions with respect to exercising their Subscription Rights. If a beneficial owner of our common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants so instructs, you should complete the Rights Certificate and submit it to the Subscription Agent with the proper subscription payment by the expiration date. You may exercise the number of Subscription Rights to which all beneficial owners in the aggregate otherwise would have been entitled had they been direct holders of our common stock on the Record Date, provided that you, as a nominee record holder, make a proper showing to the Subscription Agent by submitting the form entitled "Nominee Holder Certification," which is provided with your Rights Offering materials. If you did not receive this form, you should contact our Subscription Agent to request a copy.

Validity of Subscriptions

We will resolve all questions regarding the validity and form of the exercise of your Subscription Rights, including time of receipt and eligibility to participate in the Rights Offering. Our determination will be final and binding. Once made, subscriptions are irrevocable; we will not accept any alternative, conditional, or contingent subscriptions. We reserve the absolute right to reject any subscriptions not properly submitted or the acceptance of which would be unlawful. You must resolve any irregularities in connection with your subscriptions before the expiration date of the Rights Offering, unless we waive them in our sole discretion. Neither we nor the Subscription Agent is under any duty to notify you or your representative of defects in your subscriptions. A subscription will be considered accepted, subject to our right to withdraw or terminate the Rights Offering, only when the Subscription Agent receives a properly completed and duly executed Rights Certificate and any other required documents and the full subscription payment including final clearance of any personal check. Our interpretations of the terms and conditions of the Rights Offering will be final and binding.

Stockholder Rights

You will have no rights as a holder of the shares of our common stock issuable upon conversion of the Preferred Stock issued in the Rights Offering until such Preferred Stock is converted into common stock and issued in book-entry form or your account at your broker, dealer, bank or other nominee is credited with the shares of our common stock. Holders of Warrants issued in connection with the Rights Offering will not have rights as holders of our common stock until such Warrants are exercised and the shares of common stock underlying the Warrants are issued to the holder.

Foreign Stockholders

We will not mail this prospectus or Rights Certificates to stockholders with addresses that are outside the United States or that have an army post office or foreign post office address. The Subscription Agent will hold these Rights Certificates for their account. To exercise Subscription Rights, our foreign stockholders must notify the Subscription Agent prior to 5:00 p.m., Eastern Time, on October 5, 2022, the third business day prior to the expiration date, of your exercise of Subscription Rights and provide evidence satisfactory to us, such as a legal opinion from local counsel, that the exercise of such Subscription Rights does not violate the laws of the jurisdiction in which such stockholder resides and payment by a U.S. bank in U.S. dollars before the expiration of the offer. If no notice is received by such time or the evidence presented is not satisfactory to us, the Subscription Rights represented thereby will expire.

No Revocation or Change

Once you submit the Rights Certificate or have instructed your nominee of your subscription request, you are not allowed to revoke or change the exercise or request a refund of monies paid. All exercises of Subscription Rights are irrevocable, even if you learn information about us that you consider to be unfavorable. You should not exercise your Subscription Rights unless you are certain that you wish to purchase shares at the Subscription Price. If we should make any fundamental changes to the terms set forth in this prospectus, we will (i) file a post-effective amendment to the registration statement of which this prospectus forms a part, (ii) offer potential purchasers who have subscribed for rights the opportunity to cancel such subscriptions, and (iii) issue a refund of any money advanced by such stockholder or eligible warrant holder and recirculate an updated prospectus after the post-effective amendment is declared effective with the SEC.

U.S. Federal Income Tax Treatment of Rights Distribution

For U.S. federal income tax purposes, we do not believe holders of shares of our common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants should recognize income or loss upon receipt or exercise of a Subscription Right, but the receipt and exercise of the Subscription Rights is unclear in certain respects. See "Material U.S. Federal Income Tax Consequences."

No Recommendation to Rights Holders

Our board of directors is not making a recommendation regarding your exercise of the Subscription Rights. Stockholders who exercise Subscription Rights risk investment loss on money invested. We cannot predict the price at which our shares of common stock will trade after the Rights Offering. You should make your investment decision based on your assessment of our business and financial condition, our prospects for the future and the terms of this Rights Offering. Please see “Risk Factors” for a discussion of some of the risks involved in investing in our common stock.

Fees and Expenses

We will pay all fees charged by the Subscription Agent and the Information Agent, and by the dealer-manager. You are responsible for paying any other commissions, fees, taxes or other expenses incurred in connection with the exercise of your Subscription Rights.

Listing

The Subscription Rights may not be sold, transferred, assigned or given away to anyone, and will not be listed for trading on any stock exchange or market. There is no public trading market for the Preferred Stock or the Warrants and they will not be listed for trading on Nasdaq or any other securities exchange or market. The shares of our common stock issuable upon the conversion of the Preferred Stock and the exercise of the Warrants to be issued in the Rights Offering are traded on Nasdaq under the symbol “SINT.”

Important

Do not send Rights Certificates directly to us. You are responsible for choosing the payment and delivery method for your Rights Certificate and you bear the risks associated with such delivery. If you choose to deliver your Rights Certificate and payment by mail, we recommend that you use registered mail, properly insured, with return receipt requested. We also recommend that you allow a sufficient number of days to ensure delivery to the Subscription Agent and clearance of payment prior to the expiration time.

Distribution Arrangements

Maxim Group LLC will act as dealer-manager for the Rights Offering. The dealer-manager will provide marketing assistance and advice to us in connection with the Rights Offering and will use its best efforts to solicit the exercise of Subscription Rights and participation in the Over-Subscription Privilege. The dealer-manager is not underwriting or placing any of the Subscription Rights or the shares of our Preferred Stock or Warrants to be issued in the Rights Offering and does not make any recommendation with respect to such Subscription Rights (including with respect to the exercise or expiration of such Subscription Rights), shares or Warrants. We have agreed to pay the dealer-manager certain fees and to reimburse the dealer-manager for certain out-of-pocket expenses incurred in connection with this offering. See “Plan of Distribution.”

Other Matters

We are not making the Rights Offering in any state or other jurisdiction in which it is unlawful to do so, nor are we distributing or accepting any offers to purchase any units from subscription rights holders who are residents of those states or other jurisdictions or who are otherwise prohibited by federal or state laws or regulations from accepting or exercising the subscription rights. We may delay the commencement of the Rights Offering in those states or other jurisdictions, or change the terms of the Rights Offering, in whole or in part, in order to comply with the securities laws or other legal requirements of those states or other jurisdictions. Subject to state securities laws and regulations, we also have the discretion to delay allocation and distribution of any shares you may elect to purchase by exercise of your subscription privileges in order to comply with state securities laws. We may decline to make modifications to the terms of the Rights Offering requested by those states or other jurisdictions, in which case, if you are a resident in those states or jurisdictions or if you are otherwise prohibited by federal or state laws or regulations from accepting or exercising the subscription rights, you will not be eligible to participate in the Rights Offering. However, we are not currently aware of any states or jurisdictions that would preclude participation in the Rights Offering.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

The following discussion describes the material U.S. federal income tax consequences of the receipt and exercise (or expiration) of the Subscription Rights acquired through the Rights Offering, the ownership and disposition of shares of our Preferred Stock and Warrants received upon exercise of the Subscription Rights and the ownership and disposition of the shares of common stock received upon the conversion of our Preferred Stock or the exercise of the Warrants. This discussion does not purport to be a complete analysis of all potential tax consequences. The effects of other U.S. federal tax laws, such as estate and gift tax laws, alternative minimum tax laws, net investment income tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended, or the Code, U.S. Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the IRS, in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a holder of the Subscription Rights, shares of our Preferred Stock, Warrants or shares of our common stock. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective basis. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the receipt of Subscription Rights through the Rights Offering by persons holding shares of our common stock, Preferred Stock and Warrants, the exercise (or expiration) of the Subscription Rights, the acquisition, ownership and disposition of shares of our Preferred Stock, and the acquisition, ownership and disposition (or expiration) of Warrants, each acquired upon exercise of the Subscription Rights, and the acquisition, ownership and disposition of shares of our common stock acquired upon conversion of our Preferred Stock or exercise of the Warrants.

This discussion is limited to the Subscription Rights acquired through the Rights Offering, shares of our Preferred Stock and Warrants acquired upon exercise of Subscription Rights and shares of our common stock acquired upon conversion of our Preferred Stock or exercise of the Warrants, in each case, that are held as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a holder’s particular circumstances, including the impact of the alternative minimum tax or the unearned income Medicare contribution tax. In addition, it does not address consequences relevant to holders subject to particular rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- U.S. holders (as defined below) that are subject to taxing jurisdictions other than, or in addition to, the United States or otherwise hold our common stock, the Subscription Rights, shares of our Preferred Stock, Warrants or shares of our common stock in connection with a trade or business, permanent establishment, or fixed base outside the United States;
- corporations organized outside the United States, any state thereof, or the District of Columbia that are nonetheless treated as U.S. persons for U.S. federal income tax purposes;

- persons holding our common stock, the Subscription Rights, shares of our Preferred Stock, Warrants or shares of our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies, underwriters, and other financial institutions;
- brokers, dealers or traders in securities or currencies or traders that elect to mark-to-market their securities;
- “controlled foreign corporations,” “passive foreign investment companies,” and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships or other pass-through entities for U.S. federal income tax purposes (and investors therein) and S corporations (and shareholders thereof);

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- real estate investment trusts, regulated investment companies, grantor trusts, tax-exempt organizations or governmental organizations;
 - persons deemed to sell the Subscription Rights, shares of Preferred Stock, or Warrants or shares of our common stock under the constructive sale provisions of the Code;
 - persons subject to special tax accounting rules as a result of any item of gross income being taken into account in an applicable financial statement (as defined in the Code);
 - persons for whom our stock constitutes “qualified small business stock” within the meaning of Section 1202 of the Code;
 - persons who received, hold or will receive shares of our common stock, Participating Warrants, the Subscription Rights, shares of our Preferred Stock or Warrants pursuant to the exercise of any employee stock option or otherwise as compensation and persons who hold restricted common stock;
 - tax-qualified retirement plans, individual retirement accounts, or other tax-deferred accounts;
 - persons subject to the alternative minimum tax; and
 - U.S. holders that have a functional currency other than the U.S. dollar.

