

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

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

SINTX Technologies, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3841
(Primary Standard Industrial
Classification Code Number)

84-1375299
(I.R.S. Employer
Identification Number)

1885 West 2100 South
Salt Lake City, UT, 84119
(801) 839-3500
(Address, including zip code, and telephone number,
including area code, of registrant's principal executive offices)

B. Sonny Bal, MD
President and Chief Executive Officer
SINTX Technologies, Inc.
1885 West 2100 South
Salt Lake City, UT, 84119
(801) 839-3500
(Name, address, including zip code, and telephone number,
including area code, of agent for service)

Copies to:

David F. Marx
Daniel P. Lyman
Dorsey & Whitney LLP
111 South Main Street, Suite 2100
Salt Lake City, Utah 84111

Barry I. Grossman
Sarah E. Williams
Matthew Bernstein
Ellenoff Grossman & Schole LLP
1345 Avenue of the Americas, 11th Floor
New York, NY 10105

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

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

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Act or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS, SUBJECT TO COMPLETION, DATED OCTOBER 23, 2023

SINTX TECHNOLOGIES, INC.

Up to 8,904,719 Units, Each Unit Consisting of One Share of Common Stock or One Pre-Funded Warrant and One Class E Warrant to Purchase One Share of Common Stock

Placement Agent Warrants to Purchase an Aggregate of Up To 356,188 Shares of Common Stock

Up to 18,165,626 Shares of Common Stock Issuable upon the Exercise of the Pre-Funded Warrants, Class E Warrants, and Placement Agent Warrants

We are offering on a best-efforts basis up to 8,904,719 units (the “Units”), each consisting of one share of common stock and one Class E Warrant to purchase one share of common stock (the “Class E Warrants”), at an assumed public offering price of \$0.5615 per Unit, equal to the closing price of our common stock on the Nasdaq Capital Market, or Nasdaq, on October 19, 2023.

Each Class E Warrant will be immediately exercisable for one share of common stock at an exercise price of \$ per share (not less than 100% and not more than 120% of the public offering price of each Unit sold in this offering) and expire years after the issuance date.

We are also offering to each purchaser of Units that would otherwise result in the purchaser’s beneficial ownership exceeding 4.99% of our outstanding shares of common stock immediately following the consummation of this offering the opportunity to purchase Units consisting of one pre-funded warrant (in lieu of one share of common stock) and one Class E Warrant. A holder of pre-funded warrants will not have the right to exercise any portion of its pre-funded warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, at the election of the holder, such limit may be increased to up to 9.99%) of the number of shares of common stock outstanding immediately after giving effect to such exercise. Each pre-funded warrant will be exercisable for one share of common stock. The purchase price of each Unit including a pre-funded warrant will be equal to the price per Unit including one share of common stock, minus \$0.0001, and the remaining exercise price of each pre-funded warrant will equal \$0.0001 per share. The pre-funded warrants will be immediately exercisable (subject to the beneficial ownership cap) and may be exercised at any time until all of the pre-funded warrants are exercised in full. For each Unit including a pre-funded warrant we sell (without regard to any limitation on exercise set forth therein), the number of Units including a share of common stock we are offering will be decreased on a one-for-one basis. The shares of common stock and pre-funded warrants, if any, can each be purchased in this offering only with the accompanying Class E Warrants as part of a Unit, but the components of the Units will immediately separate upon issuance. See “Description of Securities” in this prospectus for more information.

We are also registering the shares of common stock issuable from time to time upon the exercise of the Class E Warrants and pre-funded warrants included in the Units offered hereby. We are also registering the shares of common stock issuable from time to time upon the exercise of the placement agent’s warrants.

Our common stock is listed on the Nasdaq Capital Market, or Nasdaq, under the symbol “SINT.” On October 19, 2023, the last reported sale price of our common stock was \$0.5615 per share. There is no established public trading market for the Class E Warrants or the pre-funded warrants. We do not intend to apply for listing of the Class E Warrants or pre-funded warrants on any securities exchange or recognized trading system. Without an active trading market, the liquidity of the Class E Warrants and pre-funded warrants will be limited.

The public offering price for the Units in this offering will be determined at the time of pricing, and may be at a discount to the then current market price. Therefore, the assumed combined public offering price used throughout this prospectus may not be indicative of the final offering price. The final public offering price will be determined through negotiation between us and the investors based upon a number of factors, including our history and our prospects, the industry in which we operate, our past and present operating results, the previous experience of our executive officers and the general condition of the securities markets at the time of this offering.

The Units will be offered at a fixed price and are expected to be issued in a single closing. We expect this offering to be completed not later than two business days following the commencement of this offering and we will deliver all securities to be issued in connection with this offering delivery versus payment/receipt versus payment upon receipt of investor funds received by us. Accordingly, neither we nor the placement agent have made any arrangements to place investor funds in an escrow account or trust account since the placement agent will not receive investor funds in connection with the sale of the securities offered hereunder.

We have engaged Maxim Group LLC as our exclusive placement agent (“Maxim” or the “placement agent”) to use its reasonable best efforts to solicit offers to purchase our securities in this offering. The placement agent is not purchasing or selling any of the securities we are offering and is not required to arrange for the purchase or sale of any specific number or dollar amount of the securities. Because there is no minimum offering amount required as a condition to closing in this offering the actual public offering amount, placement agent’s fee, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above and throughout this prospectus. We have agreed to pay the placement agent the placement agent fees set forth in the table below. See “Plan of Distribution” in this prospectus for more information.

	Per Unit	Total⁽²⁾
Public Offering Price	\$	\$
Placement Agent fees ⁽¹⁾	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) In connection with this Offering, we have agreed to pay to Maxim as placement agent a cash fee equal to 7% of the gross proceeds received by us in the Offering. We have also agreed to provide Maxim for all expenses related to the Offering including up to \$100,000 for reimbursement of legal expenses in connection with its engagement as placement agent and to grant Maxim warrants to purchase a number of shares of common stock equal to 4% of the total number of Units being sold in the Offering. See “Plan of Distribution.”

(2) Assumes no pre-funded warrants are issued and all Units issued in the offering include common stock.

The above summary of offering proceeds to us does not give effect to any exercise of the Class E Warrants being issued in this offering.

Investing in our securities involves a high degree of risk. See the section entitled “Risk Factors” beginning on page 7 of the prospectus. You should carefully consider these risk factors, as well as the information contained in this prospectus, before you invest.

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.

TABLE OF CONTENTS

Prospectus Summary	1
Risk Factors	7
Special Note Regarding Forward-Looking Statements	13
Use of Proceeds	15
Capitalization	16
Description of Securities	18
Plan of Distribution	35
Material U.S. Federal Income Tax Consequences	41
Legal Matters	49
Experts	49
Where You Can Find More Information	49
Incorporation By Reference	50

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 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 placement agent have authorized anyone else to provide you with different information. We do not, and the placement agent 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 placement agent 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 placement agent 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

We are a 27-year-old advanced ceramics company formed in December 1996, focused on providing solutions in a variety of biomedical, technical, 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, technical (including aerospace and armor) 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 our inception, we have 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 - means that it may also be suitable in other fusion device applications such as arthroplasty implants, foot wedges, 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, we acquired TA&T, a nearly 40-year-old business with a mission 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.

Technical Applications: It is our belief that our 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. Our AS9100D certification and ITAR registration have facilitated entry into the aerospace portion of this market.

We entered the ceramic armor market through the purchase of assets from B4C, LLC and a technology partnership with Precision Ceramics USA. We intend 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. We have signed a 10-year lease for a building near our headquarters in Salt Lake City, UT that houses development and manufacturing activities for SINTX Armor.

1

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 focused many of our resources on these opportunities.

We presently manufacture 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 for over 10 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, and several of these have transitioned from prototype to regular production orders. We expect the launch of SINTX Armor may generate revenue from new products. The acquisition of TA&T brings revenue from multiple markets that we have previously not participated in.
- *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. We have received three NIH grants over the last fifteen months in order to develop 3D printed silicon nitride / polymer implantable medical devices.
- *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.

2

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 twelve issued U.S. patents, seven foreign patents, eighteen pending U.S. non-provisional patent applications, no pending U.S. provisional patent applications, one hundred twenty-five pending foreign applications and one pending PCT patent application. Our first issued patent expired in 2016, with the last of these patents expiring in 2039.

We have three U.S. patents directed to articulating implants using our high-strength, high toughness doped silicon nitride solid ceramic. These issued patents, which include US 7,666,229; US 9,051,639; and US 9,517,136 will expire in November 2023, September 2032, and March 2034, respectively.

We also have one U.S. patent 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. The issued patent US 9,649,197 will expire in July 2035.

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 one divisional patent application filed in Europe and two divisional applications filed in 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 patent protection for our 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 patent protection for our 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, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/014725 directed to antifungal composites and methods thereof, we entered the national stage in Europe, Brazil, Japan, Australia, Canada, China, India, Mexico, and South Korea to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/027258 directed to antipathogenic face mask, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/027263 directed to systems and methods for rapid inactivation of SARS-CoV2 by silicon nitride, copper, and aluminum nitride, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/038364 directed to antipathogenic devices and methods thereof for antifungal applications, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/028975 directed to methods for laser coating of silicon nitride on a metal substrate, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/028641 directed to methods of silicon nitride laser cladding, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/027270 directed to antiviral compositions and devices and methods of use thereof, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/056461 directed to systems and methods for selective laser sintering of silicon nitride and metal composites, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/056452 directed to systems and methods for hot-isostatic pressing to increase nitrogen content in silicon nitride, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/062650 directed to nitride based antipathogenic compositions and devices and method of use thereof, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2022/023868 directed to systems and methods for physical vapor deposition silicon nitride coatings having antimicrobial and osteogenic enhancements, we entered the national stage in Australia, Brazil, Canada, China, Europe, India, Japan, South Korea, and Mexico to seek patent protection for our 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 hot-isostatic pressing 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.

Recent Developments

Amendment to Equity Distribution Agreement

On October 12, 2023, we entered into an amendment to our Equity Distribution Agreement (the “Distribution Agreement”) with Maxim, pursuant to which (1) the expiration date of the Distribution Agreement was extended to the earlier of: (i) the sale of shares having an aggregate offering price of \$15,000,000, (ii) the termination by either us or Maxim upon the provision of fifteen (15) days written notice, or (iii) February 25, 2025 and (2) updates were made to references to the Company’s registration statement on Form S-3 filed on October 12, 2023. No other changes were made to the terms of the Distribution Agreement.

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.

4

Summary of the Offering

Securities to be Offered

Up to 8,904,719 Units on a best-efforts basis, at an assumed public offering price of \$0.5615 per Unit. Each Unit consists of one share of common stock and one Class E Warrant.

We are also offering to each purchaser, with respect to the purchase of Units that would otherwise result in the purchaser’s beneficial ownership exceeding 4.99% of our outstanding shares of common stock immediately following the consummation of this offering, the opportunity to purchase one pre-funded warrant in lieu of one share of common stock. A holder of pre-funded warrants will not have the right to exercise any portion of its pre-funded warrant if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, at the election of the holder, such limit may be increased to up to 9.99%) of the number of shares of common stock outstanding immediately after giving effect to such exercise. Each pre-funded warrant will be exercisable for one share of common stock. The purchase price per pre-funded warrant will be equal to the price per share of common stock, minus \$0.0001, and the exercise price of each pre-funded warrant will equal \$0.0001 per share. The pre-funded warrants will be immediately exercisable (subject to the beneficial ownership cap) and may be exercised at any time in perpetuity until all of the pre-funded warrants are exercised in full. For more information regarding the pre-funded warrants, you should carefully read the section titled “Description of Securities Included in this Offering” in this prospectus.

The Units will not be certificated or issued in stand-alone form. The shares of common stock and pre-funded warrants, if any, can each be purchased in this offering only with the accompanying Class E Warrants as part of a Unit, but the components of the Units will immediately separate upon issuance. We are also registering the shares of common stock issuable from time to time upon exercise of the Class E Warrants and pre-funded warrants included in the Units offered hereby.

Size of Offering

Up to \$5,000,000

Subscription Price Per Unit

\$0.5615 (or \$0.5614 per Unit including one pre-funded warrant in lieu of one share of common stock)

Description of the Class E Warrants

Each Class E Warrant will have an exercise price of \$ _____ per share (not less than 100% and not more than 120% of the public offering price of each Unit sold in this offering), will be exercisable upon issuance and will expire years from issuance. Each Class E Warrant is exercisable for one share of common stock, subject to adjustment in the event of stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our shares of common stock as described herein. The terms of the Class E Warrants will be governed by a Warrant Agency Agreement, dated as of the closing date of this offering, that we expect to be entered into between us and American Stock Transfer & Trust Company, LLC or its affiliate (the “Warrant Agent”). This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the Class E Warrants. For more information regarding the Class E Warrants, you should carefully read the section titled “Description of Securities Included in this Offering” in this prospectus.

5

Placement Agent Warrants

We have agreed to issue to the placement agent warrants to purchase a number of shares of common stock equal to 4% of the total number of securities being sold in the Offering. The placement agent’s warrants will be exercisable at any time, and from time to time, in whole or in part, during the four and one-half year period commencing 180 days from the effective date of the registration statement of which this prospectus forms a part. The placement agent’s warrants will be exercisable at a price per share equal to 110.0% of the exercise price of the Class E Warrants. We are also registering the shares of common stock issuable upon the exercise of the placement agent warrants.

Common Stock Outstanding Prior to This Offering

4,246,212 shares

Common Stock Outstanding after This Offering

Up to approximately 13,150,931 shares (assuming no issuance of pre-funded warrants and no exercise of Class E Warrants issued in connection with this offering), or 22,055,650 shares if the Class E Warrants are exercised in full.

Use of Proceeds

Assuming the maximum number of Units are sold in this offering at an assumed public offering price of \$0.5615 per Unit, which represents the closing price of our common stock on Nasdaq on October 19, 2023, and assuming no issuance of pre-funded warrants and no exercise of Class E Warrants issued in connection with this offering, we estimate the net proceeds of the Offering will be approximately \$4.35 million. However, this is a best efforts offering with no minimum number of securities or amount of proceeds as a condition to closing, and we may not sell all or any of these securities offered pursuant to this prospectus; as a result, we may receive significantly less in net proceeds. We intend to use the net proceeds from this offering 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 Class E 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. See “Use of Proceeds.” Our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds from this offering. See “Risk Factors” for a discussion of certain risks that may affect our intended use of the net proceeds from this offering.

Market for Common Stock

Our common stock is listed on Nasdaq under the symbol “SINT.”

Market for Pre-Funded Warrants and Class E Warrants

There is no established public trading market for the pre-funded warrants or Class E Warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the pre-funded warrants or Class E Warrants on any securities exchange or recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants and Class E Warrants will be limited.

Risk Factors

An investment in our securities is highly speculative and involves a significant degree of risk. See “Risk Factors” and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our securities.

Best Efforts Offering

We have agreed to offer and sell the securities offered hereby to the purchasers through the placement agent. The placement agent is not required to buy or sell any specific number or dollar amount of the securities offered hereby, but it will use its reasonable best efforts to solicit offers to purchase the securities offered by this prospectus. See “Plan of Distribution” on page 35 of this prospectus.

The number of shares of common stock to be outstanding after this offering is based on 4,246,212 shares of common stock outstanding as of October 18, 2023 and excludes:

- 11,909 shares of common stock issuable upon the exercise of outstanding options and restricted stock units granted as of June 30, 2023 under our equity incentive plans at a weighted average exercise price of \$120 per share;
- 1,244,754 shares of common stock issuable upon the exercise of outstanding warrants issued as of June 30, 2023;
- 10,576 shares of our common stock issuable upon the conversion of 26 shares of series B convertible preferred stock outstanding as of June 30, 2023;
- 338 shares of our common stock issuable upon the conversion of 50 shares of series C convertible preferred stock outstanding as of June 30, 2023; and
- 11,919 shares of common stock reserved for issuance upon conversion of 180 shares of the Series D Preferred Stock outstanding as of June 30, 2023.

Unless otherwise indicated, the information in this prospectus, including the number of shares outstanding after this offering, does not reflect any issuance, exercise, vesting, expiration, or forfeiture of any additional equity awards under our incentive plans that occurred after June 30, 2023.

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 herein and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 under the heading “Item 1A. Risk Factors,” and as described or may be described in any subsequent quarterly report on Form 10-Q under the heading “Item 1A. Risk Factors,” as well as in any applicable prospectus supplement and contained or to be contained in our filings with the SEC and incorporated by reference in this prospectus, together with all of the other information contained in this prospectus, or any applicable prospectus supplement. For a description of these reports and documents, and information about where you can find them, see “Where You Can Find More Information” and “Incorporation by Reference.” 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 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 This Offering and Ownership of Our Securities

There is currently a limited market for our securities, and any trading market that exists in our securities may be highly illiquid and may not reflect the underlying value of our net assets or business prospects.

Although our common stock is traded on Nasdaq, there is currently a limited market for our common stock and an active market may never develop. Investors are cautioned not to rely on the possibility that an active trading market may develop.

The best efforts structure of this offering may have an adverse effect on our business plan.

The placement agent is offering the securities in this offering on a best efforts basis. The placement agent is not required to purchase any securities, but will use its best efforts to sell the securities offered. As a “best efforts” offering, there can be no assurance that the offering contemplated hereby will ultimately be consummated or will result in any proceeds being made available to us. The success of this offering will impact our ability to use the proceeds to execute our business plan. We may have insufficient capital to implement our business plan, potentially resulting in greater operating losses unless we are able to raise the required capital from alternative sources. There is no assurance that alternative capital, if needed, would be available on terms acceptable to us, or at all.

Future sales of our common stock may depress our share price.

As of September 29, 2023, we had 4,208,151 shares of our common stock outstanding. Sales of a number of shares of common stock in the public market or issuances of additional shares pursuant to the exercise of our outstanding warrants, or the expectation of such sales or exercises, could cause the market price of our common stock to decline. We may also sell additional shares of common stock or securities convertible into or exercisable or exchangeable for common stock in subsequent public or private offerings or other transactions, which may adversely affect the market price of our common stock.

Our stockholders may experience substantial dilution in the value of their investment if we issue additional shares of our capital stock.

Our charter allows us to issue up to 250,000,000 shares of our common stock and up to 130,000,000 shares of preferred stock. To raise additional capital, we may in the future sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that are lower than the prices paid by existing stockholders, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders, which could result in substantial dilution to the interests of existing stockholders.

7

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 June 30, 2023, we had outstanding 26 shares of Series B convertible preferred stock convertible into an aggregate of 10,576 shares of common stock, and warrants issued in October 2022 that are exercisable for an aggregate of 616,641 shares of common stock. The Series B convertible preferred stock and October 2022 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 October 2022 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. Depending upon how such provisions are interpreted, the alternative cashless exercise provision contained in the Class C Warrants and Class D Warrants could potentially result in a significant reduction in the conversion or exercise price of the Series B convertible preferred stock and October 2022 warrants. Our outstanding 26 shares of Series B preferred stock are, prior to this offering, convertible into 10,576 shares of common stock at a conversion price of \$2.7042 per share. The October 2022 warrants are exercisable at an exercise price of \$2.7042 per share. These full ratchet anti-dilution provisions will likely be triggered by the issuance of the Units in this 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.

Other than amounts required to be paid to certain lenders, 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 with regard to 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 offering.

The shares issuable upon the exercise of the Class E Warrants to be issued pursuant to the offering will dilute the ownership interest of stockholders not participating in this offering and holders of Class E Warrants who have not exercised their Class E Warrants.

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

The number of shares of common stock underlying the securities we propose to issue and ultimately will issue if this 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 offering. We cannot predict the effect, if any, that the availability of shares for future sale represented by the Class E Warrants issued in connection with the offering will have on the market price of our common stock from time to time.

Holders of pre-funded warrants and Class E Warrants will have no rights as a common stockholder until such holders exercise their pre-funded warrants and Class E Warrants, respectively, and acquire our common stock.

Until holders of pre-funded warrants and Class E Warrants acquire shares of our common stock upon exercise of the pre-funded warrants and Class E Warrants, as the case may be, holders of pre-funded warrants and Class E Warrants will have no rights with respect to the shares of our common stock underlying such pre-funded warrants and Class E Warrants. Upon exercise of the pre-funded warrants and Class E Warrants, the holders thereof will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

8

There is no public market for the pre-funded warrants or Class E Warrants in this offering.

There is no established public trading market for the pre-funded warrants or Class E Warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the pre-funded warrants or Class E Warrants on any securities exchange or recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants and Class E Warrants will be limited.

Absence of a public trading market for the pre-funded warrants or Class E Warrants may limit your ability to resell the pre-funded warrants or Class E Warrants.

There is no established trading market for the pre-funded warrants or Class E 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 pre-funded warrants or Class E Warrants may not be widely distributed. Purchasers of the pre-funded warrants or Class E Warrants may be unable to resell the pre-funded warrants or Class E 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 Class E Warrants issued in connection with this offering.

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

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

The exclusive jurisdiction, waiver of trial by jury, and choice of law clauses set forth in the form of securities purchase agreement to be used in this offering may have the effect of limiting a purchaser's rights to bring legal action against us and could limit a purchaser's ability to obtain a favorable judicial forum for disputes with us.

The form of securities purchase agreement used in this offering requires 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. Disputes arising under the form of securities purchase agreement are governed by Delaware and New York law, respectively. These provisions may have the effect of limiting the ability of investors to bring a legal claim against us due to geographic limitations and/or preference for a trial by jury and may limit an investor's ability to bring a claim in a judicial forum that it finds favorable for disputes with us. Alternatively, if a court were to find this exclusive forum provision inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business and financial condition.

We could be delisted from Nasdaq, which could seriously harm the liquidity of our stock and our ability to raise capital.

On October 20, 2023, we received a notice from the Nasdaq Listing Qualifications Department (the "Staff") of the Nasdaq Stock Market LLC ("Nasdaq") stating that the bid price of our common stock for the last 30 consecutive trading days had closed below the minimum \$1.00 per share required for continued listing under Listing Rule 5550(a)(2). We initially have a period of 180 calendar days, or until April 17, 2024, to regain compliance with such rule. If we do not regain compliance with Rule 5550(a)(2) by April 17, 2024, we may be afforded a second 180 calendar day period to regain compliance. To qualify, we would be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for The Nasdaq Capital Market, except for the minimum bid price requirement. In addition, we would be required to notify Nasdaq of our intent to cure the deficiency during the second compliance period, which may include, if necessary, implementing a reverse stock split. There can be no assurance that we will be able to regain compliance with Nasdaq requirements or will otherwise be in compliance with other Nasdaq listing criteria.

9

If we cease to be eligible to trade on the Nasdaq Capital Market:

- We may have to pursue trading on a less recognized or accepted market, such as the OTC Bulletin Board or the "pink sheets."
- The trading price of our common stock could suffer, including an increased spread between the "bid" and "asked" prices quoted by market makers.
- Shares of our common stock could be less liquid and marketable, thereby reducing the ability of stockholders to purchase or sell our shares as quickly and as inexpensively as they have done historically. If our stock is traded as a "penny stock," transactions in our stock would be more difficult and cumbersome.
- We may be unable to access capital on favorable terms or at all, as companies trading on alternative markets may be viewed as less attractive investments with higher associated risks, such that existing or prospective institutional investors may be less interested in, or prohibited from, investing in our common stock. This may also cause the market price of our common stock to decline.

The price of our common stock is volatile and is likely to continue to fluctuate due to reasons beyond our control.

The volatility of publicly traded company stocks, including shares of our common stock, often do not correlate to the operating performance of the companies represented by such stocks or our operating performance. Some of the factors that may cause the market price of our common stock to fluctuate include:

- the sentiment of retail investors (including as may be expressed on financial trading and other social media sites and online forums);
- the direct access by retail investors to broadly available trading platforms;
- the amount and status of short interest in our securities;
- access to margin debt;
- trading in options and other derivatives on our common stock and any related hedging;
- CTL's ability to sell silicon nitride based spinal fusion products and our cost of manufacturing such products for CTL;
- our ability to develop, obtain regulatory clearances or approvals for, and market new and enhanced product candidates on a timely basis;
- our ability to enter into OEM and private label partnership agreements and the terms of those agreements;
- our ability to develop products that are effective in inactivating the SARS-CoV-2 virus;
- changes in governmental regulations or in the status of our regulatory approvals, clearances or future applications;
- our announcements or our competitors' announcements regarding new products, product enhancements, significant contracts, number and productivity of distributors, number of hospitals and surgeons using products, acquisitions or strategic investments;
- announcements of technological or medical innovations for the treatment of orthopedic pathology;
- delays or other problems with the manufacturing of our products, product candidates and related instrumentation;
- volume and timing of orders for our products and our product candidates, if and when commercialized;
- changes in the availability of third-party reimbursement in the United States and other countries;
- quarterly variations in our or our competitors' results of operations;
- changes in earnings estimates or recommendations by securities analysts, if any, who cover our common stock;
- failure to meet estimates or recommendations by securities analysts, if any, who cover our stock;

- changes in the fair value of our derivative liabilities resulting from changes in the market price of our common stock, which may result in significant fluctuations in our quarterly and annual operating results;
- changes in healthcare policy in the United States and internationally;
- product liability claims or other litigation involving us;
- sales of a substantial aggregate number of shares of our common stock;
- sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders;
- disputes or other developments with respect to intellectual property rights;
- changes in accounting principles;
- changes to tax policy; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

These and other external factors may cause the market price and demand for our common stock to fluctuate substantially, which may limit or prevent our stockholders from readily selling their shares of our common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the company that issued the stock. If our stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit regardless of the merits of the case or the eventual outcome. Such a lawsuit also would divert the time and attention of our management from running our company.

Securities analysts may not continue to provide coverage of our common stock or may issue negative reports, which may have a negative impact on the market price of our common stock.

Since completing our initial public offering of shares of our common stock in February 2014, a limited number of securities analysts have been providing research coverage of our common stock. If securities analysts do not continue to cover our common stock, the lack of research coverage may cause the market price of our common stock to decline. The trading market for our common stock may be affected in part by the research and reports that industry or financial analysts publish about our business. If one or more of the analysts who elect to cover us downgrade our stock, our stock price would likely decline rapidly. If one or more of these analysts cease coverage of us, we could lose visibility in the market, which in turn could cause our stock price to decline. In addition, under the Sarbanes-Oxley Act of 2002, and a global settlement among the SEC, other regulatory agencies and a number of investment banks, which was reached in 2003, many investment banking firms are required to contract with independent financial analysts for their stock research. It may be difficult for a company such as ours, with a smaller market capitalization, to attract independent financial analysts that will cover our common stock. This could have a negative effect on the market price of our stock.