If an entity treated as a partnership for U.S. federal income tax purposes holds shares of our common stock, the Subscription Rights, shares of our Preferred Stock and Warrants acquired upon exercise of Subscription Rights or shares of our common stock acquired upon conversion of our Preferred Stock or exercise of the Warrants, as the case may be, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships and the partners in such partnerships should consult their own tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE RECEIPT, OWNERSHIP AND EXERCISE OF SUBSCRIPTION RIGHTS, THE ACQUISITION, OWNERSHIP, AND DISPOSITION OF SHARES OF OUR PREFERRED STOCK AND WARRANTS ACQUIRED UPON EXERCISE OF SUBSCRIPTION RIGHTS, AND SHARES OF OUR COMMON STOCK ACQUIRED UPON CONVERSION OF PREFERRED STOCK OR EXERCISE OF WARRANTS ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Tax Considerations Applicable to U.S. Holders

Definition of a U.S. Holder

For purposes of this discussion, a “U.S. holder” is any beneficial owner of shares of our common stock, our Subscription Rights, shares of our Preferred Stock and Warrants acquired upon exercise of Subscription Rights or shares of our common stock acquired upon conversion of our Preferred Stock or exercise of Warrants, as the case may be, that, for U.S. federal income tax purposes, is:

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

Receipt of Subscription Rights

Although the authorities governing transactions such as this Rights Offering are complex and do not speak directly to the consequences of certain aspects of this Rights Offering, including the inclusion of the right to purchase Warrants in the Subscription Rights (rather than the right to purchase only shares of our Preferred Stock), the distribution of Subscription Rights to holders of Participating Warrants and the effects of the Over-Subscription Privilege, we do not believe a U.S. holder’s receipt of Subscription Rights pursuant to the Rights Offering should be treated as a taxable distribution with respect to its existing shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants, as applicable, for U.S. federal income tax purposes. Section 305(a) of the Code generally provides that the receipt by a stockholder, or a holder of rights to acquire stock, of a right to acquire stock or warrants is not included in the taxable income of the stockholder; however, the general non-recognition rule in Section 305(a) of the Code is subject to exceptions described in Section 305(b) of the Code, which include “disproportionate distributions.” A disproportionate distribution is generally a distribution or a series of distributions, including deemed distributions, that has the effect of the receipt of cash or other property by some stockholders (including holders of rights to acquire stock and holders of debt instruments convertible into stock) and an increase in the proportionate interest of other stockholders (including holders of rights to acquire stock and holders of debt instruments convertible into stock) in a corporation’s assets or earnings and profits. **During the last 36 months, we have not made any distributions of cash or property (other than stock or rights to acquire stock) with respect to: (i) our common stock or (ii) options or warrants to acquire our common stock. Currently we do not intend to make any future distributions of cash or property (other than stock or rights to acquire stock) with respect to: (i) our common stock or (ii) options or warrants to acquire our common stock; however, there is no guarantee that we will not make such distributions in the future. In addition, we do not currently have any convertible debt outstanding nor do we currently intend to issue any convertible debt.**

The position regarding the non-taxable treatment of the Subscription Right distribution is not binding on the IRS, or the courts. If this position is finally determined by the IRS or a court to be incorrect, whether because, contrary to our expectations, distributions of cash or property (other than stock or rights to acquire stock) are made with respect to our common stock, options or warrants, because the issuance of the Subscription Rights is a “disproportionate distribution” or otherwise, the fair market value of the Subscription Rights would be taxable to U.S. holders of our common stock as a dividend to the extent of the U.S. holder’s pro rata share of our current and accumulated earnings and profits, if any, with any excess being treated as a return of capital to the extent thereof and then as capital gain. **Although no assurance can be given, we anticipate that we will not have current and accumulated earnings and profits through the end of 2022.** Further, if the position regarding the non-taxable treatment of the Subscription Rights distribution is incorrect, the treatment of holders of Participating Warrants is not clear, and it may differ from, and may be more adverse than, the treatment of the Subscription Rights distribution to the holders of common stock.

The following discussion is based upon the treatment of the Subscription Right issuance as a non-taxable distribution with respect to a U.S. holder’s existing shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants for U.S. federal income tax purposes.

Tax Basis in the Subscription Rights

If the fair market value of the Subscription Rights a U.S. holder receives is less than 15% of the fair market value of the U.S. holder’s existing shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants (in each case, with respect to which the Subscription Rights are distributed) on the date the U.S. holder receives the Subscription Rights, the Subscription Rights will be allocated a zero tax basis for U.S. federal income tax purposes, unless the U.S. holder elects to allocate the tax basis in the holder’s existing shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants between the existing shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants and the Subscription Rights in proportion to the relative fair market values of the existing shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants and the Subscription Rights determined on the date of receipt of the Subscription Rights. If a U.S. holder chooses to allocate tax basis between the holder’s existing common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants and the Subscription Rights, the U.S. holder must make this election on a statement included with the holder’s timely filed U.S. federal income tax return (including extensions) for the taxable year in which the U.S. holder receives the Subscription Rights. Such an election is irrevocable.

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However, if the fair market value of the Subscription Rights a U.S. holder receives is 15% or more of the fair market value of the holder’s existing shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants on the date the U.S. holder receives the Subscription Rights, then the U.S. holder must allocate tax basis in the existing shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants between those shares or warrants and the Subscription Rights the U.S. holder receives in proportion to their fair market values determined on the date the U.S. holder receives the Subscription Rights. Please refer to the discussion below regarding the U.S. tax treatment of a U.S. holder that, at the time of the receipt of the Subscription Right, no longer holds the common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants with respect to which the Subscription Right was distributed.

The fair market value of the Subscription Rights on the date that the Subscription Rights are distributed is uncertain and the fair market value of the Participating Warrants is uncertain, and we have not obtained, and do not intend to obtain, an appraisal of the fair market value of the Subscription Rights or the Participating Warrants on that date. In determining the fair market value of the Subscription Rights, U.S. holders should consider all relevant facts and circumstances, including without limitation any difference between the Subscription Price of the Subscription Rights and the trading price of our shares of common stock on the date that the Subscription Rights are distributed, the fair market value and the conversion terms of the Preferred Stock, the exercise price of the Warrants, the length of the period during which the Subscription Rights may be exercised and the fact that the Subscription Rights are non-transferable. In determining the fair market value of the Participating Warrants, U.S. holders should consider all relevant facts and circumstances, including without limitation the difference between the exercise price of the Participating Warrants and the trading price of our common stock on the date that the Subscription Rights are distributed, the length of the period during which the Participating Warrants may be exercised, the nature of the adjustment provisions in the Participating Warrants that may affect the economics of the exercise of such Participating Warrants and any limitations of the transferability of the Participating Warrants.

Exercise of Subscription Rights

A U.S. holder will not recognize gain or loss upon the exercise of a Subscription Right received in the Rights Offering. A U.S. holder’s adjusted tax basis, if any, in the Subscription Right plus the Subscription Price should be allocated between the share of Preferred Stock and the Warrants acquired upon exercise of the Subscription Right. We believe that the tax basis in the common stock or Participating Warrants upon which the Subscription Rights were issued which is allocated to the Subscription Rights under the prior section entitled “—Tax Basis in the Subscription Rights” should be further allocated between the shares of Preferred Stock and the Warrants acquired upon exercise of the Subscription Right in proportion to their relative fair market values on the date the Subscription Rights were distributed. The Subscription Price should be allocated between the shares of Preferred Stock and the Warrants acquired upon exercise of the Subscription Right in proportion to their relative fair market values on the exercise date. These allocations will establish the U.S. holder’s initial tax basis for U.S. federal income tax purposes in the shares of Preferred Stock and Warrants received upon exercise of such U.S. holder’s Subscription Right. The holding period of a share of Preferred Stock or a Warrant acquired upon exercise of a Subscription Right in the Rights Offering will begin on the date of exercise.

If, at the time of the receipt or exercise of the Subscription Right, the U.S. holder no longer holds the common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrant with respect to which the Subscription Right was distributed, then certain aspects of the tax treatment of the receipt and exercise of the Subscription Right are unclear, including (1) the allocation of the tax basis between the shares of our common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants previously sold and the Subscription Right, (2) the impact of such allocation on the amount and timing of gain or loss recognized with respect to the shares of our common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants previously sold, and (3) the impact of such allocation on the tax basis of the shares of our Preferred Stock and Warrants acquired upon exercise of the Subscription Right. If a U.S. holder exercises a Subscription Right received in the Rights Offering after disposing of shares of our common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants with respect to which the Subscription Right is received, the U.S. holder should consult its own tax advisor.

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Expiration of Subscription Rights

If a U.S. holder allows Subscription Rights received in the Rights Offering to expire, the U.S. holder should not recognize any gain or loss for U.S. federal income tax purposes, and the U.S. holder should re-allocate any portion of the tax basis in its existing common shares, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants previously allocated to the Subscription Rights that have expired to such U.S. holder’s existing common shares, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants, as applicable.

Sale or Other Disposition, Exercise or Expiration of Warrants

As of the date of this prospectus, the exercise price of each Warrant that may be received upon exercise of a Subscription Right is not yet determinable. The tax authorities that apply to warrants with an exercise price less than the fair market value of the underlying security which will be received upon exercise thereof are complex and subject to differing interpretations. Accordingly, the tax treatment of the Warrants which may be received upon exercise of a Subscription Right is uncertain. If the exercise price of a Warrant as of the date of receipt by a U.S. holder that exercises a Subscription Right is substantially less than the fair market value of the underlying share of our common stock which may be received upon exercise of such Warrant, the Warrant may be classified for U.S. federal income tax purposes as of the date of receipt by a U.S. holder as a share of our common stock. If a Warrant is properly classified as a share of common stock for U.S. federal income tax purposes, a U.S. holder will not be required to recognize income, gain or loss upon exercise of such Warrant and a U.S. holder’s tax basis in a share of our common stock will be equal to the sum of (1) the U.S. holder’s tax basis in the

Warrants exchanged therefor and (2) the exercise price of such Warrants. A U.S. holder's holding period in the shares of our common stock received upon exercise should generally include the holding period of such U.S. holder in the Warrants. For the U.S. federal income tax consequences of a sale or other taxable disposition (other than by exercise), or distributions (including constructive distributions) paid on the Warrants if they are properly classified as shares of our common stock for U.S. federal income tax purposes, see the discussions below under the headings "—Constructive Dividends on Warrants", "—Distributions on Preferred Stock and Common Stock", and "—Sale, Exchange or other Disposition of Preferred Stock and Common Stock". U.S. holders should consult their own tax advisors regarding the proper U.S. federal income tax classification of the Warrants. The remainder of this discussion assumes the Warrants are properly classified as warrants for U.S. federal income tax purposes.

Upon the sale or other taxable disposition of a Warrant (other than by exercise) received upon exercise of a Subscription Right, a U.S. holder will generally recognize capital gain or loss equal to the difference between the amount realized on the sale or other taxable disposition and the U.S. holder's adjusted tax basis in the Warrant. A U.S. Holder's adjusted tax basis in a Warrant will generally equal its initial tax basis (discussed above under "—Exercise of Subscription Rights"), as adjusted for any constructive dividends on the Warrant described below. This capital gain or loss will be long-term capital gain or loss if the U.S. holder's holding period in such Warrant is more than one year at the time of the sale or other taxable disposition. The deductibility of capital losses is subject to certain limitations.