Anti-takeover provisions in our organizational documents and Delaware law may discourage or prevent a change in control, even if an acquisition would be beneficial to our stockholders, which could affect our stock price adversely and prevent attempts by our stockholders to replace or remove our current management.

Our restated certificate of incorporation, as amended, (the “Restated Certificate of Incorporation”) and amended and restated bylaws (the “Restated Bylaws”) contain provisions that could discourage, delay or prevent a merger, acquisition or other change in control of our company or changes in our board of directors that our stockholders might consider favorable, including transactions in which you might receive a premium for your shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. Furthermore, these provisions could prevent or frustrate attempts by our stockholders to replace or remove management. These provisions:

- allow the authorized number of directors to be changed only by resolution of our board of directors;
- provide for a classified board of directors, such that not all members of our board will be elected at one time;
- prohibit our stockholders from filling board vacancies, limit who may call stockholder meetings, and prohibit the taking of stockholder action by written consent;
- prohibit our stockholders from making certain changes to our restated certificate of incorporation or restated bylaws except with the approval of holders of 75% of the outstanding shares of our capital stock entitled to vote;
- require advance written notice of stockholder proposals that can be acted upon at stockholders’ meetings and of director nominations to our board of directors; and
- authorize our board of directors to create and issue, without prior stockholder approval, preferred stock that may have rights senior to those of our common stock and that, if issued, could operate as a “poison pill” to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. Any delay or prevention of a change in control transaction or changes in our board of directors could cause the market price of our common stock to decline.

We do not intend to pay cash dividends.

We have never declared or paid cash dividends on our capital stock and we do not anticipate paying any cash dividends in the foreseeable future. We currently intend to retain all available funds and any future earnings for debt service and use in the operation and expansion of our business. In addition, the terms of any future debt or credit facility may preclude us from paying any dividends.

Our outstanding shares of Series B Convertible Preferred Stock, Series C Convertible Preferred Stock, Series D Convertible Preferred Stock and our outstanding common stock warrants are convertible and exercisable into shares of our common stock and when converted or exercised, the issuance of additional shares of common stock may result in downward pressure on the trading price of our common stock.

We have outstanding shares of Series B Convertible Preferred Stock, Series C Convertible Preferred Stock and Series D Convertible Preferred Stock that are each convertible into shares of common stock. We believe that as such holders convert their preferred shares into common stock, they will immediately sell their shares of common stock. The sale of such shares of common stock may result in downward pressure on the trading price of our common stock resulting in a lower stock price. Additionally, we have outstanding warrants to purchase shares of common stock. Many of these warrants have a cashless exercise provision that if exercised may also result in downward pressure on the trading price of our common stock and cause such price to decline.

SPECIAL NOTE REGARDING 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 titled "Business," "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this prospectus and in any of our filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act

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 ability to design, manufacture and commercialize armor plates for military, police and civilian use;
- Our ability to successfully integrate the recently acquired Technology Assessment & Transfer and develop and commercialize products arising from this acquisition;
- 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;

13

- 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;
- potential changes to the healthcare delivery systems and payment methods in the United States or internationally;
- our ability to attract and retain a qualified management team, engineering team, sales and marketing team, distribution team, 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.

14

USE OF PROCEEDS

We estimate that the net proceeds from the Offering will be approximately \$4.35 million (assuming the sale of all Units offered hereby at the assumed public offering price of

\$0.5615 per Unit, which represents the closing sale price of our common stock on Nasdaq on October 19, 2023, and assuming no issuance of pre-funded warrants and no exercise of the Class E Warrants issued in connection with this offering), after deducting expenses relating to this offering payable by us estimated at approximately \$0.7 million, including placement agent fees and expenses which include fees payable to Ascendant Capital Markets, LLC (“Ascendant”), for certain financial advisor services provided in connection with the Offering.

	100% of Units Sold	% of Total	50% of Units Sold	% of Total	25% of Units Sold	% of Total
Gross Proceeds from Offering	\$ 5,000,000		\$ 2,500,000		\$ 1,250,000	
Use of Proceeds						
Placement Agent Fees	\$ 350,000	7.0%	\$ 175,000	7.0%	\$ 87,500	7.0%
Offering Expenses	\$ 300,000	6.0%	\$ 300,000	12.0%	\$ 300,000	24.0%
General Corporate	\$ 4,350,000	87.0%	\$ 2,025,000	81.0%	\$ 862,500	69.0%
Total Use of Proceeds	\$ 5,000,000	100.0%	\$ 2,500,000	100.0%	\$ 1,250,000	100.0%

We intend to use the net proceeds from the Offering 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 Class E 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.

15

CAPITALIZATION

The following table sets forth our actual cash and cash equivalents and capitalization, each as of June 30, 2023, and as adjusted to give effect to the issuance and sale of securities in this offering at an assumed public offering price of \$0.5615 per Unit, which is the last reported sale price for our common stock on the Nasdaq Capital Market on October 19, 2023, and an aggregate offering amount of \$4.35 million, after deducting the placement agent fees and estimated offering expenses payable by us.

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

You should read this information in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our condensed consolidated financial statements and related notes appearing in our Quarterly Report on Form 10-Q for the quarters ended June 30, 2023 and March 31, 2023, and our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, which are incorporated by reference in this prospectus.

	As of June 30, 2023	
	(unaudited, amounts in thousands except for share and per share information)	
	Actual	As Adjusted⁽¹⁾
Cash and cash equivalents	\$ 9,328	
Borrowings	107	
Operating lease liability	2,116	
Stockholders’ equity:		
Convertible preferred stock Series B, \$0.01 par value, 130,000,000 total shares authorized inclusive of all series of preferred; 26 shares outstanding (actual and as adjusted)	-	
Convertible preferred stock Series C, \$0.01 par value, 130,000,000 total shares authorized inclusive of all series of preferred; 50 shares outstanding (actual and as adjusted)	-	
Convertible preferred stock Series D, \$0.01 par value, 130,000,000 total shares authorized inclusive of all series of preferred; 180 shares outstanding (actual and as adjusted)	-	
Common stock, \$0.01 par value; 250,000,000 shares authorized; 4,208,027 shares issued and outstanding (actual); shares (as adjusted)	42	
Additional paid-in capital	278,973	
Accumulated deficit	(265,203)	
Total stockholders’ equity	13,812	
Total capitalization	16,035	

(1) A \$1.00 increase or decrease in the assumed combined public offering price of \$0.5615 per Unit, which is the last reported sale price of our common stock on Nasdaq on October 19, 2023, would increase or decrease, as appropriate, our as adjusted cash and cash equivalents, additional paid-in capital and total stockholders’ equity by approximately \$8.9 million, assuming the number of Units offered by us as set forth on the cover page of this prospectus remains the same, and after deducting the estimated placement agent fees and estimated offering expenses payable by us. Similarly, a 1,000,000 Unit increase or decrease in the number of Units offered by us, based on the assumed combined public offering price of \$0.5615 per Unit, would increase or decrease our as adjusted cash and cash equivalents, and total stockholders’ equity by approximately \$0.56 million, after deducting the estimated placement agent fees and estimated offering expenses payable by us.

Except as otherwise noted, all information in this prospectus reflects and assumes (i) no sale of pre-funded warrants in this offering, which, if sold, would reduce the number of shares of common stock that we are offering on a one-for-one basis and (ii) no exercise of the Class E Warrants issued in this offering. The above discussion and table are based on 4,208,027 shares of common stock outstanding as of June 30, 2023 and excludes, as of such date:

- 11,909 shares of our common stock issuable upon the exercise of stock options, with a weighted-average exercise price of \$120 per share, and vesting of restricted stock units;
- 1,244,754 shares of common stock issuable upon the exercise of outstanding warrants;
- 10,576 shares of our common stock issuable upon the conversion of 26 shares of series B convertible preferred stock outstanding;
- 338 shares of our common stock issuable upon the conversion of 50 shares of series C convertible preferred stock outstanding;
- 11,919 shares of our common stock issuable upon the conversion of 180 shares of series D convertible preferred stock outstanding;

16

MARKET PRICE AND DIVIDEND POLICY

Our shares of common stock are currently quoted on The Nasdaq Capital Market under the symbol “SINT”. On October 19, 2023, the last reported sales price of our common stock on Nasdaq was \$0.5615.

Holders of Record

As of October 19, 2023, we had approximately 159 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

17

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 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 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 September 29, 2023, there were 4,208,151 shares of common stock outstanding. Each outstanding share of common stock entitles the holder thereof to one vote per share on all matters. Our 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. Holders of our common stock 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 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”.

Description of Securities Included in this Offering

We are offering Units, each Unit consisting of one share of common stock and one Class E Warrant to purchase one share of common stock.

We are offering to each purchaser whose purchase of shares of common stock in this offering would otherwise result in the purchaser, together with its affiliates, beneficially owning more than 4.99% (or, at the election of the holder, 9.99%) of our outstanding shares of common stock immediately following the consummation of this offering, the opportunity to purchase, if the purchaser so chooses, Units containing pre-funded warrants, in lieu of shares of common stock that would otherwise result in the purchaser’s beneficial ownership exceeding 4.99% (or, at the election of the holder, 9.99%) of our outstanding shares of common stock. For each pre-funded warrant we sell (without regard to any limitation on exercise set forth therein), the number of shares of common stock we are offering will be decreased on a one-for-one basis. Because one Class E Warrant is being sold together in this offering with each share of common stock or, in the alternative, each pre-funded warrant to purchase one share of common stock, the number of Class E Warrants sold in this offering will not change as a result of a change in the mix of the shares of common stock and pre-funded warrants sold.

18

We are also registering the shares of common stock issuable from time to time upon exercise of the Class E Warrants, and pre-funded warrants included in the Units offered hereby. Our Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock (or pre-funded warrants) and Class E Warrants comprising our Units are immediately separable and will be issued separately in this offering.

The following summary of certain terms and provisions of the pre-funded warrants and Class E Warrants offered hereby is not complete and is subject to, and qualified in its entirety by the provisions of the form of pre-funded warrant, and the form of Class E Warrant, which are filed as exhibits to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions set forth in the form of Class E Warrant and form of pre-funded warrant.

Exercisability. The pre-funded warrants are exercisable at any time after their original issuance until they are exercised in full. The Class E Warrants are exercisable at any time after their original issuance and at any time up to the date that is _____ years after their original issuance. Each of the Class E Warrants and the pre-funded warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the shares of common stock underlying the Class E Warrants, under the Securities Act of 1933, as amended (the “Securities Act”) is effective and available for the issuance of such shares, by payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise. If a registration statement registering the issuance of the shares of common stock underlying the Class E Warrants or pre-funded warrants under the Securities Act is not effective or available, the holder may, in its

sole discretion, elect to exercise the Class E Warrant or pre-funded warrant through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the warrant. We may be required to pay certain amounts as liquidated damages as specified in the warrants in the event we do not deliver shares of common stock upon exercise of the warrants within the time periods specified in the warrants. No fractional shares of common stock will be issued in connection with the exercise of a warrant.

Exercise Limitation. A holder will not have the right to exercise any portion of the pre-funded warrants, or Class E Warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election by a holder prior to the issuance of any warrants, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99%, upon at least 61 days' prior notice from the holder to us with respect to any increase in such percentage.

Exercise Price. The exercise price for the pre-funded warrants is \$0.0001 per share. The exercise price per whole share of common stock purchasable upon exercise of the Class E Warrants is \$ _____ per share. The exercise price and number of shares of common stock issuable on exercise are subject to appropriate adjustments in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock.

Transferability. Subject to applicable laws, the Class E Warrants and pre-funded warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing. We do not intend to list the Class E Warrants or the pre-funded warrants offered in this offering on any securities exchange or other trading market. Without an active trading market, the liquidity of these securities will be limited.

Warrant Agent. The pre-funded warrants and Class E Warrants are expected to be issued in registered form under a warrant agreement between American Stock Transfer & Trust Company, LLC, as warrant agent, and us. The Class E Warrants and the pre-funded warrants shall initially be represented only by one or more global warrants deposited with the warrant agent, as custodian on behalf of The Depository Trust Company (DTC) and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

19

Fundamental Transactions. In the event of a fundamental transaction, as described in the Class E Warrants and pre-funded warrants and generally including, with certain exceptions, any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding shares of common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding shares of common stock, the holders of the Class E Warrants and pre-funded warrants will be entitled to receive upon exercise of the warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the warrants immediately prior to such fundamental transaction. In addition, in the event of a fundamental transaction, we or the successor entity, at the request of a holder of Class E Warrants, will be obligated to purchase any unexercised portion of such Class E Warrants in accordance with the terms of the Class E Warrants. Additionally, as more fully described in the Class E Warrants, in the event of certain fundamental transactions, the holders of the Class E Warrants will be entitled to receive consideration in an amount equal to the Black Scholes value of the Class E Warrants on the date of consummation of such transaction.

Rights as a Shareholder. Except as otherwise provided in the Class E Warrants or pre-funded warrants or by virtue of such holder's ownership of our shares of common stock, the holder of a Class E Warrant or pre-funded warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the warrant. Holders of pre-funded warrants have the right to participate in dividends and certain distributions as specified in the warrant.

Governing Law. The pre-funded warrants, Class E Warrants, and warrant agreement are governed by New York law.

Description of Other Outstanding Securities of the Company

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 September 29, 2023, there were 26 shares of Series B Preferred stock outstanding which are convertible into 10,576 shares of our common 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 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.

20

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 \$13,060.80 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 \$2.70 (the "Conversion

Price”). The 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 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 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 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 Certificate of Designation, no further adjustment of the 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.

Subject to certain exclusions contained in the 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 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 Certificate of Designation, no further adjustment of the 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 Conversion Price has been or is to be made, except as contemplated by the terms of the Certificate of Designation, no further adjustment of the Conversion Price will be made by reason of such issuance or sale.

21

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 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 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).

In addition, holders of Series B 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 the common stock. Additionally, we will not pay any dividends on shares of common stock (other than dividends in the form of common stock) unless and until such time as we pay dividends on each Series B Preferred Share on an as-converted basis. Other than as set forth in the previous sentence, no other dividends will be paid on Series B Preferred Stock and we will pay no dividends (other than dividends in the form of common stock) on shares of common stock unless we simultaneously comply with the previous sentence.

22

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 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 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 September 29, 2023, there were 50 shares of Series C Preferred stock outstanding which are convertible into 338 shares of our common stock.

Conversion. Each share of Series C Preferred Stock will be convertible at our option at any time on or after the first anniversary of the expiration of the Rights Offering 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 Series C Preferred Stock by a conversion price of \$148.14 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 us, 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.

23

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 certificate of designation or as otherwise required by law, the 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 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.

Series D Preferred Stock

Our board of directors designated 4,656 shares of our preferred stock as Series D Preferred Stock. As of September 29, 2023, there were 180 shares of Series D Preferred stock outstanding which are convertible into 11,919 shares of our common stock.

Conversion. Each share of Series D Preferred Stock is 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 of \$15.102 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 Preferred Stock will not have the right to convert any portion of the Series D 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 D Preferred Stock, upon notice to us, may increase or decrease the beneficial ownership limitation provisions of such holder's Series D 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 Series D Preferred Stock, the holders of the Series D 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 D Preferred Stock.

24

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 Series D Preferred Stock has no voting rights.

Liquidation Preference. Upon our liquidation, dissolution or winding-up, whether voluntary or involuntary, holders of Series D 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 D 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 Series D Preferred Stock. Shares of Series D Preferred Stock are not otherwise entitled to any redemption rights, or mandatory sinking fund or analogous provisions.

Future Preferred Stock.

Our Board of Directors will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we sell under this prospectus and applicable prospectus supplements in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or incorporate by reference into the registration statement of which this prospectus is a part the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. This description 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;

25

- 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 under this prospectus, 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.

Warrants

As of September 29, 2023, there were 1,244,754 common stock purchase warrants outstanding, which expire between February 2025 and February 2028. Each of these warrants entitles the holder to purchase one share of common stock at prices ranging between \$2.70 and \$150 per share. Certain of these warrants has 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. Additionally, certain of these warrants entitle a holder to also effect an “alternative cashless exercise” wherein the holder may surrender a certain number of warrants in return for a lesser number of shares of our common stock on a cashless basis. 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.

26

The holders of certain of these warrants have registration rights, as described in greater detail below.

February 2023 Offering Warrants

On February 7, 2023, we issued a Class C Common Stock Purchase Warrant to purchase up to 2,150,000 shares of Common Stock (the “Class C Warrants”) and a Class D Common Stock Purchase Warrant to purchase up to 1,075,000 shares of Common Stock (the “Class D Warrants”). The Class C and Class D Warrants are exercisable at a price of \$5.60 per share. The Class C Warrants will expire five years from the date of issuance and the Class D Warrants will expire three years from the date of issuance. In addition, a holder may also effect an “alternative cashless exercise” wherein the aggregate number of shares of common stock issuable in such alternative cashless exercise shall equal the product of (x) the aggregate number of shares of common stock that would be issuable upon exercise of the Class C Warrant or Class D Warrant in accordance with the terms of such warrant if such exercise were by means of a cash exercise rather than a cashless exercise and (y) 0.40 with respect to the Class C Warrant or 0.80 with respect to the Class D Warrant.

The following summary of certain terms and provisions of the Class C Warrants, and Class D Warrants is not complete and is subject to, and qualified in its entirety by the provisions of the form of Class C Warrant, and the form of Class D Warrant, which are filed as exhibits to this registration statement.

Exercisability. The Class C Warrants are exercisable at any time after their original issuance and at any time up to the date that is five years after their original issuance. The Class D Warrants are exercisable at any time after their original issuance and at any time up to the date that is three years after their original issuance. Each of the Class C Warrants, Class D Warrants, are exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the shares of common stock underlying the Class C Warrants or Class D Warrants, under the Securities Act of 1933, as amended (the “Securities Act”) is effective and available for the issuance of such shares, by payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise. If a registration statement registering the issuance of the shares of common stock underlying the Class C Warrants, Class D Warrants, under the Securities Act is not effective or available, the holder may, in its sole discretion, elect to exercise the Class C Warrant or Class D Warrant, through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the warrant. We may be required to pay certain amounts as liquidated damages as specified in the warrants in the event we do not deliver shares of common stock upon exercise of the warrants within the time periods specified in the warrants. In addition, a holder may also effect an “alternative cashless exercise.” In such event, the aggregate number of shares of common stock issuable in such alternative cashless exercise shall equal the product of (x) the aggregate number of shares of common stock that would be issuable upon exercise of the Class C Warrant or Class D Warrant in accordance with the terms of such warrant if such exercise were by means of a cash exercise rather than a cashless exercise and (y) 0.40 with respect to the Class C Warrant or 0.80 with respect to the Class D Warrant. No fractional shares of common stock will be issued in connection with the exercise of a Class C Warrant or Class D Warrant. With respect to any alternative cashless exercise, fractional shares will be rounded down to the nearest whole share.

Fractional Shares. No fractional shares of common stock will be issued in connection with the exercise of a warrant. Other than as described above with respect to alternative cashless exercises, in lieu of fractional shares, we will, at our election, either pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

Exercise Limitation. A holder will not have the right to exercise any portion of the Class C Warrants, or Class D Warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election by a holder prior to the issuance of any warrants, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99%, upon at least 61 days’ prior notice from the holder to us with respect to any increase in such percentage.

Exercise Price. The exercise price per whole share of common stock purchasable upon exercise of the Class C Warrants and the Class D Warrants is \$5.60 per share. The exercise price and number of shares of common stock issuable on exercise are subject to appropriate adjustments in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock.

Transferability. Subject to applicable laws, the Class C Warrants and Class D Warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing. We do not intend to list the Class C Warrants or the Class D Warrants on any securities exchange or other trading market. Without an active trading market, the liquidity of these securities will be limited.

Warrant Agent. The Class C Warrants and Class D Warrants are issued in registered form under a warrant agreement between American Stock Transfer & Trust Company, LLC, as warrant agent, and us. The Class C Warrants and Class D Warrants shall initially be represented only by one or more global warrants deposited with the warrant agent, as custodian on behalf of The Depository Trust Company (DTC) and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

Fundamental Transactions. In the event of a fundamental transaction, and generally including, with certain exceptions, any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding shares of common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding shares of common stock, the holders of the Class C Warrants and Class D Warrants will be entitled to receive upon exercise of the warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the warrants immediately prior to such fundamental transaction. In addition, in the event of a fundamental transaction, we or the successor entity, at the request of a holder of Class C Warrants or Class D Warrants, will be obligated to purchase any unexercised portion of such Class C Warrants or Class D Warrants in accordance with the terms of the warrants. Additionally, as more fully described in the warrants, in the event of certain fundamental transactions, the holders of the warrants will be entitled to receive consideration in an amount equal to the Black Scholes value of the warrants on the date of consummation of such transaction.

Rights as a Shareholder. Except as otherwise provided in the Class C Warrants and Class D Warrants or by virtue of such holder’s ownership of our shares of common stock, the holder of a Class C Warrant or Class D Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the warrant.

Governing Law. The Class C Warrants, Class D Warrants, and warrant agreement are governed by New York law.

Maxim and Ascendant February 2023 Warrants

In connection with the February 2023 Offering, we issued (i) to Maxim, as our sole placement agent for the 2023 Offering, 73,100 warrants to purchase shares of our common stock and (ii) to Ascendant, as a financial advisor to us in the February 2023 Offering, 12,900 warrants to purchase shares of our common stock (collectively, the “Placement Agent Warrants”). The Placement Agent Warrants will expire on February 7, 2028. The Placement Agent Warrants are exercisable at a price of \$6.16 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 Placement Agent Warrants will not have the right to exercise any portion of the Placement Agent Warrants 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 Placement Agent Warrants, 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 Placement Agent Warrants. The Placement Agent Warrants may be exercised as to all or a lesser number of shares of our

common stock and contain certain demand registration rights and unlimited “piggyback” registration rights for a period of five years after February 7, 2023, at our expense. We relied on the exemption from registration available under Section 4(a)(2) of the Securities Act in connection with the issuance of the Dealer Manager Warrants to Maxim and Ascendant.

The foregoing description of the Placement Agent Warrants is not complete. For the complete terms of the Placement Agent Warrants, you should refer to the form of Placement Agent Warrant filed as an exhibit to this registration statement.

October 2022 Rights Offering Warrants

On October 17, 2022, we issued 308,321 common stock warrants designated as our “Class A” warrants and 308,321 common stock warrants designated as our “Class B” warrants (collectively the “October 2022 Warrants”) in a rights offering to our stockholders (the “October 2022 Rights Offering”). Each of these warrants entitles the holder to purchase one share of common stock at an exercise price of \$2.70 per share. 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. The material terms and provisions of the October 2022 Warrants are summarized below. This summary of the October 2022 Warrants is not complete. For the complete terms of the October 2022 Warrants, you should refer to the form of October 2022 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 October 2022 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 Class A Warrant is exercisable at any time and will expire five years from the date of issuance. Each Class B Warrant is exercisable at any time and will expire three years from the date of issuance. The 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 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 October 2022 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 October 2022 Warrants, the holder of an October 2022 Warrant, solely in such holder’s capacity as a holder of such 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 October 2022 Warrant may be modified or amended or the provisions thereof waived with the written consent of us and the holder.

The October 2022 Warrants were issued pursuant to a warrant agent agreement by and between us and America Stock Transfer & Trust Company, the warrant agent.

Maxim and Ascendant October 2022 Warrants

In connection with the October 2022 Rights Offering, we issued (i) to Maxim, as the dealer-manager in the October 2022 Rights Offering, 10,483 warrants to purchase shares of our common stock and (ii) to Ascendant, as a financial advisor to us in the October 2022 Rights Offering, 1,850 warrants to purchase shares of the Company’s common stock

(collectively, the “Dealer Manager Warrants”). The Dealer Manager Warrants are non-exercisable for 6 months from October 17, 2022 and will expire on September 23, 2027. The Dealer Manager Warrants will be exercisable at a price of \$16.61 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 Dealer Manager Warrants will not have the right to exercise any portion of the Dealer Manager Warrants 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 Dealer Manager Warrants, 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 Dealer Manager Warrants. In addition, the Dealer Manager Warrants shall not be redeemable and may not be sold, transferred, assigned, pledged or hypothecated or be the subject of any hedging, short sale, derivative, put, or call transaction for a period of 180 days following September 23, 2022, except that they may be assigned, in whole or in part, to any officer or partner of Maxim (or to Ascendant). The Dealer Manager Warrants may be exercised as to all or a lesser number of shares of our common stock, and contain unlimited “piggyback” registration rights for a period of five years after September 23, 2022, at the Company’s expense. We relied on the exemption from registration available under Section 4(a)(2) of the Securities Act in connection with the issuance of the Dealer Manager Warrants to Maxim and Ascendant.

The foregoing description of the Dealer Manager Warrants is not complete. For the complete terms of the Dealer Manager Warrants, you should refer to the form of Dealer Manager Warrant filed as an exhibit to the registration statement of which this prospectus forms a part.

February 2020 Rights Offering Warrants

On February 6, 2020, we issued 63,720 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 \$150 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 shares of common stock 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 us or our successor entity purchase the February 2020 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 February 2020 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.

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.

Also on February 6, 2020, in connection with a rights offering, we issued 2,039 common stock warrants (the “Maxim Warrants”) to Maxim, as the dealer manager in such rights offering, and 510 common stock warrants (the “Ascendant Warrants”) to Ascendant, 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 \$162.95 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 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.

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. A 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.

Stock Market Listing

Our common stock is listed on The NASDAQ Capital Market under the symbol "SINT".

34

PLAN OF DISTRIBUTION

We are offering up to _____ Units, based on an assumed public offering price of \$ _____ per Unit, which represents the closing price of our common stock on Nasdaq on _____, 2023, for gross proceeds of up to \$ _____ million before deduction of placement agent commissions and offering expenses, in a best-efforts offering. There is no minimum amount of proceeds that is a condition to closing of this offering. The actual amount of gross proceeds, if any, in this offering could vary substantially from the gross proceeds from the sale of the maximum amount of securities being offered in this prospectus.