A U.S. holder will not be required to recognize income, gain or loss upon exercise of a Warrant received upon exercise of a Subscription Right. A U.S. holder's tax basis in a share of our common stock received upon exercise of the Warrants for cash will be equal to the sum of (1) the U.S. holder's tax basis in the Warrants exchanged therefor and (2) the exercise price of such Warrants. A U.S. holder's holding period in the shares of our common stock received upon exercise will commence on the day after such U.S. holder exercises the Warrants.

In certain circumstances, the Warrants will be exercisable on a cashless basis. The U.S. federal income tax treatment of an exercise of a Warrant on a cashless basis is not clear, and could differ from the consequences described above. It is possible that a cashless exercise could be a taxable event. U.S. holders are urged to consult their own tax advisors as to the consequences of an exercise of a Warrant on a cashless basis, including with respect to whether the exercise is a taxable event, and their holding period and tax basis in the common stock received.

If a Warrant expires without being exercised, a U.S. holder will recognize a capital loss in an amount equal to such holder's adjusted tax basis in the Warrant. Such loss will be long-term capital loss if, at the time of the expiration, the U.S. holder's holding period in such Warrant is more than one year. The deductibility of capital losses is subject to certain limitations.

Constructive Dividends on Warrants

As described in the section entitled "Dividend Policy," we do not anticipate declaring or paying dividends to holders of our common stock or our Preferred Stock in the foreseeable future. However, if at any time during the period in which a U.S. holder holds Warrants received upon exercise of a Subscription Right, we were to pay a taxable dividend to our stockholders and, in accordance with the anti-dilution provisions of the Warrants, the exercise price of the Warrants were decreased, that decrease would be deemed to be the payment of a taxable dividend to a U.S. holder of the Warrants to the extent of our earnings and profits, notwithstanding the fact that such holder will not receive a cash payment. If the exercise price is adjusted in certain other circumstances (or in certain circumstances, there is a failure to make appropriate adjustments), or there is an adjustment to the number of common shares that will be issued on exercise of the Warrants, such adjustments may also result in the deemed payment of a taxable dividend to a U.S. holder. U.S. holders should consult their own tax advisors regarding the proper treatment of any adjustments to the exercise price of the Warrants. We are currently required to report the amount of any deemed distributions to the IRS, as well as either on our website or to holders not exempt from reporting.

Distributions on Preferred Stock and Common Stock

As described in the section entitled "Dividend Policy," we do not anticipate declaring or paying dividends to holders of our Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or common stock in the foreseeable future. However, if we do make distributions of cash or property on our Preferred Stock, Series B Preferred Stock, Series C Preferred Stock or common stock, such distributions will constitute dividends to the extent paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes. Dividends received by a corporate U.S. holder may be eligible for a dividends received deduction, subject to applicable limitations. Dividends received by certain non-corporate U.S. holders, including individuals, are generally taxed at the lower applicable capital gains rate provided certain holding period and other requirements are satisfied. Distributions in excess of our current and accumulated earnings and profits will constitute a return of capital and first be applied against and reduce a U.S. holder's adjusted tax basis in its Preferred Stock or common stock, as the case may be, but not below zero. Any excess will be treated as capital gain and will be treated as described below in the section relating to the sale or disposition of our common stock.

Sale, Exchange or Other Disposition of Preferred Stock and Common Stock

Upon a sale, exchange, or other taxable disposition of our Preferred Stock (other than by conversion) or our common stock, a U.S. holder generally will recognize capital gain or loss equal to the difference between the amount realized (not including any amount attributable to declared and unpaid dividends, which will be taxable as described above to U.S. holders of record who have not previously included such dividends in income) and the U.S. holder's adjusted tax basis in our Preferred Stock or our common stock. The U.S. holder's adjusted tax basis in our Preferred Stock generally will equal its initial tax basis (discussed above under "—Exercise of Subscription Rights"), as adjusted for applicable distributions (including constructive dividends described below). A U.S. holder's adjusted tax basis in our common stock generally will equal its initial tax basis in our common stock (discussed below under "—Conversion of the Preferred Stock into Our Common Stock"), as adjusted for applicable distributions (including constructive dividends described below). Such capital gain or loss generally will be long-term capital gain or loss if the U.S. holder's holding period for our Preferred Stock or our common stock exceeded one year at the time of disposition (see the discussion below under "—Conversion of Our Preferred Stock into Our Common Stock" regarding a U.S. holder's holding period for our common stock). Long-term capital gains recognized by certain non-corporate U.S. holders, including individuals, generally are subject to reduced rates of taxation. The deductibility of capital losses is subject to limitations.

Conversion of Our Preferred Stock into Our Common Stock

A U.S. holder will not recognize any gain or loss in respect of the receipt of our common stock upon the conversion of our Preferred Stock (except to the extent the U.S. holder receives a cash payment for any fractional share that would otherwise have been issuable upon conversion of the Preferred Stock). The adjusted tax basis of our common stock that a U.S. holder receives on conversion will equal the adjusted tax basis of the Preferred Stock converted (decreased by the adjusted tax basis allocable to any fractional share that would otherwise have been issued upon conversion of the Preferred Stock), and the holding period of such common stock received on conversion will include the period during which the U.S. holder held the Preferred Stock prior to conversion.

In the event a U.S. holder's Preferred Stock is converted pursuant to an election by such U.S. holder in the case of certain acquisitions or fundamental changes or pursuant to certain other transactions (including our consolidation or merger into another person), the tax treatment of such a conversion will depend upon the facts underlying the particular transaction triggering such a conversion. In this regard, it is possible that any related adjustments of the conversion rate would be treated as a constructive distribution to the U.S. holder as described below under "—Constructive Dividends on Preferred Stock" U.S. holders should consult their own tax advisors to determine the specific tax treatment of a conversion under such circumstances.

Constructive Dividends on Preferred Stock or Common Stock

The conversion rate of our Preferred Stock is subject to adjustment under certain circumstances, as described below under "Description of Securities—Preferred Stock—Preferred Stock." Section 305(c) of the Code and U.S. Treasury Regulations thereunder may treat a U.S. holder of our Preferred Stock as having received a constructive distribution includable in such U.S. holder's income in the manner as described above under "—Distributions on Preferred Stock and Common Stock," if and to the extent that certain adjustments in the conversion rate (or failures to make such an adjustment) increase the proportionate interest of such U.S. holder in our earnings and profits. In certain

other circumstances, an adjustment to the conversion rate of our Preferred Stock or a failure to make such an adjustment could potentially give rise to constructive distributions to U.S. holders of our common stock. Thus, under certain circumstances, U.S. holders may recognize income in the event of a constructive distribution even though they may not receive any cash or property. We are currently required to report the amount of any deemed distributions to the IRS, as well as either on our website or to holders not exempt from reporting.

Information Reporting and Backup Withholding

A U.S. holder may be subject to information reporting and backup withholding when such holder receives dividend payments (including constructive dividends) or receives proceeds from the sale or other taxable disposition of the Warrants, shares of our Preferred Stock acquired through the exercise of Subscription Rights or shares of our common stock acquired through conversion of our Preferred Stock or exercise of the Warrants. Certain U.S. holders are exempt from backup withholding, including certain corporations and certain tax-exempt organizations. A U.S. holder will be subject to backup withholding if such holder is not otherwise exempt (or fails to properly establish an exemption) and such holder:

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

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a U.S. holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS. U.S. holders should consult their own tax advisors regarding their qualification for an exemption from backup withholding and the procedures for obtaining such an exemption.

Tax Considerations Applicable to Non-U.S. Holders

For purposes of this discussion, a "non-U.S. holder" is a beneficial owner of shares of our common stock, Series B Preferred Stock, Series C Preferred Stock, Participating Warrants, our Subscription Rights, shares of our Preferred Stock and Warrants acquired upon exercise of Subscription Rights or shares of our common stock acquired upon conversion of our Preferred Stock or exercise of Warrants, as the case may be, that is neither a U.S. holder nor an entity treated as a partnership for U.S. federal income tax purposes.

Receipt, Exercise and Expiration of the Subscription Rights

The discussion assumes that the receipt of Subscription Rights will be treated as a nontaxable distribution. See "Tax Considerations Applicable to U.S. Holders—Receipt of Subscription Rights" above. In such case, non-U.S. holders will not be subject to U.S. federal income tax (or any withholding thereof) on the receipt, exercise or expiration of the Subscription Rights.

Exercise of Warrants

A non-U.S. holder will not be subject to U.S. federal income tax on the cash exercise of Warrants into shares of our common stock. As discussed above in "Tax Considerations Applicable to U.S. Holders—Sale or Other Disposition, Exercise or Expiration of Warrants," the U.S. federal income tax classification of the Warrants and the treatment of an exercise of a Warrant on a cashless basis is not clear. Non-U.S. holders are urged to consult their own tax advisors as to the proper U.S. federal income tax classification of the Warrants and the consequences of an exercise of a Warrant on a cashless basis, including with respect to whether the exercise is a taxable event, and their holding period and tax basis in the common stock received.

Constructive Dividends on Warrants

As described in the section entitled "Dividend Policy," we do not anticipate declaring or paying dividends to holders of our Preferred Stock or common stock in the foreseeable future. However, if at any time during the period in which a non-U.S. holder holds Warrants we were to pay a taxable dividend to our stockholders and, in accordance with the anti-dilution provisions of the Warrants, the exercise price of the Warrants were decreased, that decrease would be deemed to be the payment of a taxable dividend to a non-U.S. holder to the extent of our earnings and profits, notwithstanding the fact that such holder will not receive a cash payment. If the exercise price is adjusted in certain other circumstances (or in certain circumstances, there is a failure to make appropriate adjustments), or there is an adjustment to the number of common shares that will be issued on exercise of the Warrants, such adjustments may also result in the deemed payment of a taxable dividend to a non-U.S. holder. Any resulting withholding tax attributable to deemed dividends may be collected from other amounts payable or distributable to the non-U.S. holder. Non-U.S. holders should consult their own tax advisors regarding the proper treatment of any adjustments to the Warrants.