Pursuant to a placement agency agreement, dated as of _____, 2023, we have engaged Maxim Group LLC to act as our exclusive placement agent (the "Placement Agent") to solicit offers to purchase the securities offered by this prospectus. The Placement Agent is not purchasing or selling any securities, nor is it required to arrange for the purchase and sale of any specific number or dollar amount of securities, other than to use its "reasonable best efforts" to arrange for the sale of the securities by us. Therefore, we may not sell the entire amount of securities being offered. Investors purchasing securities offered hereby will have the option to execute a securities purchase agreement with us. In addition to the rights and remedies available to all investors in this offering under federal and state securities laws, the investors which enter into a securities purchase agreement will also be able to bring claims of breach of contract against us. Investors who do not enter into a securities purchase agreement shall rely solely on this prospectus in connection with the purchase of our securities in this offering. The Placement Agent may engage one or more subagents or selected dealers in connection with this offering.

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

We will deliver the securities being issued to the investors upon receipt of investor funds for the purchase of the securities offered pursuant to this prospectus. There is no arrangement for funds to be received in escrow, trust or similar arrangement and the Units will be offered at a fixed price and are expected to be issued in a single closing. We expect to deliver the securities being offered pursuant to this prospectus on or about _____, 2023.

Placement Agent Fees, Commissions and Expenses

Upon the closing of this offering, we will pay the placement agent a cash transaction fee equal to 7% of the aggregate gross cash proceeds to us from the sale of the securities in the offering. In addition, we will reimburse the placement agent for its out-of-pocket expenses incurred in connection with this offering, including the fees and expenses of the counsel for the placement agent, up to \$100,000.

The following table shows the public offering price, placement agent fees and proceeds, before expenses, to us.

	<u>Per Unit</u>	<u>Total</u>
Public offering price	\$ _____	\$ _____
Placement agent fees	\$ _____	\$ _____
Proceeds, before expenses, to us	\$ _____	\$ _____

We estimate that the total expenses of the offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the placement agent commission, will be approximately \$ _____, all of which are payable by us. This figure includes, among other things, the placement agent's fees and expenses (including the legal fees, costs and expenses for the placement agent's legal counsel) up to \$100,000.

35

Placement Agent Warrants

Additionally, we agreed to grant to the placement agent common stock purchase warrants exercisable for a number of shares of our common stock equal to 4% of the Units sold in the offering. In the event that we engage Ascendant Capital Markets, LLC as a financial advisor in connection with the offering, the placement agent agreed that Ascendant shall be entitled to 15% of the total fee earned by the placement agent in connection with the offering and 15% of the placement agent warrants issuable upon closing (i.e., the placement agent will receive 85% of the cash fee and placement agent warrants, and Ascendant shall receive 15% of the cash fee and placement agent warrants). The placement agent 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 placement agent warrants will be exercisable at a price equal to 110.0% of the public offering price of the Units. The placement agent warrants shall not be redeemable. The placement agent 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 the placement agent (or to Ascendant) subject to the terms of the lock-up. The placement agent warrants may be exercised as to all or a lesser number of shares of our common stock, and will contain unlimited "piggyback" registration rights for a period of five years after the commencement of sales of the offering at our expense.

Lock-Up Agreements

We, each of our officers and directors and stockholders holding five percent or more of our shares of common stock have agreed, subject to certain exceptions, not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any shares of our common stock or other securities convertible into or exercisable or exchangeable for our common stock for a period of six months after this offering is completed without the prior written consent of the placement agent.

The placement agent may in its sole discretion and at any time without notice release some or all of the shares subject to lock-up agreements prior to the expiration of the lock-up period. When determining whether or not to release shares from the lock-up agreements, the placement agent will consider, among other factors, the security holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time.

Indemnification

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the placement agent may be required to make for these liabilities.

Regulation M

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

Determination of Offering Price and Warrant Exercise Price

The actual offering price of the securities we are offering, and the exercise price of the Warrants included in the Units that we are offering, were negotiated between us, the placement agent and the investors in the offering based on the trading of our shares of common stock prior to the offering, among other things. Other factors considered in determining the public offering price of the securities we are offering, as well as the exercise price of the Warrants that we are offering include our history and prospects, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, the general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

36

Regulation M

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

Electronic Distribution

A prospectus in electronic format may be made available on a website maintained by the placement agent. In connection with the offering, the placement agent or selected dealers may distribute prospectuses electronically. No forms of electronic prospectus other than prospectuses that are printable as Adobe® PDF will be used in connection with this offering.

Other than the prospectus in electronic format, the information on the placement agent's website and any information contained in any other website maintained by the placement agent is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the placement agent in its capacity as placement agent and should not be relied upon by investors.

Certain Relationships

The placement agent and its affiliates have provided and may in the future provide, from time to time, investment banking and financial advisory services to us in the ordinary course of business, for which they may receive customary fees and commissions.

In connection with a rights offering in October 2022, we entered into a dealer-manager agreement with the placement agent, and on the closing of such offering on October 17, 2022, we paid the placement agent a fee of 7% of the gross proceeds we received in the rights offering, as well as certain expenses, and issued to the placement agent warrants to purchase 10,483 shares of our common stock and to Ascendant warrants to purchase 1,850 shares of our common stock.

On February 25, 2021, we entered into an equity distribution agreement with the placement agent (the "Equity Distribution Agreement"), pursuant to which we may sell shares of our common stock having an aggregate offering price of up to \$15,000,000 from time to time through the placement agent. The placement agent will be entitled to a transaction fee at a fixed rate of 2.0% of the gross sales price of shares of common stock sold under the Equity Distribution Agreement. As of the date hereof, no shares of our common stock have been sold under the Equity Distribution Agreement.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC, whose address is 59 Maiden Lane, New York, New York 10038. Their telephone number is 1-800-937-5449.

Listing

Our common stock is traded on Nasdaq under the symbol "SINT."

Selling Restrictions

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

37

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

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

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

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

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

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

38

United Kingdom. Each underwriter has represented and agreed that:

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

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

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

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

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

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

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

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

Notice to Prospective Investors in the Cayman Islands. No invitation, whether directly or indirectly, may be made to the public in the Cayman Islands to subscribe for our securities.

39

Taiwan. The securities have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the securities in Taiwan.

Notice to Prospective Investors in Hong Kong. The contents of this prospectus have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to the offer. If you are in any doubt about any of the contents of this prospectus, you should obtain independent professional advice. Please note that (i) our shares may not be offered or sold in Hong Kong, by means of this prospectus or any document other than to “professional investors” within the meaning of Part I of Schedule 1 of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) (SFO) and any rules made thereunder, or in other circumstances which do not result in the document being a “prospectus” within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong) (CO) or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO, and (ii) no advertisement, invitation or document relating to our shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere) which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the SFO and any rules made thereunder.

Notice to Prospective Investors in the People’s Republic of China. This prospectus may not be circulated or distributed in the PRC and the shares may not be offered or sold, and will not offer or sell to any person for re-offering or resale directly or indirectly to any resident of the PRC except pursuant to applicable laws, rules and regulations of the PRC. For the purpose of this paragraph only, the PRC does not include Taiwan and the special administrative regions of Hong Kong and Macau.

40

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

The following is a general discussion of certain material U.S. federal income tax consequences relating to the acquisition, ownership and disposition of Units, consisting of shares of common stock and Class E Warrants, the acquisition, ownership and disposition of units consisting of pre-funded warrants and Class E Warrants (such units are referred to in this discussion as “pre-funded units”), the acquisition, ownership, and disposition of shares of common stock acquired as part of the Units, the acquisition, ownership, and disposition of pre-funded warrants acquired as part of the pre-funded units, the exercise, disposition, or expiration of Class E Warrants acquired as part of the Units or pre-funded units, the acquisition, ownership, and disposition of shares of common stock received upon exercise of the pre-funded warrants, and the acquisition, ownership, and disposition of shares of common stock received upon exercise of the Class E Warrants (the “warrant shares”), all as acquired pursuant to this prospectus. This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended (the “Internal Revenue Code”), existing and proposed U.S. Treasury Regulations promulgated or proposed thereunder and current administrative and judicial interpretations thereof, all as in effect as of the date of this prospectus and all of which are subject to change or to differing interpretation, possibly with retroactive effect. 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 Internal Revenue Service (the “IRS”), or an opinion of legal counsel, regarding the matters discussed below. There can be no assurance that the IRS or a court will not take a contrary position.

This discussion is limited to U.S. holders and non-U.S. holders who hold Units, pre-funded units, shares of common stock, pre-funded warrants, Class E Warrants, or warrant shares, as applicable, as a capital asset within the meaning of Section 1221 of the Internal Revenue Code (generally, as property held for investment). This discussion does not address all aspects of U.S. federal income taxation, such as the U.S. alternative minimum income tax and the additional tax on net investment income, nor does it address any aspect of state, local or non-U.S. taxes, or U.S. federal taxes other than income taxes, such as federal estate and gift taxes. Except as provided below, this summary does not address tax reporting requirements. This discussion does not consider any specific facts or circumstances that may apply to a holder and does not address the special tax considerations that may be applicable to particular holders, such as:

41

- insurance companies;
- tax-exempt organizations and governmental organizations;
- banks or other financial institutions;
- brokers or dealers in securities or foreign currency;
- traders in securities who elect to apply a mark-to-market method of accounting;
- real estate investment trusts, regulated investment companies or mutual funds;
- pension plans;
- controlled foreign corporations, and shareholders thereof;
- passive foreign investment companies, and shareholders thereof;
- 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 that own (directly, indirectly or constructively) more than 5% of the total voting power or total value of our common stock;
- corporations that accumulate earnings to avoid U.S. federal income tax;
- persons subject to the alternative minimum tax;
- U.S. expatriates and certain former citizens or long-term residents of the United States;
- persons that have a “functional currency” other than the U.S. dollar;
- persons that acquire Units, pre-funded units, shares of common stock, pre-funded warrants, Class E Warrants or warrant shares as compensation for services;
- owners that hold our stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;

- holders subject to special accounting rules;
- S corporations (and shareholders thereof);
- partnerships or other entities treated as partnerships for U.S. federal income tax purposes (and partners or other owners thereof); and
- U.S. holders that are subject to taxing jurisdictions other than, or in addition to, the United States with respect to their Units, pre-funded units, shares of common stock, pre-funded warrants, Class E Warrants or warrant shares, or that hold such securities in connection with a trade or business, permanent establishment or fixed base outside the United States.

If an entity or arrangement taxable as a partnership (or other “pass-through entity”) for U.S. federal income tax purposes holds our Units, pre-funded units, shares of common stock, pre-funded warrants, Class E Warrants or warrant shares, the U.S. federal income tax treatment of such entity (or arrangement) and the partners (or other owners) of such entity generally will depend on the status of the partners, the activities of the entity and certain determinations made at the partner level. This summary does not address the tax consequences to any such owner. Partners (or other owners) of entities or arrangements that are classified as partnerships or as “pass-through” entities for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal, U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences arising from and relating to the acquisition, ownership, and disposition our Units, pre-funded units, shares of common stock, pre-funded warrants, Class E Warrants or warrant shares.

For purposes of this discussion, the term “U.S. holder” means a beneficial owner of our Units, pre-funded units, shares of common stock, pre-funded warrants, Class E Warrants or warrant shares that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized in or 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 taxation regardless of its source; or
- a trust, if (1) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or (2) the trust has a valid election to be treated as a U.S. person under applicable U.S. Treasury Regulations.

A “non-U.S. holder” is a beneficial owner of our Units, pre-funded units, shares of common stock, pre-funded warrants, Class E Warrants or warrant shares that is neither a U.S. holder nor a partnership (or other entity treated as a partnership for U.S. federal income tax purposes).

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT, AND IS NOT INTENDED TO BE, LEGAL OR TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE U.S. FEDERAL, STATE, LOCAL, AND NON-U.S. INCOME, ESTATE AND OTHER TAX CONSIDERATIONS OF ACQUIRING, HOLDING AND DISPOSING OF OUR UNITS, PRE-FUNDED UNITS, SHARES OF COMMON STOCK, PRE-FUNDED WARRANTS, CLASS E WARRANTS OR WARRANT SHARES.

U.S. Federal Income Tax Consequences of the Acquisition of Units or Pre-Funded Units

For U.S. federal income tax purposes, the acquisition by a U.S. holder or a non-U.S. holder of a Unit will be treated as the acquisition of one share of common stock and one Class E Warrant. The purchase price for each Unit will be allocated among these two components in proportion to their relative fair market values at the time the Unit is purchased by the U.S. holder or non-U.S. holder. This allocation of the purchase price for each Unit will establish a U.S. holder’s or non-U.S. holder’s initial tax basis for U.S. federal income tax purposes in the one share of common stock and the one Class E Warrant that comprise each Unit.

For this purpose, we will allocate \$ _____ of the purchase price for the Unit to the share of common stock, and \$ _____ of the purchase price for the Unit to the Class E Warrant. However, the IRS will not be bound by such allocation of the purchase price for the Units, and therefore, the IRS or a U.S. court may not respect the allocation set forth above. Each U.S. holder and non-U.S. holder should consult its own tax advisor regarding the allocation of the purchase price for the Units.

For U.S. federal income tax purposes, the acquisition by a U.S. holder or a non-U.S. holder of a pre-funded unit will be treated as the acquisition of one pre-funded warrant and one Class E Warrant. The purchase price for each pre-funded unit will be allocated among these two components in proportion to their relative fair market values at the time the pre-funded unit is purchased by the U.S. holder or non-U.S. holder. This allocation of the purchase price for each pre-funded unit will establish a U.S. holder’s or non-U.S. holder’s initial tax basis for U.S. federal income tax purposes in the one pre-funded warrant and one Class E Warrant that comprise each pre-funded unit.

For this purpose, we will allocate \$ _____ of the purchase price for the pre-funded unit to the pre-funded warrant and \$ _____ of the purchase price for each pre-funded unit to the Class E Warrant. However, the IRS will not be bound by such allocation of the purchase price for the pre-funded units, and therefore, the IRS or a U.S. court may not respect the allocation set forth above. Each U.S. holder and non-U.S. holder should consult its own tax advisor regarding the allocation of the purchase price for the pre-funded units.

Treatment of Pre-Funded Warrants

Although it is not entirely free from doubt, we believe that a pre-funded warrant should be treated as a separate class of shares of common stock for U.S. federal income tax purposes and a U.S. holder or non-U.S. holder of pre-funded warrants should generally be taxed in the same manner as a holder of shares of common stock except as described below. Accordingly, no gain or loss should be recognized upon the exercise of a pre-funded warrant and, upon exercise, the holding period of a pre-funded warrant should carry over to the shares of common stock received. Similarly, the tax basis of the pre-funded warrant should carry over to the shares of common stock received upon exercise, increased by the exercise price of \$0.0001 per share. However, such characterization is not binding on the IRS, and the IRS may treat the pre-funded warrants as warrants to acquire shares of common stock. If so, the amount and character of a U.S. holder’s or non-U.S. holder’s gain with respect to an investment in pre-funded warrants could change. Accordingly, each U.S. holder and non-U.S. holder should consult its own tax advisors regarding the risks associated with the acquisition of a pre-funded warrant pursuant to this prospectus (including potential alternative characterizations). The balance of this discussion generally assumes that the characterization described above is respected for U.S. federal income tax purposes.

In certain limited circumstances, a U.S. holder may be permitted to undertake a cashless exercise of pre-funded warrants into shares of common stock. The U.S. federal income tax treatment of a cashless exercise of pre-funded warrants into shares of common stock is unclear, and the tax consequences of a cashless exercise could differ from the consequences upon the exercise of a pre-funded warrant described in the preceding paragraph. U.S. holders should consult their own tax advisors regarding the U.S. federal income tax consequences of a cashless exercise of pre-funded warrants.

U.S. Holders

U.S. Federal Income Tax Consequences of the Exercise, Disposition or Expiration of Class E Warrants or Certain Adjustments to the Class E Warrants

Exercise of Class E Warrants

A U.S. holder should not recognize gain or loss on the exercise of Class E Warrants and related receipt of warrant shares (unless cash is received in lieu of the issuance of a fractional warrant share). A U.S. holder's initial tax basis in the warrant shares received on the exercise of Class E Warrants should be equal to the sum of (a) such U.S. holder's tax basis in such Class E Warrants plus (b) the exercise price paid by such U.S. holder on the exercise of such Class E Warrants. It is unclear whether a U.S. holder's holding period for the warrant shares received on the exercise of Class E Warrants would commence on the date of exercise of the Class E Warrants or the day following the date of exercise of the Class E Warrants.

In certain limited circumstances, a U.S. holder may be permitted to undertake a cashless exercise of Class E Warrants into warrant shares. The U.S. federal income tax treatment of a cashless exercise of Class E Warrants into warrant shares is unclear, and the tax consequences of a cashless exercise could differ from the consequences upon the exercise of Class E Warrants described in the preceding paragraph. U.S. holders should consult their own tax advisors regarding the U.S. federal income tax consequences of a cashless exercise of Class E Warrants.

Disposition of Class E Warrants

A U.S. holder will recognize gain or loss on the sale or other taxable disposition of a Class E Warrant in an amount equal to the difference, if any, between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. holder's tax basis in the Class E Warrant sold or otherwise disposed of. Any such gain or loss generally will be a capital gain or loss, which will be long-term capital gain or loss if the Class E Warrant is held for more than one year. Deductions for capital losses are subject to complex limitations under the Internal Revenue Code.

44

Expiration of Class E Warrants Without Exercise

Upon the lapse or expiration of a Class E Warrant, a U.S. holder will recognize a loss in an amount equal to such U.S. holder's tax basis in the Class E Warrant. Any such loss generally will be a capital loss and will be long-term capital loss if the Class E Warrant is held for more than one year. Deductions for capital losses are subject to complex limitations under the Internal Revenue Code.

Certain Adjustments to the Class E Warrants

Under Section 305 of the Internal Revenue Code, an adjustment to the number of warrant shares that will be issued on the exercise of the Class E Warrants, or an adjustment to the exercise price of the Class E Warrants, may be treated as a constructive distribution to a U.S. holder of the Class E Warrants if, and to the extent that, such adjustment has the effect of increasing such U.S. holder's proportionate interest in the "earnings and profits" or our assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or other property to our shareholders). Adjustments to the exercise price of Class E Warrants made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holders of the Class E Warrants should generally not be considered to result in a constructive distribution. Any such constructive distribution would be taxable whether or not there is an actual distribution of cash or other property. (See more detailed discussion of the rules applicable to distributions made by us at "*Distributions on Shares of Common Stock, Pre-Funded Warrants and Warrant Shares*" below).

U.S. Federal Income Tax Consequences of the Acquisition, Ownership, and Disposition of Shares of Common Stock, Pre-Funded Warrants and Warrant Shares

Distributions on Shares of Common Stock, Pre-Funded Warrants and Warrant Shares

A U.S. holder that receives a distribution, including a constructive distribution, with respect to a share of common stock, pre-funded warrant or warrant share (as well as any constructive distribution on a Class E Warrant as described above) will be required to include the amount of such distribution in gross income as a dividend to the extent of our current and accumulated "earnings and profits", as computed under U.S. federal income tax principles. To the extent that a distribution exceeds our current and accumulated "earnings and profits", such distribution will be treated first as a tax-free return of capital to the extent of a U.S. holder's tax basis in the shares of common stock, pre-funded warrants or warrant shares and thereafter as gain from the sale or exchange of such shares of common stock, pre-funded warrants or warrant shares (see "*Sale or Other Taxable Disposition of Shares of Common Stock, Pre-Funded Warrants and/or Warrant Shares*" below). Dividends received on shares of common stock, pre-funded warrants or warrant shares may be eligible for a dividends received deduction, subject to certain restrictions relating to, among others, the corporate U.S. holder's taxable income, holding period and debt financing. Dividends paid by us to non-corporate U.S. holders, including individuals, generally will be eligible for the preferential tax rates applicable to long-term capital gains for dividends, provided certain holding period and other conditions are satisfied. The dividend rules are complex, and each U.S. holder should consult its own tax advisor regarding the application of such rules.

Sale or Other Taxable Disposition of Shares of Common Stock, Pre-Funded Warrants and/or Warrant Shares

Upon the sale or other taxable disposition of shares of common stock, pre-funded warrants or warrant shares, a U.S. holder generally will recognize capital gain or loss in an amount equal to the difference between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. holder's tax basis in such shares of common stock, pre-funded warrants or warrant shares sold or otherwise disposed of. Gain or loss recognized on such sale or other taxable disposition generally will be long-term capital gain or loss if, at the time of the sale or other taxable disposition, the shares of common stock, pre-funded warrants or warrant shares have been held for more than one year. Preferential tax rates may apply to long-term capital gain of a U.S. holder that is an individual, estate, or trust. There are no preferential tax rates for long-term capital gain of a U.S. holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Internal Revenue Code.

45

Non-U.S. Holders

U.S. Federal Income Tax Consequences of the Exercise, Disposition or Expiration of Class E Warrants or Certain Adjustments to the Class E Warrants

Exercise of Class E Warrants

A non-U.S. holder generally will not recognize gain or loss on the exercise of Class E Warrants and related receipt of warrant shares (unless cash is received in lieu of the issuance of a fractional warrant share and certain other conditions are present, as discussed below under "*Gain on Sale, Exchange or Other Taxable Disposition of Shares of Common Stock, Pre-Funded Warrants, Class E Warrants and Warrant Shares*"). A non-U.S. holder's initial tax basis in the warrant shares received on the exercise of Class E Warrants should be equal to the sum of (i) the non-U.S. holder's tax basis in the Class E Warrants, plus (ii) the exercise price paid by the non-U.S. holder on the exercise of the Class E Warrants. It is unclear whether a non-U.S. holder's holding period for the warrant shares received on the exercise of Class E Warrants would commence on the date of exercise of the Class E Warrants or the day following the date of exercise of the Class E Warrants.

In certain limited circumstances, a non-U.S. holder may be permitted to undertake a cashless exercise of Class E Warrants into warrant shares. The U.S. federal income tax

treatment of a cashless exercise of Class E Warrants into warrant shares is unclear, and the tax consequences of a cashless exercise could differ from the consequences upon the exercise of Class E Warrants described in the preceding paragraph. Non-U.S. holders should consult their own tax advisors regarding the U.S. federal income tax consequences of a cashless exercise of Class E Warrants.

Disposition of Class E Warrants

A non-U.S. Holder will recognize gain or loss on the sale or other taxable disposition of a Class E Warrant in an amount equal to the difference, if any, between (a) the amount of cash plus the fair market value of any property received and (b) such non-U.S. holder's tax basis in the Class E Warrant sold or otherwise disposed of. Any such gain or loss generally will be a capital gain or loss, which will be long-term capital gain or loss if the Class E Warrant is held for more than one year. Any such gain recognized by a non-U.S. holder will be taxable for U.S. federal income tax purposes according to rules discussed under the heading "*Gain on Sale, Exchange or Other Taxable Disposition of Shares of Common Stock, Pre-Funded Warrants, Class E Warrants and Warrant Shares*" below.

Expiration of Class E Warrants without Exercise

Upon the lapse or expiration of a Class E Warrant, a non-U.S. holder will recognize loss in an amount equal to such non-U.S. holder's tax basis in the Class E Warrant. Any such loss generally will be a capital loss and will be long-term capital loss if the Class E Warrants are held for more than one year. Deductions for capital losses are subject to complex limitations under the Internal Revenue Code.

Certain Adjustments to the Class E Warrants

Under Section 305 of the Internal Revenue Code, an adjustment to the number of warrant shares that will be issued on the exercise of the Class E Warrants, or an adjustment to the exercise price of the Class E Warrants, may be treated as a constructive distribution to a non-U.S. holder of the Class E Warrants if, and to the extent that, such adjustment has the effect of increasing such non-U.S. holder's proportionate interest in our "earnings and profits" or assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or other property to our shareholders). Adjustments to the exercise price of a Class E Warrant made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holders of the Class E Warrants should generally not result in a constructive distribution. See the more detailed discussion of the rules applicable to distributions made by us under the heading "*Distributions on Shares of Common Stock, Pre-Funded Warrants and Warrant Shares*" below.

46

U.S. Federal Income Tax Consequences of the Acquisition, Ownership, and Disposition of Shares of Common Stock, Pre-Funded Warrants and Warrant Shares

Distributions on Shares of Common Stock, Pre-Funded Warrants and Warrant Shares

If we pay distributions of cash or property with respect to our shares of common stock, pre-funded warrants or warrant shares, those distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's tax basis in its shares of common stock, pre-funded warrants or warrants shares, as applicable. Any remaining excess will be treated as capital gain, subject to the tax treatment described below under the heading "*Gain on Sale, Exchange or Other Taxable Disposition of Shares of Common Stock, Pre-Funded Warrants, Warrants and Warrant Shares*." Dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence. In the case of any constructive distribution, it is possible that this tax would be withheld from any amount owed to the non-U.S. holder, including, but not limited to, distributions of cash, shares of common stock or sales proceeds subsequently paid or credited to that holder. If we are unable to determine, at the time of payment of a distribution, whether the distribution will constitute a dividend, we may nonetheless choose to withhold any U.S. federal income tax on the distribution as permitted by U.S. Treasury Regulations. If we are a USRPHC (as defined below) and we do not qualify for the Regularly Traded Exception (as defined below), distributions which constitute a return of capital will be subject to withholding tax unless an application for a withholding certificate is filed to reduce or eliminate such withholding.

Distributions that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States are generally not subject to the 30% (or lower rate as may be specified by an applicable tax treaty) withholding tax if the non-U.S. holder provides a properly executed IRS Form W-8ECI stating that the distributions are not subject to withholding because they are effectively connected with the non-U.S. holder's conduct of a trade or business in the United States. If a non-U.S. holder is engaged in a trade or business in the United States and the distribution is effectively connected with the conduct of that trade or business, the distribution will generally have the consequences described above for a U.S. holder (subject to any modification provided under an applicable income tax treaty). Any U.S. effectively connected income received by a non-U.S. holder that is treated as a corporation for U.S. federal income tax purposes may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty).