Distributions on Preferred Stock and Common Stock

As described in the section entitled "Dividend Policy," we do not anticipate declaring or paying dividends to holders of our Preferred Stock or common stock in the foreseeable future. However, if we do make distributions of cash or property on our Preferred Stock or common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a non-U.S. holder's adjusted tax basis in its Preferred Stock or common stock, as the case may be, but not below zero. Any excess will be treated as capital gain and will be treated as described below in the section relating to the sale or disposition of our Preferred Stock, Warrants, or common stock. Because we may not know the extent to which a distribution is a dividend for U.S. federal income tax purposes at the time it is made, for purposes of the withholding rules discussed below we or the applicable withholding agent may treat the entire distribution as a dividend.

Subject to the discussion below on backup withholding and foreign accounts, dividends paid to a non-U.S. holder of our Preferred Stock or common stock that are not effectively connected with the non-U.S. holder's conduct of a trade or business within the United States will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty).

Non-U.S. holders will be entitled to a reduction in or an exemption from withholding on dividends as a result of either (1) an applicable income tax treaty or (2) the non-U.S. holder holding our Preferred Stock or common stock in connection with the conduct of a trade or business within the United States and such dividends being effectively connected with that trade or business. To claim such a reduction in or exemption from withholding, the non-U.S. holder must provide the applicable withholding agent with a properly executed (a) IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) claiming an exemption from or reduction of the withholding tax pursuant to the benefits of an income tax treaty between the United States and the country in which the non-U.S. holder resides or is established, or (b) IRS Form W-8ECI stating that the dividends are not subject to withholding tax because they are effectively connected with the conduct by the non-U.S. holder of a trade or business within the United States, as

may be applicable. These certifications must be provided to the applicable withholding agent prior to the payment of dividends and must be updated periodically. Non-U.S. holders that do not timely provide the applicable withholding agent with the required certification, but that qualify for a reduced rate under an applicable income tax treaty, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

If dividends paid to a non-U.S. holder are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such dividends are attributable), then, although exempt from U.S. federal withholding tax (provided the non-U.S. holder provides appropriate certification, as described above, and subject to the discussion below on backup withholding and foreign accounts), the non-U.S. holder will be subject to U.S. federal income tax on such dividends on a net income basis at the regular graduated U.S. federal income tax rates. In addition, a non-U.S. holder that is a corporation may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on its effectively connected earnings and profits for the taxable year that are attributable to such dividends, as adjusted for certain items. Non-U.S. holders should consult their own tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Sale or Other Disposition of Preferred Stock, Warrants or Common Stock

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

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

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

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

With respect to the third bullet point above, we believe we are not currently and do not anticipate becoming a USRPHC. Because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our other business assets and our non-U.S. real property interests, however, there can be no assurance we are not a USRPHC or will not become one in the future.

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

Conversion of Our Preferred Stock into Our Common Stock

A non-U.S. holder will not recognize any gain or loss in respect of the receipt of our common stock upon the conversion of our Preferred Stock (except to the extent the non-U.S. holder receives a cash payment for any fractional share that would otherwise have been issuable upon conversion of the Preferred Stock).

Constructive Dividends on Preferred Stock

As described above under “—Tax Considerations Applicable to U.S. Holders—Constructive Dividends on Preferred Stock or Common Stock,” in certain circumstances, a non-U.S. holder will be deemed to receive a constructive distribution from us. Adjustments in the conversion rate (or failures to adjust the conversion rate) that increase the proportionate interest of a non-U.S. holder in our earnings and profits could result in deemed distributions to the non-U.S. holder that are treated as dividends for U.S. federal income tax purposes. Any constructive dividend deemed paid to a non-U.S. holder will be subject to U.S. federal income tax or withholding tax in the manner described above under “—Tax Considerations Applicable to Non-U.S. Holders—Distributions on Preferred Stock and Common Stock.” It is possible that U.S. federal tax on the constructive dividend would be withheld, if applicable, from subsequent payments on the Preferred Stock or our common stock.

Information Reporting and Backup Withholding

Subject to the discussion below on foreign accounts, a non-U.S. holder will not be subject to backup withholding with respect to distributions on our Preferred Stock, Warrants or common stock we make to the non-U.S. holder, provided the applicable withholding agent does not have actual knowledge or reason to know such holder is a United States person and the holder timely certifies its non-U.S. status, such as by providing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or other applicable certification. However, information returns generally will be filed with the IRS in connection with any distributions (including deemed distributions) made on our Preferred Stock, Warrants and common stock to the non-U.S. holder, regardless of whether any tax was actually withheld. Copies of these information returns may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

Information reporting and backup withholding may apply to the proceeds of a sale or other taxable disposition of our Preferred Stock, Warrants or common stock within the United States, and information reporting may (although backup withholding generally will not) apply to the proceeds of a sale or other taxable disposition of our Preferred Stock, Warrants or common stock outside the United States conducted through certain U.S.-related financial intermediaries, in each case, unless the beneficial owner timely certifies under penalty of perjury that it is a non-U.S. holder on IRS Form W-8BEN or W-8BEN-E, or other applicable form (and the payor does not have actual knowledge or reason to know that the beneficial owner is a U.S. person) or such owner otherwise timely establishes an exemption. Proceeds of a disposition of our Preferred Stock, Warrants or common stock conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

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

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under the Foreign Account Tax Compliance Act, or FATCA, on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends (including deemed dividends) paid on our Preferred Stock, Warrants or common stock, or gross proceeds from the sale or other disposition of our Preferred Stock, Warrants or common stock paid to a “foreign financial institution” or a “non-

financial foreign entity” (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any “substantial United States owners” (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain “specified United States persons” or “United States-owned foreign entities” (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Non-U.S. holders typically will be required to furnish certifications (generally on the applicable IRS Form W-8) or other documentation to provide the information required by FATCA or to establish compliance with or an exemption from withholding under FATCA. FATCA withholding may apply where payments are made through a non-U.S. intermediary that is not FATCA compliant, even where the non-U.S. holder satisfies the holder’s own FATCA obligations. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Withholding under FATCA also potentially applies to payments of gross proceeds from the sale or other disposition of our common stock. Proposed regulations, however, would eliminate withholding under FATCA on such payments, and the U.S. Treasury Department has indicated that taxpayers may rely on this aspect of the proposed regulations until final regulations are issued. Because we may not know the extent to which a distribution is a dividend for U.S. federal income tax purposes at the time it is made, for purposes of these withholding rules we or the applicable withholding agent may treat the entire distribution as a dividend. Prospective investors should consult their own tax advisors regarding the potential application of these withholding provisions.

DESCRIPTION OF SECURITIES

As of the date of this prospectus, our Restated Certificate of Incorporation authorizes us to issue 250,000,000 shares of common stock, par value \$0.01 per share, and 130,000,000 shares of preferred stock, par value \$0.01 per share. The following is a summary of the rights of our common and preferred stock and some of the provisions of our Restated Certificate of Incorporation and Amended and Restated Bylaws, our outstanding warrants, our registration rights agreements and the Delaware General Corporation Law. Because it is only a summary, it does not contain all the information that may be important to you and is subject to and qualified in its entirety by our Restated Certificate of Incorporation and our Restated Bylaws, a copy of each of which has been incorporated as an exhibit to the registration statement of which this prospectus forms a part.

Our Restated Certificate of Incorporation and our Amended and Restated Bylaws contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of the board of directors, which may have the effect of delaying, deferring or preventing a future takeover or change in control of the Company unless such takeover or change in control is approved by our board of directors.

Common Stock

As of August 31, 2022, there were 24,727,495 shares of common stock outstanding. In addition, as of August 31, 2022 there were: (i) 1,291,207 shares of common stock subject to outstanding options and restricted stock units; (ii) 626,799 shares of common stock reserved for future issuance under our 2020 Equity Incentive Plan; (iii) 1,115,742 shares of common stock reserved for future issuance under outstanding common stock warrants; (iv) 19,306 shares of common stock reserved for issuance on conversion of 26 shares of the Series B Preferred Stock; and (v) 33,753 shares of common stock reserved for issuance on conversion of 50 shares of the Series C Preferred Stock. Each outstanding share of common stock entitles the holder thereof to one vote per share on all matters. Our Amended and Restated Bylaws provide that any vacancy occurring in the board of directors may be filled by the affirmative vote of a majority of the remaining directors. Stockholders do not have preemptive rights to purchase shares in any future issuance of our common stock. In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to receive, ratably, the net assets available to stockholders after payment of all creditors.

Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, and do not have cumulative voting rights. Accordingly, the holders of a majority of the shares of our common stock entitled to vote can elect all of the directors standing for election. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for dividend payments. All outstanding shares of our common stock are fully paid and nonassessable, and any shares of our common stock to be sold pursuant to this prospectus will be fully paid and nonassessable. The holders of common stock have no preferences or rights of conversion, exchange, pre-emption or other subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. In the event of any liquidation, dissolution or winding-up of our affairs, holders of our common stock will be entitled to share ratably in our assets that are remaining after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company. The transfer agent and the registrar’s address is 59 Maiden Lane, New York, New York 10038. Their telephone number is 1-800-937-5449. Our common stock is listed on The NASDAQ Capital Market under the symbol “SINT”.

Preferred Stock

Our Board of directors has the authority under our Restated Certificate of Incorporation, without further action by our stockholders, to issue up to 130,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences, privileges and restrictions of the shares of each wholly unissued series, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference and sinking fund terms, and to increase or decrease the number of shares of any such series (but not below the number of shares of such series then outstanding). Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock or otherwise adversely affecting the rights of holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change of control and may adversely affect the market price of our common stock.

Series B Preferred Stock.

Our board of directors designated 15,000 shares of our preferred stock as Series B Preferred Stock. As of August 31, 2022, there were 26 shares of Series B Preferred stock outstanding. The Series B Preferred Stock ranks senior to our common stock and other classes of capital stock with respect to redemption, unless the holders of a majority of the outstanding shares of Series B Preferred Stock consent to the creation of parity stock or senior preferred stock.

Conversion

Each share of Series B Preferred Stock is convertible into shares of our common stock at any time at the holder’s option at the Series B Conversion Price described below. We may not effect any conversion of Series B Preferred Stock, with certain exceptions, to the extent that, after giving effect to an attempted conversion, the holder of Series B Preferred Stock (together with such holder’s affiliates, and any persons acting as a group together with such holder or any of such holder’s affiliates) would beneficially own a number of shares of common stock in excess of 4.99% (or, at the election of the holder, 9.99%) of the shares of our common stock then outstanding after giving effect to such conversion, referred to as the Preferred Stock Beneficial Ownership Limitation; provided, however, that upon notice to us, the holder may increase or decrease the Preferred Stock Beneficial Ownership Limitation, provided that in no event may the Preferred Stock Beneficial Ownership Limitation exceed 9.99% and any increase in the Preferred

Stock Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us.

Subject to certain ownership limitations as described below and certain equity conditions being met, if during any 30 consecutive trading days, the volume weighted average price of our common stock exceeds \$130.61 and the daily dollar trading volume during such period exceeds \$500,000 per trading day, we have the right to force the conversion of the Series B Preferred Stock into common stock.