A non-U.S. holder who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E, as applicable, and satisfy applicable certification and other requirements. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty generally may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim with the IRS. Non-U.S. holders should consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

Gain on Sale, Exchange or Other Taxable Disposition of Shares of Common Stock, Pre-Funded Warrants, Class E Warrants and Warrant Shares

Subject to the discussions below in "*Information Reporting and Backup Withholding*" and "*Foreign Account Tax Compliance Act*," a non-U.S. holder generally will not be subject to U.S. federal income tax on gain recognized on a sale, exchange or other taxable disposition of our shares of common stock, pre-funded warrants, Class E Warrants, or warrant shares unless:

47

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment maintained by the non-U.S. holder in the United States; in these cases, the non-U.S. holder will be taxed on a net income basis at the regular graduated rates and in the manner applicable to a U.S. holder, and, if the non-U.S. holder is a corporation, an additional branch profits tax at a rate of 30%, or a lower rate as may be specified by an applicable income tax treaty, may also apply;
- the non-U.S. holder is an individual present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the amount by which such non-U.S. holder's capital gains allocable to U.S. sources exceed capital losses allocable to U.S. sources during the taxable year of the disposition; or

- we are or have been a “U.S. real property holding corporation” (“USRPHC”) for U.S. federal income tax purposes at any time during the shorter of the non-U.S. holder’s holding period or the 5-year period ending on the date of disposition of shares of common stock, pre-funded warrants, Class E Warrants or warrant shares; provided, with respect to the shares of common stock and warrant shares, that as long as our shares of common stock are regularly traded on an established securities market as determined under the U.S. Treasury Regulations (the “**Regularly Traded Exception**”), a non-U.S. holder would not be subject to taxation on the gain on the sale of shares of common stock or warrant shares under this rule unless the non-U.S. holder has owned: (i) more than 5% of our shares of common stock at any time during such 5-year or shorter period; (ii) pre-funded warrants with a fair market value on the date acquired by such holder greater than the fair market value on that date of 5% of our shares of common stock; (iii) Class E Warrants with a fair market value on the date acquired by such holder greater than the fair market value on that date of 5% of our shares of common stock; or (iv) aggregate equity securities of ours with a fair market value on the date acquired in excess of 5% of the fair market value of our shares of common stock on such date (in any case, a “**5% Shareholder**”). Since the Class E Warrants are not expected to be listed on a securities market, the Class E Warrants are unlikely to qualify for the Regularly Traded Exception. Special rules apply to the pre-funded warrants. Non-U.S. holders holding pre-funded warrants should consult their own tax advisors regarding such rules. In determining whether a non-U.S. holder is a 5% Shareholder, certain attribution rules apply in determining ownership for this purpose. We believe that we are not currently, and do not anticipate becoming in the future, a USRPHC for U.S. federal income tax purposes. However, we can provide no assurances that we are not currently, or will not become, a USRPHC, or if we are or become a USRPHC, that the shares of common stock, pre-funded warrants, Class E Warrants or warrant shares will meet the Regularly Traded Exception at the time a non-U.S. holder purchases such securities or sells, exchanges or otherwise disposes of such securities. Non-U.S. holders should consult with their own tax advisors regarding the consequences to them of investing in a USRPHC. If we are a USRPHC, a non-U.S. holder will be taxed as if any gain or loss were effectively connected with the conduct of a trade or business as described above in “*Distributions on Shares of Common Stock, Pre-Funded Warrants and Warrant Shares*” in the event that (i) such holder is a 5% Shareholder, or (ii) the Regularly Traded Exception is not satisfied during the relevant period.

Information Reporting and Backup Withholding

Distributions on, and the payment of the proceeds of a disposition of, our shares of common stock, pre-funded warrants and warrant shares generally will be subject to information reporting if made within the United States or through certain U.S.-related financial intermediaries. Information returns are required to be filed with the IRS and copies of information returns may be made available to the tax authorities of the country in which a holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding may also apply if the holder fails to provide certification of exempt status or a correct U.S. taxpayer identification number and otherwise comply with the applicable backup withholding requirements. Generally, a holder will not be subject to backup withholding if it provides a properly completed and executed IRS Form W-9 or appropriate IRS Form W-8, as applicable. Backup withholding is not an additional tax. Amounts withheld under the backup withholding rules may be refunded or credited against the holder’s U.S. federal income tax liability, if any, provided certain information is timely filed with the IRS.

48

Foreign Account Tax Compliance Act

Sections 1471 through 1474 of the Internal Revenue Code (commonly referred to as “**FATCA**”) impose a separate reporting regime and potentially a 30% withholding tax on certain payments, including payments of dividends on our shares of common stock, pre-funded warrants and warrant shares. Withholding under FATCA generally applies to payments made to or through a foreign entity if such entity fails to satisfy certain disclosure and reporting rules. These rules generally require (i) in the case of a foreign financial institution, that the financial institution agree to identify and provide information in respect of financial accounts held (directly or indirectly) by U.S. persons and U.S.-owned entities, and, in certain instances, to withhold on payments to account holders that fail to provide the required information, and (ii) in the case of a non-financial foreign entity, that the entity either identify and provide information in respect of its substantial U.S. owners or certify that it has no such U.S. owners.

FATCA withholding also potentially applies to payments of gross proceeds from the sale or other disposition of our shares of common stock, pre-funded warrants and warrant shares. Proposed U.S. Treasury Regulations, however, would eliminate FATCA withholding on such payments, and the U.S. Treasury Department has indicated that taxpayers may rely on this aspect of the proposed U.S. Treasury Regulations until final U.S. Treasury Regulations are issued.

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.

The United States and a number of other jurisdictions have entered into intergovernmental agreements to facilitate the implementation of FATCA. Any applicable intergovernmental agreement may alter one or more of the FATCA information reporting and withholding requirements. You are encouraged to consult with your own tax advisor regarding the possible implications of FATCA on your investment in our shares of common stock, pre-funded warrants or warrant shares, including the applicability of any intergovernmental agreements.

THE ABOVE SUMMARY IS NOT INTENDED TO CONSTITUTE A COMPLETE ANALYSIS OF ALL TAX CONSIDERATIONS APPLICABLE TO PROSPECTIVE INVESTORS WITH RESPECT TO THE ACQUISITION, OWNERSHIP, AND DISPOSITION OF UNITS, PRE-FUNDED UNITS, SHARES OF COMMON STOCK, PRE-FUNDED WARRANTS, CLASS E WARRANTS OR WARRANT SHARES. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSIDERATIONS APPLICABLE TO THEM IN LIGHT OF THEIR OWN PARTICULAR CIRCUMSTANCES.

LEGAL MATTERS

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

EXPERTS

The consolidated financial statements of SINTX Technologies, Inc., as of December 31, 2022 and 2021, and for each of the years in the two-year period ended December 31, 2022, have been incorporated by reference herein in reliance on the report of Tanner LLC, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC’s website at <http://www.sec.gov>. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. You may also access these filings through our website at www.sintx.com.

49

We have filed with the SEC a registration statement under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC at the address listed above. The registration statement, along with our most recent annual report on Form 10-K, subsequent reports on Form 10-Q and current reports on Form 8-K, as well as other filings that we make with the SEC, are also available on our Internet website, www.sintx.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to “incorporate by reference” information that we file with it into this prospectus, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the Commission will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the Commission:

- (a) The Company’s Annual Report on Form 10-K for the fiscal year ended [December 31, 2022](#);
- (b) The Company’s Quarterly Reports on Form 10-Q for the fiscal quarters ended [March 31, 2023](#) and [June 30, 2023](#);
- (c) The Company’s Current Reports on Form 8-K filed with the SEC on [January 13, 2023](#), [February 9, 2023](#), [October 11, 2023](#), [October 12, 2023](#), and [October 20, 2023](#); and
- (d) The description of the Company’s 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 4.18](#) to our Annual Report on Form 10-K for the year ended December 31, 2022, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference any future filings (other than Current Reports furnished under Items 2.02 or 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of the registration statement, and (ii) after the effectiveness of the registration statement but prior to the termination of the offering of the securities covered by this prospectus, excluding, in each case, information deemed furnished and not filed.

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

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the information that has been incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents. Requests should be directed to: SINTX Technologies, Inc., Attention: Investor Relations, 1885 West 2100 South, Salt Lake City, Utah 84119 and our telephone number is (801) 839-3500. You may also access the documents incorporated by reference in this prospectus through our website at www.sintx.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

Up to 8,904,719 Units, Each Unit Consisting of One Share of Common Stock or One Pre-Funded Warrant and One Class E Warrant to Purchase One Share of Common Stock

Placement Agent Warrants to Purchase an Aggregate of Up To 356,188 Shares of Common Stock

Up to 18,165,626 Shares of Common Stock Issuable upon the Exercise of the Pre-Funded Warrants, Class E Warrants, and Placement Agent Warrants

PROSPECTUS

Maxim Group LLC

, 2023

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following is a statement of estimated expenses in connection with the issuance and distribution of the securities being registered, excluding dealer-manager fees. All expenses incurred with respect to the registration of the common stock will be borne by us. All amounts are estimates except the SEC registration fee and the FINRA filing fee.

Item	Amount to be Paid
SEC registration fee	\$ 1,657
FINRA filing fee	\$ 2,183
Legal fees and expenses	\$ 200,000
Accounting fees and expenses	\$ 80,000
Transfer Agent Fees and Expenses	\$ 15,000
Miscellaneous expenses	\$ 10,000

Item 14. Indemnification of Directors and Officers

Our Restated Certificate of Incorporation and Restated Bylaws provide that each person who was or is made a party or is threatened to be made a party to or is otherwise involved (including, without limitation, as a witness) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was one of our directors or officers or is or was serving at our request as a director, officer, member, manager or trustee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, whether the basis of such proceeding is alleged action in an official capacity as a director, officer or trustee or in any other capacity while serving as a director, officer or trustee, shall be indemnified and held harmless by us to the fullest extent authorized by the Delaware General Corporation Law, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits us to provide broader indemnification rights than such law permitted us to provide prior to such amendment) against all expense, liability and loss (including attorneys' fees, judgments, fines, Employee Retirement Income Security Act excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such indemnitee in connection therewith. These provisions limit the liability of our directors and officers to the fullest extent permitted under Delaware law. A director will not receive indemnification if he or she is found not to have acted in good faith.

Section 145 of the Delaware General Corporation Law permits a corporation to indemnify any director or officer of the corporation against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with any action, suit or proceeding brought by reason of the fact that such person is or was a director or officer of the corporation, if such person acted in good faith and in a manner that he reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, if he or she had no reasonable cause to believe his or her conduct was unlawful. In a derivative action (i.e., one brought by or on behalf of the corporation), indemnification may be provided only for expenses actually and reasonably incurred by any director or officer in connection with the defense or settlement of such an action or suit if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be provided if such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the court in which the action or suit was brought shall determine that such person is fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

II-1

Pursuant to Section 102(b)(7) of the Delaware General Corporation Law, Article Eighth of our Restated Certificate of Incorporation eliminates the liability of a director to us or our stockholders for monetary damages for such a breach of fiduciary duty as a director, except for liabilities arising:

- from any breach of the director's duty of loyalty to us or our stockholders;
- from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- under Section 174 of the Delaware General Corporation Law; or
- from any transaction from which the director derived an improper personal benefit.

We carry insurance policies insuring our directors and officers against certain liabilities that they may incur in their capacity as directors and officers. We have entered into indemnification agreements with certain of our executive officers and directors. These agreements, among other things, indemnify and advance expenses to our directors and officers for certain expenses, including attorney's fees, judgments, fines and settlement amounts incurred by any such person in any action or proceeding, including any action by us arising out of such person's services as our director or officer, or any other company or enterprise to which the person provides services at our request. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and officers. We have entered into agreements to indemnify all of our directors and officers.

In addition, the Registrant has entered into indemnification agreements with each of its current directors and executive officers. These agreements will require the Registrant to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to the Registrant and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified. The Registrant also intends to enter into indemnification agreements with its future directors and executive officers.

Item 15. Recent Sales of Unregistered Securities.*Maxim and Ascendant October 2022 Warrants*

In connection with the October 2022 Rights Offering, the Company issued (i) to Maxim, as the dealer-manager in the October 2022 Rights Offering, 10,483 warrants to purchase shares of the Company's common stock and (ii) to Ascendant, as a financial advisor to the Company in the October 2022 Rights Offering, 1,850 warrants to purchase shares of the Company's common stock (collectively, the "Dealer Manager Warrants"). The Dealer Manager Warrants are non-exercisable for 6 months from October 17, 2022 and will expire on September 23, 2027. The Dealer Manager Warrants will be exercisable at a price of \$16.61 per share, subject to adjustment for stock dividends, distributions, subdivisions, combinations, or reclassifications, and for certain dilutive issuances. The Company relied on the exemption from registration available under Section 4(a)(2) of the Securities Act in connection with the issuance of the Dealer Manager Warrants to Maxim and Ascendant.