Conversion Price.

The Series B Preferred Stock is convertible into shares of common stock by dividing the stated value of the Series B Preferred Stock (\$1,100) by \$1.4814 (the “Series B Conversion Price”). The Series B Conversion Price is subject to adjustment for stock splits, stock dividends, and distributions of common stock or securities convertible, exercisable or exchangeable for common stock, subdivisions, combinations and reclassifications.

Subject to certain exclusions contained in the Series B Certificate of Designation, if we in any manner grant or sell any rights, warrants or options and the lowest price per share for which one share of common stock is at any time issuable upon the exercise of any such option or upon conversion, exercise or exchange of any Common Stock Equivalents (as defined in the Series B Certificate of Designation) issuable upon exercise of any such option, exercise or exchange of any Common Stock Equivalent issuable upon the exercise of such option or otherwise pursuant to the terms thereof is less than the Series B Conversion Price, then such share of common stock will be deemed to be outstanding and to have been issued and sold by us at the time of the granting or sale of such option for such price per share. For purposes of this paragraph only, the “lowest price per share for which one share of common stock is issuable upon the exercise of any such options or upon conversion, exercise or exchange of any Common Stock Equivalent issuable upon exercise of any such option or otherwise pursuant to the terms thereof” will be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by us with respect to any one share of common stock upon the granting or sale of such option, upon exercise of such option and upon conversion, exercise or exchange of any Common Stock Equivalents issuable upon exercise of such option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such option for which one share of common stock is issuable upon the exercise of any such options or upon conversion, exercise or exchange of any Common Stock Equivalents issuable upon exercise of any such option or otherwise pursuant to the terms thereof. Except as contemplated by the terms of the Series B Certificate of Designation, no further adjustment of the Series B Conversion Price will be made upon the actual issuance of such shares of common stock or of such convertible securities upon the exercise of such options or otherwise pursuant to the terms of or upon the actual issuance of such Common Stock Equivalents.

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Subject to certain exclusions contained in the Series B Certificate of Designation, if we in any manner issue or sell any Common Stock Equivalents and the lowest price per share for which one share of common stock is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof is less than the Series B Conversion Price, then such share of common stock will be deemed to be outstanding and to have been issued and sold by us at the time of the issuance or sale of such convertible securities for such price per share. For purposes of this paragraph only, the “lowest price per share for which one share of common stock is issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof” will be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by us with respect to one share of common stock upon the issuance or sale of the Common Stock Equivalent and upon conversion, exercise or exchange of such convertible security or otherwise pursuant to the terms thereof and (y) the lowest conversion price set forth in such convertible security for which one share of common stock is issuable upon conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Common Stock Equivalent (or any other person) upon the issuance or sale of such Common Stock Equivalent plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Common Stock Equivalent (or any other person). Except as contemplated by the terms of the Series B Certificate of Designation, no further adjustment of the Series B Conversion Price will be made upon the actual issuance of such shares of common stock upon conversion, exercise or exchange of such Common Stock Equivalents or otherwise pursuant to the terms thereof, and if any such issuance or sale of such Common Stock Equivalents is made upon exercise of any options for which adjustment of the Series B Conversion Price has been or is to be made, except as contemplated by the terms of the Series B Certificate of Designation, no further adjustment of the Series B Conversion Price will be made by reason of such issuance or sale.

If the purchase or exercise price provided for in any options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any convertible securities, or the rate at which any convertible securities are convertible into or exercisable or exchangeable for shares of common stock increases or decreases at any time (other than proportional changes in conversion or exercise prices, as applicable, in connection with stock dividends, splits or combination of outstanding common stock) the Conversion Price in effect at the time of such increase or decrease will be adjusted to the Series B Conversion Price which would have been in effect at such time had such options or convertible securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. If the terms of any option or convertible security that was outstanding as of the date of issuance of the Preferred Stock and related Warrants are increased or decreased in the manner described in the immediately preceding sentence, then such option or convertible security and the shares of common stock deemed issuable upon exercise, conversion or exchange thereof will be deemed to have been issued as of the date of such increase or decrease. No adjustment will be made if such adjustment would result in an increase of the Series B Conversion Price then in effect.

If any option and/or convertible security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company (as determined by the holder of Preferred Stock, the “Primary Security”, and such option and/or convertible security and/or Adjustment Right (as defined below), the “Secondary Securities” and together with the Primary Security, each a “unit”), together comprising one integrated transaction, the aggregate consideration per share of common stock with respect to such Primary Security will be deemed to be the lower of (x) the purchase price of such unit, (y) if such Primary Security is an option and/or convertible security, the lowest price per share for which one share of common stock is at any time issuable upon the exercise or conversion of the Primary Security in accordance with the paragraphs above and (z) the lowest volume-weighted average price of the common stock on any trading day during the four trading day period immediately following the public announcement of such dilutive issuance. If any shares of common stock, options or convertible securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount of consideration received by us therefor. If any shares of common stock, options or convertible securities are issued or sold for a consideration other than cash, the amount of such consideration received by us will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by us for such securities will be the arithmetic average of the volume-weighted average prices of such security for each of the five (5) trading days immediately preceding the date of receipt. If any shares of common stock, options or convertible securities are issued to the owners of the non-surviving entity in connection with any merger in which we are the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such shares of common stock, options or convertible securities (as the case may be). The fair value of any consideration other than cash or publicly traded securities will be determined jointly by us and the holder. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the “Valuation Event”), the fair value of such consideration will be determined within five trading days after the tenth day following such Valuation Event by an independent, reputable appraiser jointly selected by us and the holder. “Adjustment Right” means any right granted with respect to any securities issued in connection with, or with respect to, any issuance or sale (or deemed issuance or sale in accordance with the paragraph above) of shares of common stock that could result in a decrease in the net consideration received by us in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

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The foregoing conversion price adjustment provisions will likely be triggered by the issuance of the Preferred Stock and Warrants in the Rights Offering.

In addition, holders of Preferred Stock may be eligible to elect an alternative price in the event we issue certain variable price securities.

Liquidation; Dividends; Repurchases.

In the event of a liquidation, the holders of Series B Preferred Stock are entitled to participate on an as-converted-to-common stock basis with holders of the common stock in

any distribution of assets of the Company to the holders of common stock.

Redemption Right.

We hold an option to redeem some or all of the Series B Preferred Stock at any time after the six-month anniversary of its issuance date at a 25% premium to the stated value of the Series B Preferred Stock subject to redemption, upon 30 days prior written notice to the holder of the Series B Preferred Stock. The Series B Preferred Stock would be redeemed by us for cash.

Fundamental Transactions.

In the event of any fundamental transaction, 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 common stock, then upon any subsequent conversion of the Series B Preferred Stock, the holder will have the right to receive as alternative consideration, for each share of our common stock that would have been issuable upon such conversion 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 our common stock for which the Series B Preferred Stock is convertible immediately prior to such event.

Voting Rights.

With certain exceptions, the holders of shares of Series B Preferred Stock have no voting rights. However, as long as any shares of Series B Preferred Stock remain outstanding, we may not, without the affirmative vote of holders of a majority of the then-outstanding Series B Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series B Preferred Stock or alter or amend the Series B Certificate of Designation, (b) increase the number of authorized shares of Series B Preferred Stock, (c) amend our Certificate of Incorporation or other charter documents in any manner that adversely affects any rights of holders of Series B Preferred Stock disproportionately to the rights of holders of our other capital stock, or (d) enter into any agreement with respect to any of the foregoing.

Jurisdiction and Waiver of Trial by Jury

Other than with respect to suits, actions or proceedings arising under the federal securities laws, the Series B Certificate of Designation provides for investors to consent to exclusive jurisdiction to courts located in New York, New York and provides for a waiver of the right to a trial by jury. It also provides that disputes are governed by Delaware law.

Series C Preferred Stock.

Our board of directors designated 9,440 shares of our preferred stock as Series C Preferred Stock. As of August 31, 2022, there were 50 shares of Series C Preferred stock outstanding.

Conversion. Each share of Series C Preferred Stock is convertible at our option at any time or at the option of the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Preferred Stock by a conversion price of \$1.4814 per share. In addition, the conversion price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations or reclassifications. Subject to limited exceptions, a holder of the Series C Preferred Stock will not have the right to convert any portion of the Series C Preferred Stock to the extent that, after giving effect to the conversion, the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion. A holder of the Series C Preferred Stock, upon notice to the Company, may increase or decrease the beneficial ownership limitation provisions of such holder's Series C Preferred Stock, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion. In the event that a conversion is effected at our option, we will exercise such option to convert shares of Series C Preferred Stock on a pro rata basis among all of the holders based on such holders' shares of Series C Preferred Stock.

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

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

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

Liquidation Preference. Upon our liquidation, dissolution or winding-up, whether voluntary or involuntary, holders of Series C Preferred Stock will be entitled to receive out of our assets, whether capital or surplus, the same amount that a holder of common stock would receive if the Series C Preferred Stock were fully converted (disregarding for such purpose any conversion limitations under the Series C Certificate of Designation) to common stock, which amounts shall be paid pari passu with all holders of common stock.

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

Future Preferred Stock.

Our Restated Certificate of Incorporation provides that our board of directors is authorized to issue, without stockholder approval, blank check preferred stock. Our board of directors will fix the rights, preferences, privileges, qualifications and restrictions of any such preferred stock issued in the certificate of designation relating to that series. Such certificate of designation will include:

- the title and stated value;
- the number of shares we are offering;

- the liquidation preference per share;
- the purchase price per share;

- the dividend rate per share, dividend period and payment dates and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- our right, if any, to defer payment of dividends and the maximum length of any such deferral period;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock or other securities of ours, including warrants, and, if applicable, the conversion period, the conversion price, or how it will be calculated, and under what circumstances it may be adjusted;
- voting rights, if any, of the preferred stock;
- preemption rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuances of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preferred stock.

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

The General Corporation Law of the State of Delaware, the state of our incorporation, provides 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 that preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Description of Other Outstanding Securities of the Company

Warrants

As of August 31, 2022, there were 1,115,742 common stock purchase warrants outstanding, which expire between December 2022 and February 2025. Each of these warrants entitles the holder to purchase one share of common stock at prices ranging between \$278,370 and \$1.4814, as converted, per share, with a weighted average exercise price of \$6.07 per share. Certain of these warrants have a net exercise provision under which its holder may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on the fair market value of our common stock at the time of exercise of the warrant after deduction of the aggregate exercise price. Each of these warrants also contains provisions for the adjustment of the exercise price and the aggregate number of shares issuable upon the exercise of the warrant in the event of dividends, share splits, reorganizations and reclassifications and consolidations. Certain of these warrants contain a provision requiring a reduction to the exercise price in the event we issue common stock, or securities convertible into or exercisable for common stock, at a price per share lower than the warrant exercise price.

The holders of certain of these warrants have registration rights that are outlined below under the heading “Registration Rights.”

February 2020 Rights Offering Warrants

On February 6, 2020, we issued 6,372,000 common stock warrants (the “February 2020 Warrants”) in a rights offering to our stockholders. The material terms and provisions of the February 2020 Warrants are summarized below. This summary of the February 2020 Warrants is not complete. For the complete terms of the February 2020 Warrants, you should refer to the form of February 2020 Warrant filed as an exhibit to the registration statement of which this prospectus forms a part.

Pursuant to a warrant agency agreement between us and American Stock Transfer & Trust Company, LLC, as warrant agent, the February 2020 Warrants were issued in book-entry form and are represented only by one or more global warrants deposited with the warrant agent, as custodian on behalf of The Depository Trust Company, or DTC, and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

Exercisability. Each February 2020 Warrant became exercisable at the time of issuance and will expire five years from their issuance date. The February 2020 Warrants are exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and payment in full for the number of shares of our common stock purchased upon such exercise, except in the case of a cashless exercise as discussed below. The number of shares of common stock issuable upon exercise of the February 2020 Warrants is subject to adjustment in certain circumstances, including a stock split of, stock dividend on, or a subdivision, combination or recapitalization of the common stock. If we effect a merger, consolidation, sale of substantially all of our assets, or other similar transaction, then, upon any subsequent exercise of a February 2020 Warrant, the February 2020 Warrant holder will have the right to receive any shares of the acquiring corporation or other consideration it would have been entitled to receive if it had been a holder of the number of shares of common stock then issuable upon exercise in full of the February 2020 Warrant.

Cashless Exercise. After the earlier of (a) the date that is 30 days after the initial exercise date of the February 2020 Warrants or (b) such trading day that the aggregate volume of shares of common stock sold since the expiration of the Offering exceeds three times the number of shares of common stock and common stock equivalents sold in the Offering, the holder shall be permitted to exercise the February 2020 Warrant, on a cashless basis, regardless of the then applicable trading price of the common stock on Nasdaq, for an aggregate number of shares of common stock equal to the product of (i) the aggregate number of shares of common stock that would be issuable upon exercise of the Warrant if such exercise were by means of a cash exercise and (ii) 0.70.

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

Exercise Price. Each February 2020 Warrant represents the right to purchase one share of common stock at an exercise price of \$1.50 per share. In addition, the exercise price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations, or reclassifications, and for certain dilutive issuances. Subject to limited exceptions, a holder of warrants will not have the right to exercise any portion of the warrant to the extent that, after giving effect to the exercise, the holder, together with its affiliates, and any other person acting as a group together with the holder or any of its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to its exercise. The holder, upon notice to the Company, may increase or decrease the beneficial ownership limitation provisions of the warrant, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise of the warrant.

Fundamental Transactions. In the event we consummate a merger or consolidation with or into another person or other reorganization event in which our common shares are converted or exchanged for securities, cash or other property, or we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or we or another person acquires 50% or more of our outstanding shares of common stock, referred to as a fundamental transaction, then following such event, the holders will have the option, which may be exercised within 30 days after the consummation of the fundamental transaction, to require the Company or the successor entity purchase the Warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes value of the remaining unexercised portion of the warrant on the date of the consummation of the fundamental transaction. However, if the fundamental transaction is not within the Company's control, including not approved by the Company's Board of Directors, the holder will only be entitled to receive from the Company or any 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 common stock of the Company in connection with the fundamental transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of common stock are given the choice to receive from among alternative forms of consideration in connection with the fundamental transaction.

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

No Market. There is no public trading market for the February 2020 Warrants, and they are not listed for trading on Nasdaq or any other securities exchange or market.

Rights as Stockholder. Except as set forth in the February 2020 Warrants, the holder of a warrant, solely in such holder's capacity as a holder of a February 2020 Warrant, will not be entitled to vote, to receive dividends, or to any of the other rights of our stockholders.

Redemption Rights. We may redeem the warrants for \$0.01 per warrant if our common stock closes above \$8.00 per share for ten consecutive trading days, provided that we may not do so prior to the first anniversary of expiration of the Rights Offering.

Amendments and Waivers. The provisions of each February 2020 Warrant may be modified or amended or the provisions thereof waived with the written consent of us and the holder.

Maxim and Ascendant Warrants

Also on February 6, 2020, in connection with a rights offering, we issued 203,904 common stock warrants (the "Maxim Warrants") to Maxim Group LLC, as the dealer manager in such rights offering, and 50,976 common stock warrants (the "Ascendant Warrants") to Ascendant Capital Markets, LLC, as a financial advisor to us in such rights offering. The Maxim Warrants and Ascendant Warrants have the same material terms as the February 2020 Warrants, except as described below.

The Maxim Warrants and Ascendant Warrants became exercisable 6 months from February 6, 2020 and will expire on January 17, 2025. The Maxim Warrants and Ascendant Warrants are exercisable at a price of \$1.6295 per share, subject to adjustment for stock dividends, distributions, subdivisions, combinations, or reclassifications, and for certain dilutive issuances. Subject to limited exceptions, a holder of the Maxim Warrants and Ascendant Warrants will not have the right to exercise any portion of such warrant to the extent that, after giving effect to the exercise, the holder, together with its affiliates, and any other person acting as a group together with the holder or any of its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to its exercise. The holder, upon notice to us, may increase or decrease the beneficial ownership limitation provisions of the warrant, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise of the warrant.

The Maxim Warrants and Ascendant Warrants contain the same provisions regarding fundamental transactions as those contained in the February 2020 Warrants, except that the Maxim Warrants and Ascendant Warrants do not provide the holders thereof with the option to require us, or a successor entity, to pay an amount equal to the Black Scholes value of the warrants in the event of certain fundamental transactions.

The Maxim Warrants and Ascendant Warrants are not redeemable. The Maxim Warrants and Ascendant Warrants contain unlimited "piggyback" registration rights for a period of five years after February 6, 2020 (but not longer than 7 years from January 17, 2020) at our expense, subject to certain exceptions. We relied on the exemption from registration available under Section 4(a)(2) of the Securities Act of 1933, as amended, in connection with the issuance of the warrants to Maxim and Ascendant.

This summary of the Maxim Warrants and Ascendant Warrants is not complete. For the complete terms of the Maxim Warrants and Ascendant Warrants, you should refer to the form of Maxim Warrants and Ascendant Warrants filed as an exhibit to the registration statement of which this prospectus forms a part.

May 2018 Public Offering Warrants

On May 14, 2018, we issued 379,000 common stock warrants (the "May 2018 Warrants") in a public offering. The material terms and provisions of the May 2018 Warrants are summarized below. This summary of the May 2018 Warrants is not complete. For the complete terms of the May 2018 Warrants, you should refer to the form of May 2018 Warrant filed as an exhibit to the registration statement of which this prospectus forms a part.

Pursuant to a warrant agency agreement between us and American Stock Transfer & Trust Company, LLC, as warrant agent, the May 2018 Warrants were issued in book-entry form and are represented only by one or more global warrants deposited with the warrant agent, as custodian on behalf of The Depository Trust Company, or DTC, and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

Exercisability, Exercise Price and Term. The May 2018 Warrants entitle the holder to purchase shares of our common stock at an exercise price equal to \$1.4814 per share. The May 2018 Warrants were exercisable immediately and expire on the five-year anniversary of the issuance date. The holder of a May 2018 Warrant will not be deemed a holder of our underlying common stock until the May 2018 Warrant is exercised, except as set forth in the May 2018 Warrants.

The exercise price and the number of shares issuable upon exercise of the May 2018 Warrants is subject to appropriate adjustment, similar to that described with respect to the Series B Preferred Stock above, in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common stock. Subject to certain exclusions contained in the May 2018 Warrant, the exercise price is also subject to adjustment in the event that we sell or grant any option to purchase, or sell or grant any right to repurchase, or otherwise dispose of or issue (or announce any offer, sale, grant or any option to purchase or other disposition) any common stock or common stock equivalents (as defined in the May 2018 Warrants), at an effective price per share less than the exercise price then in effect (including in the event we issued Series B Preferred Stock at a conversion price lower than the initial conversion price of the Series B Preferred Stock). The foregoing exercise price

adjustment provisions will likely be triggered by the issuance of the Preferred Stock and Warrants in the Rights Offering. In addition, May 2018 Warrant holders may be eligible to elect an alternative price in the event we issue certain variable price securities. The May 2018 Warrant holders must pay the exercise price in cash upon exercise of the May 2018 Warrants, unless such May 2018 Warrant holders are utilizing the cashless exercise provision of the May 2018 Warrants, which is only available in certain circumstances such as if the underlying shares are not registered with the SEC pursuant to an effective registration statement.

Fundamental Transactions. In addition, in the event we consummate a merger or consolidation with or into another person or other reorganization event in which our common shares are converted or exchanged for securities, cash or other property, or we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or we or another person acquires 50% or more of our outstanding shares of common stock, referred to as a fundamental transaction, then following such event, the holders of the May 2018 Warrants will be entitled to receive upon exercise of the May 2018 Warrants the same kind and amount of securities, cash or property which the holders would have received had they exercised the May 2018 Warrants immediately prior to such fundamental transaction. Any successor to us or surviving entity is required to assume the obligations under the warrants. Notwithstanding the foregoing, in the event of a fundamental transaction, the holders will have the option, which may be exercised within 30 days after the consummation of the fundamental transaction, to require us or the successor entity purchase the Warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes value of the remaining unexercised portion of the warrant on the date of the consummation of the fundamental transaction. However, if the fundamental transaction is not within our control, including not approved by our Board of Directors, the holder will only be entitled to receive from us or any 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 May 2018 Warrant, that is being offered and paid to the holders of our common stock in connection with the fundamental transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of common stock are given the choice to receive from among alternative forms of consideration in connection with the fundamental transaction.

Upon the holder's exercise of a May 2018 Warrant, we will issue the shares of common stock issuable upon exercise of the May 2018 Warrant within two trading days following our receipt of a notice of exercise, provided that payment of the exercise price has been made (unless exercised via the "cashless" exercise provision).

Prior to the exercise of any May 2018 Warrants to purchase common stock, holders of the May 2018 Warrants will not have any of the rights of holders of the common stock purchasable upon exercise, including the right to vote, except as set forth therein.

May 2018 Warrant holders may exercise the May 2018 Warrants only if the issuance of the shares of common stock upon exercise of the May 2018 Warrants is covered by an effective registration statement, or an exemption from registration is available under the Securities Act and the securities laws of the state in which the holder resides. The May 2018 Warrant holders must pay the exercise price in cash upon exercise of the May 2018 Warrants unless there is not an effective registration statement or, if required, there is not an effective state law registration or exemption covering the issuance of the shares underlying the May 2018 Warrants (in which case, the May 2018 Warrants may only be exercised via a "cashless" exercise provision).

Beneficial Ownership Limitation. The May 2018 Warrant provides that we may not effect any exercise of the May 2018 Warrants, with certain exceptions, to the extent that, after giving effect to an attempted exercise, the holder (together with such holder's affiliates, and any persons acting as a group together with such holder or any of such holder's affiliates) would beneficially own a number of shares of common stock in excess of 4.99% (or, at the election of the holder, 9.99%) of the shares of our common stock then outstanding after giving effect to such exercise, referred to as the May 2018 Warrant Beneficial Ownership Limitation; provided, however, that upon notice to us, the holder may increase or decrease the May 2018 Warrant Beneficial Ownership Limitation, provided that in no event may the May 2018 Warrant Beneficial Ownership Limitation exceed 9.99% and any increase in the May 2018 Warrant Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us.

Cashless Exercise. If a May 2018 Warrant is exercised via the "cashless" exercise provision, the holder will receive the number of shares equal to the quotient obtained by dividing (i) the difference between the VWAP (as determined pursuant to the terms of the May 2018 Warrants) and the exercise price of the May 2018 Warrant multiplied by the number of shares issuable under the May 2018 Warrant if such exercise were by means of a cash exercise by (ii) the VWAP (as determined pursuant to the terms of the May 2018 Warrants).

Jurisdiction and Waiver of Trial by Jury. Other than with respect to suits, actions or proceedings arising under the federal securities laws, the May 2018 Warrant provides for investors to consent to exclusive jurisdiction to courts located in New York, New York and provides for a waiver of the right to a trial by jury. It also provides that disputes are governed by New York law.

Repricing of Series E Warrants and Issuance of New Warrants

On March 6, 2018, we entered into a Warrant Amendment Agreement (the "Amendment Agreement") with the holders of previously issued Series E Common Stock Purchase Warrants (collectively, the "Series E Investors").

In connection with that certain Series E Common Stock Purchase Warrant between us and Series E Investors dated July 8, 2016, (the "Series E Warrant Agreement") we issued to the Series E Investors warrants to purchase up to 22,278 shares of common stock (the "Warrant Shares") at an exercise price of \$60.00 per share, (the "Series E Investor Warrants"). Under the terms of the Amendment Agreement, in consideration of the Series E Investors exercising 22,278 of the Series E Investor Warrants (the "Series E Warrant Exercise"), the exercise price per share of the Series E Investor Warrants was reduced to \$63.75 per share. In addition, and as further consideration, we issued to the Series E Investors warrants to purchase up to the number of shares of common stock equal to 100% of the number of Series E Warrant Shares issued pursuant to the Series E Warrant Exercise at an exercise price per share equal to \$60.00 per share, the closing bid price for our common stock on March 5, 2018 (the "New Warrants"). The Series E Investors may exercise the remaining 33,899 Series E Investor Warrants at their discretion. The Amendment Agreement incorporated portions of the Series E Warrant Agreement, which contained customary representations, warranties and covenants by each of us and the Series E Investors.

The New Warrants are exercisable for up to five years from the Effective Date. The exercise price and number of shares issuable upon exercise of the New Warrants are subject to adjustment for stock splits, combinations, recapitalization events and certain dilutive issuances. The New Warrants are required to be exercised for cash, provided that if during the term of the New Warrants there is not an effective registration statement under the Securities Act covering the resale of the shares issuable upon exercise of the New Warrants, then the New Warrants may be exercised on a cashless (net exercise) basis. The New Warrant is attached as an exhibit to the registration statement of which this prospectus forms a part and is incorporated herein by reference.

Outstanding December 2012 Warrants

On December 17, 2012, in connection with entering into a commercial lending transaction, we issued warrants to purchase a total of 270,000 shares of our Series F convertible preferred stock to two of our institutional lenders. These warrants are exercisable for ten years after the date of issuance. As a result of our reverse stock splits since these warrants were issued and other corporate changes, these warrants are exercisable for 13 shares of common stock as of the date of this prospectus, at an exercise price of \$278,370 per share. These warrants have a net exercise provision under which the holder may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net number of shares of common stock based on the fair market value of our common stock at the time of exercise of the warrant after deduction of the aggregate exercise price. Each of these warrants also contains provisions for the adjustment of the exercise price and the aggregate number of shares of common stock issuable upon the exercise of the warrant in the event of dividends, share splits, reorganizations, reclassifications and consolidations. These warrants are attached as exhibits to the registration statement of which this prospectus is a part and are incorporated herein by reference.

Series D Preferred Stock Included in Units Issuable in the Rights Offering

We will authorize the Series D Preferred Stock by filing a certificate of designation with the Secretary of State of Delaware. The certificate of designation may be authorized by our Board without approval by our stockholders.

Conversion. Each share of Preferred Stock will be convertible at the option of the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Preferred Stock by a conversion price equal to the Conversion Price determined on the expiration date. In addition, the conversion price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations or reclassifications. Subject to limited exceptions, a holder of the Preferred Stock will not have the right to convert any portion of the Preferred Stock to the extent that, after giving effect to the conversion, the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion. A holder of the Preferred Stock, upon notice to us, may increase or decrease the beneficial ownership limitation provisions of such holder's Preferred Stock, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion.

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

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

Voting Rights. Except as otherwise provided in the certificate of designation or as otherwise required by law, the Preferred Stock has no voting rights. However, as long as any shares of Preferred Stock remain outstanding, we may not, without the affirmative vote of holders of a majority of the then-outstanding Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Preferred Stock or alter or amend the certificate of designation, (b) increase the number of authorized shares of Preferred Stock, (c) amend our Certificate of Incorporation or other charter documents in any manner that adversely affects any rights of holders of Preferred Stock disproportionately to the rights of holders of our other capital stock, or (d) enter into any agreement with respect to any of the foregoing.

Liquidation Preference. Upon our liquidation, dissolution or winding-up, whether voluntary or involuntary, holders of Preferred Stock will be entitled to receive out of our assets, whether capital or surplus, the same amount that a holder of common stock would receive if the Preferred Stock were fully converted (disregarding for such purpose any conversion limitations under the certificate of designation) to common stock, which amounts shall be paid *pari passu* with all holders of common stock.

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

Warrants Included in Units Issuable in the Rights Offering

The Warrants to be issued as a part of this Rights Offering will be designated as our "Class A" and "Class B" warrants. The Class A Warrants and Class B Warrants have the same terms, except that the Class A Warrants expire five years from the date of issuance and the Class B Warrants expire three years from the date of issuance. These Warrants will be separately transferable following their issuance and through their expiration. Each Warrant will entitle the holder to purchase one share of our common stock at a per share exercise price equal to the Conversion Price from the date of issuance through its expiration. There is no public trading market for the Warrants and they will not be listed for trading on Nasdaq or any other securities exchange or market. The common stock underlying the Warrants, upon issuance, will also be traded on Nasdaq under the symbol "SINT."

All Warrants that are purchased in the Rights Offering as part of the Units will be issued in book-entry, or uncertificated, form meaning that you will receive a DRS account statement from our transfer agent reflecting ownership of Warrants if you are a holder of record. The Subscription Agent will arrange for the issuance of the Warrants as soon as practicable after the closing, which will occur as soon as practicable after the Rights Offering has expired but which may occur up to five business days thereafter. At closing, all prorating calculations and reductions contemplated by the terms of the Rights Offering will have been effected and payment to us for the subscribed-for Units will have cleared. If you hold your shares of common stock in the name of a bank, broker, dealer, or other nominee, DTC will credit your account with your nominee with the Warrants you purchased in the Rights Offering.

Exercisability

Each Class A Warrant will be exercisable at any time and will expire five years from the date of issuance. Each Class B Warrant will be exercisable at any time and will expire three years from the date of issuance. The Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and payment in full for the number of shares of our common stock purchased upon such exercise, except in the case of a cashless exercise as discussed below. The number of shares of common stock issuable upon exercise of the Warrants is subject to adjustment in certain circumstances, including a stock split of, stock dividend on, or a subdivision, combination or recapitalization of the common stock. If we effect a merger, consolidation, sale of substantially all of our assets, or other similar transaction, then, upon any subsequent exercise of a Warrants, the Warrant holder will have the right to receive any shares of the acquiring corporation or other consideration it would have been entitled to receive if it had been a holder of the number of shares of common stock then issuable upon exercise in full of the Warrant.

Cashless Exercise

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

Exercise Price

Each warrant represents the right to purchase one share of common stock at an exercise price equal to the Conversion Price. In addition, the exercise price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations, or reclassifications, and for certain dilutive issuances. The exercise price is also subject to adjustment in the event that we sell, issue, or grant any option to purchase, or sell or issue any right to reprice, or otherwise dispose of or issue (or enter into any agreement relating to the offer, sale, grant or any option to purchase or other disposition) any common stock or convertible securities (as defined in the warrants), at an effective price per share less than the exercise price then in effect. In addition, if at any time there occurs a stock dividend, distribution, subdivision, combination, or reclassification and the volume weighted average price of the shares of common stock for the five trading days following such event is less than the exercise price then in effect (after giving effect to the adjustment of the exercise price pursuant to such event under the terms of the Warrants), then on the fifth trading day following such event, the exercise price shall be reduced to the volume

weighted average price of the shares of common stock for the five trading days following such event.

Subject to limited exceptions, a holder of warrants will not have the right to exercise any portion of the warrant to the extent that, after giving effect to the exercise, the holder, together with its affiliates, and any other person acting as a group together with the holder or any of its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to its exercise. The holder, upon notice to us, may increase or decrease the beneficial ownership limitation provisions of the warrant, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise of the warrant.

Transferability

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

No Market

There is no public trading market for the Warrants and they will not be listed for trading on Nasdaq or any other securities exchange or market.

Rights as Stockholder

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

Amendments and Waivers

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

The Warrants will be issued pursuant to a warrant agent agreement by and between us and America Stock Transfer & Trust Company, the warrant agent.

Effects of Anti-Takeover Provisions of Our Restated Certificate of Incorporation, Our Restated Bylaws and Delaware Law

The provisions of (1) Delaware law, (2) our Restated Certificate of Incorporation and (3) our Restated Bylaws discussed below could discourage or make it more difficult to prevail in a proxy contest or effect other change in our management or the acquisition of control by a holder of a substantial amount of our voting stock. It is possible that these provisions could make it more difficult to accomplish, or could deter, transactions that stockholders may otherwise consider to be in their best interests or our best interests. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by the board of directors and to discourage certain types of transactions that may involve an actual or threatened change in control of our company. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. These provisions also are intended to discourage certain tactics that may be used in proxy fights. These provisions also may have the effect of preventing changes in our management.

Delaware Statutory Business Combinations Provision. We are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. For purposes of Section 203, a "business combination" is defined broadly to include a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and, subject to certain exceptions, an "interested stockholder" is a person who, together with his or her affiliates and associates, owns (or within three years prior, did own) 15% or more of the corporation's voting stock.

Classified Board of Directors; Appointment of Directors to Fill Vacancies; Removal of Directors for Cause. Our Restated Certificate of Incorporation provides that our board of directors will be divided into three classes as nearly equal in number as possible. Each year the stockholders will elect the members of one of the three classes to a three-year term of office. All directors elected to our classified board of directors will serve until the election and qualification of their respective successors or their earlier resignation or removal. The board of directors is authorized to create new directorships and to fill any positions so created and is permitted to specify the class to which any new position is assigned. The person filling any of these positions would serve for the term applicable to that class. The board of directors (or its remaining members, even if less than a quorum) is also empowered to fill vacancies on the board of directors occurring for any reason for the remainder of the term of the class of directors in which the vacancy occurred. Members of the board of directors may only be removed for cause and only by the affirmative vote of holders of at least 80% of our outstanding voting stock. These provisions are likely to increase the time required for stockholders to change the composition of the board of directors. For example, in general, at least two annual meetings will be necessary for stockholders to effect a change in a majority of the members of the board of directors.

Authorization of Blank Check Preferred Stock. Our Restated Certificate of Incorporation provides that our board of directors is authorized to issue, without stockholder approval, blank check preferred stock. Blank check preferred stock can operate as a defensive measure known as a "poison pill" by diluting the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors.

Advance Notice Provisions for Stockholder Proposals and Stockholder Nominations of Directors. Our Restated Bylaws provide that, for nominations to the board of directors or for other business to be properly brought by a stockholder before a meeting of stockholders, the stockholder must first have given timely notice of the proposal in writing to our Secretary. For an annual meeting, a stockholder's notice generally must be delivered not less than 90 days nor more than 120 days prior to the anniversary of the mailing date of the proxy statement for the previous year's annual meeting. For a special meeting, the notice must generally be delivered no less than 60 days nor more than 90 days prior to the special meeting or ten days following the day on which public announcement of the meeting is first made. Detailed requirements as to the form of the notice and information required in the notice are specified in our Restated Bylaws. If it is determined that business was not properly brought before a meeting in accordance with our bylaw provisions, this business will not be conducted at the meeting.

Special Meetings of Stockholders. Special meetings of the stockholders may be called only by our board of directors pursuant to a resolution adopted by a majority of the total number of directors.

No Stockholder Action by Written Consent. Our Restated Certificate of Incorporation does not permit our stockholders to act by written consent. As a result, any action to be effected by our stockholders must be effected at a duly called annual or special meeting of the stockholders.

Super-Majority Stockholder Vote required for Certain Actions. The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless the corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our Restated Certificate of Incorporation requires the affirmative vote of the holders of at least 80% of our outstanding voting stock to amend or repeal any of the provisions discussed in this section of this prospectus entitled "Effect of Anti-Takeover Provisions of Our Restated Certificate of Incorporation, Our Restated Bylaws and Delaware Law" or to reduce the number of authorized shares of common stock or preferred stock. This 80% stockholder vote would be in addition to

any separate class vote that might in the future be required pursuant to the terms of any preferred stock that might then be outstanding. An 80% vote is also required for any amendment to, or repeal of, our Restated Bylaws by the stockholders. Our Restated Bylaws may be amended or repealed by a simple majority vote of the board of directors.

Potential Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval. We may utilize these additional shares for a variety of corporate purposes, including future public offerings to raise additional capital, to facilitate corporate acquisitions or payment as a dividend on the capital stock.

The existence of unissued and unreserved common stock and preferred stock may enable our board of directors to issue shares to persons friendly to current management or to issue preferred stock with terms that could render more difficult or discourage a third-party attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, thereby protecting the continuity of our management. In addition, the board of directors has the discretion to determine designations, rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences of each series of preferred stock, all to the fullest extent permissible under the Delaware General Corporation Law and subject to any limitations set forth in our certificate of incorporation. The purpose of authorizing the board of directors to issue preferred stock and to determine the rights and preferences applicable to such preferred stock is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing desirable flexibility in connection with possible financings, acquisitions and other corporate purposes, could have the effect of making it more difficult for a third-party to acquire, or could discourage a third-party from acquiring, a majority of our outstanding voting stock.

Transfer Agent and Warrant Agent

The transfer agent and registrar for our common stock and the warrant agent for the Warrants is American Stock Transfer & Trust Company, LLC. The transfer agent and the registrar's address is 59 Maiden Lane, New York, New York 10038.

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PLAN OF DISTRIBUTION

Promptly following the effective date of the registration statement of which this prospectus form is a part, we will distribute the Subscription Rights, Rights Certificates and copies of this prospectus to the holders of our common stock, Series B Preferred Stock, Series C Preferred Stock, and Participating Warrants on the Record Date. Subscription Rights holders who wish to exercise their Subscription Rights and purchase Units must complete the Subscription Rights Certificate and return it with payment for the shares to the Subscription Agent at the following address:

If delivering by mail, hand or overnight courier:
American Stock Transfer & Trust Company, LLC
Operations Center
Attn: Reorganization Department
6201 15th Avenue
Brooklyn, New York 11219

If you have any questions, you should contact our Information Agent for the Rights Offering: D.F. King & Co, Inc., toll free at (866) 620-2536, by mail at D.F. King & Co., Inc., 48 Wall Street, 22nd Floor, New York, NY 10005 or by email at sintx@dfking.com.

Other than as described in this prospectus, we do not know of any existing agreements between any stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the underlying securities.

Maxim Group LLC will act as dealer-manager for the Rights Offering. In such capacity, the dealer-manager will provide marketing assistance and financial advice (including determining the Subscription Price and the structure of the Rights Offering) to us in connection with this offering and will solicit the exercise of Subscription Rights and participation in the Over-Subscription Privilege. The dealer-manager will provide us with updated investor feedback and recommendations on pricing and structure through to the end of the subscription period. The dealer-manager is not underwriting or placing any of the Subscription Rights or the shares of our Preferred Stock or Warrants being issued in this offering and do not make any recommendation with respect to such Subscription Rights (including with respect to the exercise or expiration of such Subscription Rights), shares or Warrants.

In connection with this Rights Offering, we have agreed to pay fees to Maxim Group LLC as dealer-manager an aggregate cash fee equal to 7.0% of the gross proceeds received by us directly from exercises of the Subscription Rights. We advanced \$20,000 (the "Advance") to Maxim Group LLC as an advance against the expense allowance upon their engagement as dealer-manager and agreed to reimburse the reasonable fees and expenses of the dealer-manager up to \$100,000 (including the Advance). Any portion of the Advance not used for Maxim's actual out-of-pocket expenses shall be promptly reimbursed to us. Additionally, we agreed to grant to Maxim (or its designated affiliates) share purchase warrants (the "Dealer Warrants") covering a number of shares of our common stock equal to 4.0% of the common stock issuable upon exercise of the Preferred Stock sold in the Rights Offering. In the event that we engage Ascendant Capital Markets, LLC as a financial advisor in connection with the Offering, Maxim agrees that Ascendant shall be entitled to 15% of the total fee earned by Maxim under the dealer-management agreement and 15% of the Dealer Warrants issuable upon Closing (i.e., Maxim will receive 85% of the cash fee and Dealer Warrants, and Ascendant shall receive 15% of the cash fee and Dealer Warrants). The Dealer Warrants will be non-exercisable for six (6) months after the date of the Closing and will expire five years after the commencement of sales of the offering. The Dealer Warrants will be exercisable at a price equal to 110.0% of the conversion price of the Convertible Preferred. The Warrants shall not be redeemable. The Dealer Warrants may not be sold, transferred, assigned, pledged or hypothecated or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the securities for a period of 180 days beginning on the date of the commencement of sales of the offering, except that they may be assigned, in whole or in part, to any officer or partner, registered person or affiliate of Maxim (or to Ascendant) subject to the terms of the lock-up. The Dealer Warrants may be exercised as to all or a lesser number of shares of our common stock, will contain unlimited "piggyback" registration rights for a period of five years after the commencement of sales of the offering at our expense.

Upon the successful completion of the Rights Offering for gross proceeds of at least six million dollars (\$6,000,000), for a period of nine (9) months from the final Closing, we will grant Maxim Group LLC the right of first refusal to act as lead managing underwriter, lead book runner or lead placement agent for any and all future public and private equity and any public debt or equity-linked debt offerings.

We have also agreed to indemnify the dealer-manager and their respective affiliates against certain liabilities arising under the Securities Act. The dealer-manager participation in this offering are subject to customary conditions contained in the dealer-manager agreement, including the receipt by the dealer-manager of an opinion of our counsel. The dealer-manager and their affiliates may provide to us from time to time in the future in the ordinary course of their business certain financial advisory, investment banking and other services for which they will be entitled to receive fees.

Subject to certain exceptions, we have agreed not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any common shares or other securities convertible into or exercisable or exchangeable for common shares for a period of ninety (90) days after the expiration of this Rights Offering.

Our common stock is listed on the Nasdaq Capital Market, or Nasdaq, under the symbol "SINT."

EXPERTS

The consolidated financial statements of SINTX Technologies, Inc., as of December 31, 2021 and 2020, and for each of the years in the two-year period ended December 31, 2021, have been incorporated by reference herein in reliance on the report of Tanner LLC, an independent registered public accounting firm (the report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern), given on the authority of said firm as experts in auditing and accounting.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Dorsey & Whitney LLP, Salt Lake City, Utah. The dealer-manager is being represented by Ellenoff Grossman & Schole LLP, New York, New York.

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**Subscription Rights to Purchase Up to 10,000 Units
Consisting of an Aggregate of Up to 10,000 Shares of Series D Convertible Preferred Stock
and 54,260,000 Warrants to Purchase Shares of Common Stock
at a Subscription Price of \$1,000 Per Unit and
Up to 27,110,000 Shares of Common Stock Issuable upon the Conversion of
Series D Convertible Preferred Stock Included in the Units and
Up to 54,260,000 Shares of Common Stock Issuable upon the Exercise of
Warrants Included in the Units**



PROSPECTUS

Dealer-Manager
Maxim Group LLC

September 23, 2022