II-2

Item 16. Exhibits and Financial Statement Schedules.*(a) Exhibits*

The following exhibits are being filed with this Registration Statement:

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
2.1+	Asset Purchase Agreement by and among Amedica Corporation, CTL Corporation and US Spine Inc. dated as of September 5, 2018		Form 8-K (Exhibit 2.1)	10/5/18	001-33624
2.2+†	Asset Purchase Agreement by and among SINTX Technologies, Inc. and B4C, LLC, dated July 20, 2021.		Form 8-K (Exhibit 2.1)	7/26/21	001-33624
2.3†	Stock Purchase Agreement		Form 8-K (Exhibit 2.1)	7/6/22	001-33624

3.1	Restated Certificate of Incorporation of the Registrant	Form 8-K (Exhibit 3.1)	2/20/14	001-33624
3.1.1	Certificate of Amendment to the Restated Certificate of Incorporation	Form 8-K (Exhibit 3.1)	1/22/16	001-33624
3.1.2	Certificate of Amendment to the Restated Certificate of Incorporation	Form 8-K (Exhibit 3.1)	11/16/17	001-33624
3.1.3	Certificate of Designation of Series B Preferred Stock	Form 8-K (Exhibit 3.1)	5/15/18	001-33624
3.1.4	Certificate of Amendment to the Restated Certificate of Incorporation	Form 8-K (Exhibit 3.1)	11/02/18	001-33624
3.1.5	Certificate of Amendment to the Restated Certificate of Incorporation of SINTX Technologies, Inc.	Form 8-K (Exhibit 3.1)	7/26/19	001-33624
3.1.6	Certificate of Designation of Series C Preferred Stock	Form 8-K (Exhibit 3.1)	2/07/20	001-33624
3.1.7	Certificate of Designation of Series D Preferred Stock	Form 8-K (Exhibit 3.1)	10/17/22	001-33624
3.1.8	Certificate of Designation of Series E Preferred Stock	Form 8-K (Exhibit 3.1)	10/28/22	001-33624
3.1.9	Certificate of Amendment to the Restated Certificate of Incorporation of Sintx Technologies, Inc.	Form 8-K (Exhibit 3.1)	12/19/22	001-33624
3.2	Amended and Restated Bylaws of SINTX Technologies, Inc.	Form 8-K (Exhibit 3.1)	10/01/21	001-33624
4.1	Form of Common Stock Certificate of the Registrant	Amendment No. 3 to Form S-1 (Exhibit 4.1)	1/29/14	333-192232

II-3

4.2	Common Stock Purchase Warrant	Form 8-K (Exhibit 4.1)	5/15/18	001-33624
4.3	Form of Warrant Agency Agreement between Amedica Corporation and American Stock Transfer and Trust Company, LLC	Form S-1 (Exhibit 4.28)	4/26/18	333-223032
4.4	Form of Common Stock Warrant	Form S-1/A	1/15/20	333-234438
4.5	Form of Warrant Agency Agreement between Amedica Corporation and American Stock Transfer and Trust Company, LLC, dated February 6, 2020	Form 8-K (Exhibit 10.1)	2/07/20	001-33624
4.6	Warrant Issued to Maxim Group LLC on February 6, 2020	Form 8-K (Exhibit 4.1)	2/07/20	001-33624
4.7	Warrant Issued to Ascendant Capital Markets, LLC on February 6, 2020	Form 8-K (Exhibit 4.2)	2/07/20	001-33624
4.8	Form of Indenture	Form S-3 (Exhibit 4.2)	3/25/19	333-230492
4.9	Dealer Manager Warrants issued to Maxim Group LLC on October 17, 2022	Form 8-K (Exhibit 4.1)	10/17/22	001-33624
4.10	Dealer Manager Warrants issued to Ascendant Capital Markets, LLC on October 17, 2022	Form 8-K (Exhibit 4.2)	10/17/22	001-33624
4.11	Form of Class A Warrant	Form 8-K (Exhibit 4.3)	10/17/22	001-33624
4.12	Form of Class B Warrant	Form 8-K (Exhibit 4.4)	10/17/22	001-33624
4.13	Form of Class C Warrant	Form S-1 (Exhibit 4.13)	2/7/23	333-269475
4.14	Form of February 2023 Pre-Funded Warrant	Form S-1 (Exhibit 4.14)	2/6/23	333-269475
4.15	Form of Class D Warrant	Form S-1 (Exhibit 4.15)	2/7/23	333-269475
4.16	Form of February 2023 Placement Agent Warrant	Form S-1 (Exhibit 4.16)	2/6/23	333-269475
4.17	February 2023 Warrant Agency Agreement	Form 8-K (Exhibit 4.5)	2/9/23	001-33624
4.18#	Form of Pre-Funded Warrant			
4.19#	Form of Class E Warrant			
4.20#	Form of Placement Agent Warrant			
4.21#	Form of Warrant Agency Agreement			
5.1#	Opinion of Dorsey & Whitney LLP			

10.1	Centrepointe Business Park Lease Agreement Net by and between the Registrant and Centrepointe Properties, LLC, dated as of April 21, 2009	Form S-1 (Exhibit 10.10)	11/8/13	333-192232
10.2	First Addendum to Centrepointe Business Park Lease Agreement Net by and between the Registrant and Centrepointe Properties, LLC, dated as of January 31, 2012	Form S-1 (Exhibit 10.11)	11/8/13	333-192232
10.3	Form of Change of Control Agreement*	Form 8-K (Exhibit 10.1)	7/22/15	001-33624
10.4	Form of Indemnification Agreement by and between the Registrant and its officers and directors	Amendment No. 2 to Form S-1 (Exhibit 10.14)	12/20/13	333-192232
10.5	Exchange Agreement dated April 4, 2016, by and among SINTX Corporation and Riverside Merchant Partners, LLC	Form 8-K (Exhibit 10.2)	5/05/16	001-33624
10.6	Form of Warrant Amendment Agreement	Form S-1 (Exhibit 10.26)	4/26/18	333-223032
10.7	Amendment to Centrepointe Business Park Lease Agreement, dated June 7, 2019, between SINTX Technologies, Inc. and Centrepointe Properties, LLC.	Form 8-K (Exhibit 10.1)	6/10/19	001-33624
10.8	Promissory Note issued by CTL Corporation in favor of Amedica Corporation dated as of October 1, 2018.	Form 8-K (Exhibit 10.1)	10/5/18	001-33624
10.9	Security Agreement between Amedica Corporation and CTL Corporation dated as of October 1, 2018.	Form 8-K (Exhibit 10.2)	10/5/18	001-33624
10.10	Guaranty between Amedica Corporation and Daniel Chon dated as of October 1, 2018.	Form 8-K (Exhibit 10.3)	10/5/18	001-33624
10.11	ROFN Security Agreement between Amedica Corporation and CTL Corporation dated as of October 1, 2018.	Form 8-K (Exhibit 10.4)	10/5/18	001-33624
10.12	Promissory Note, dated April 28, 2020 between SINTX Technologies, Inc. and First State Community Bank.	Form 8-K (Exhibit 10.1)	4/30/20	001-33624
10.13	Form of Share Purchase Agreement	Form 8-K (Exhibit 99.1)	6/29/20	001-33624
10.14	Placement Agency Agreement	Form 8-K (Exhibit 99.2)	6/29/20	001-33624

II-5

10.15	Form of Share Purchase Agreement	Form 8-K (Exhibit 99.1)	7/20/20	001-33624
10.16	Placement Agency Agreement	Form 8-K (Exhibit 99.2)	7/20/20	001-33624
10.17	Form of Share Purchase Agreement	Form 8-K (Exhibit 99.1)	8/6/20	001-33624
10.18	Placement Agency Agreement	Form 8-K (Exhibit 99.2)	8/6/20	001-33624
10.19	Form of Indenture	Form S-3 (Exhibit 4.18)	10/2/20	333-249267
10.20	Equity Distribution Agreement, dated as of February 25, 2021, by and between SINTX Technologies, Inc. and Maxim Group LLC	Form 8-K (Exhibit 10.1)	2/26/20	001-33624
10.21	2020 Equity Incentive Plan	Defn 14a Proxy Statement	7/10/2020	001-33624
10.22	Form of Warrant Agency Agreement between SINTX Technologies, Inc. and American Stock Transfer & Trust Company, LLC	Form 8-K (Exhibit 10.1)	10/17/22	001-33624
10.23	Amendment to Equity Distribution Agreement, dated as of January 10, 2023 by and between SINTX Technologies, Inc., and Maxim Group LLC	Form 8-K (Exhibit 10.1)	1/13/23	
10.24	Form of Securities Purchase Agreement	Form 8-K (Exhibit 10.1)	2/9/23	001-33624
10.25	Form of Placement Agent Agreement	Form S-1 (Exhibit 10.25)	2/6/23	333-269475
10.26#	Form of Securities Purchase Agreement			
10.27#	Form of Placement Agent Agreement			
21.1	List of Subsidiaries	Form 10-K (Exhibit 21.1)	3/29/23	001-33624
23.1	Consent of Independent Registered Public Accounting Firm, Tanner LLC			

X

23.2#	Consent of Dorsey & Whitney LLP (included in Exhibit 5.1)	
24.1	Power of Attorney (Signature Block)	X

II-6

101.INS	Inline XBRL Instance Document.	X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document.	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.	X
101.LAB	Inline XBRL Taxonomy Extension Labels Linkbase Document.	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.	X
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).	X
107	Filing Fee Table	X

* Indicates management contract or compensatory plan or arrangement.

To be filed by amendment or as an exhibit to a report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and incorporated herein by reference.

+ Schedules and exhibits to this Exhibit have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

† A portion of this Exhibit has been omitted as it contains information that (i) is not material and (ii) would be competitively harmful if publicly disclosed.

(b) Financial Statement Schedules

All schedules have been omitted because either they are not required, are not applicable or the information is otherwise set forth in the financial statements and related notes thereto.

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that paragraphs (a)(1)(i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement.

II-7

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(c) The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

II-8

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Salt Lake City, Utah on October 20, 2023.

SINTX TECHNOLOGIES, INC.

By: /s/ B. Sonny Bal
 B. Sonny Bal, M.D.
 Chief Executive Officer and President

We, the undersigned directors and officers of Sintx Technologies, Inc. (the “Company”), hereby severally constitute and appoint B. Sonny Bal, MD as our true and lawful attorney, with full power to him to sign for us and in our names in the capacities indicated below, the registration statement on Form S-1 filed herewith, and any and all pre-effective and post-effective amendments to said registration statement, and any registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, in connection with the registration under the Securities Act of 1933, as amended, of equity securities of the Company, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as each of us might or could do in person, and hereby ratifying and confirming all that said attorney or his substitute or substitutes, shall do or cause to be done by virtue of this Power of Attorney.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
<u>/s/ B. Sonny Bal</u> B. Sonny Bal, M.D.	Chief Executive Officer and Director (Principal Executive Officer and Principal Financial Officer)	October 20, 2023
<u>/s/ David W. Truetzel</u> David W. Truetzel	Director	October 20, 2023
<u>/s/ Jeffrey S. White</u> Jeffrey S. White	Director	October 20, 2023
<u>/s/ Eric. A Stookey</u> Eric A. Stookey	Director	October 20, 2023
<u>/s/ Marc Froimson</u> Marc Froimson	Director	October 20, 2023

II-9

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

SINTX Technologies, Inc.
Salt Lake City, Utah

We hereby consent to the incorporation by reference in the Prospectus constituting part of this Registration Statement of our report dated March 29, 2023, relating to the consolidated financial statements of SINTX Technologies, Inc., and subsidiaries (collectively, the Company), as of December 31, 2022 and 2021 and for each of the years then ended, incorporated by reference in this Registration Statement.

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

/s/ Tanner LLC
Lehi, Utah
October 20, 2023

Calculation of Filing Fee Tables

Form S-1
(Form Type)

SINTX Technologies, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price(1)	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	Other	Units, each consisting of:(2)	Other	—	—	—	—	\$ 0	—	—	—	—
	Equity	(i) one share of common stock, par value \$0.01 per share, or one pre-funded warrant to purchase one share of common stock(2)(4)(5)	457(o)	—	—	\$ 5,000,000	0.0001476	\$ 738	—	—	—	—
	Equity	(ii) One Class E Warrant to purchase of one share of common stock(3)	Other	—	—	—	—	\$ 0	—	—	—	—
	Equity	Common Stock, par value \$0.01 per share, underlying Class E Warrants(2)	Other	—	—	\$ 6,000,000	0.0001476	\$ 886	—	—	—	—
	Equity	Common Stock, par value \$0.01 per share, underlying pre-funded warrants(2)(3)(4)	Other	—	—	—	—	\$ 0	—	—	—	—
	Equity	Placement Agent's warrants(3)	Other	—	—	—	—	\$ 0	—	—	—	—
	Equity	Common Stock, par value \$0.01 per share, underlying Placement Agent's warrants(2)(6)	Other	—	—	\$ 220,000	0.0001476	\$ 33	—	—	—	—
Fees Previously Paid	—	—	—	—	—	—	—	—	—	—	—	—
Carry Forward Securities	—	—	—	—	—	—	—	—	—	—	—	—
Total Offering Amounts						\$ 11,220,000		\$ 1,657				
Total Fees Previously Paid								\$ 0				
Total Fee Offsets								\$				

- (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act").
- (2) In addition to the shares of common stock set forth in this table, pursuant to Rule 416 under the Securities Act, this registration statement also registers such indeterminate number of shares of common stock as may become issuable after the date hereof as a result of stock splits, stock dividends, or pursuant to the anti-dilution adjustment provisions of the warrants registered hereby.
- (3) No fee pursuant to Rule 457(g) of the Securities Act.
- (4) The proposed maximum aggregate offering price of the common stock proposed to be sold in the offering will be reduced on a dollar-for-dollar basis based on the offering price of any pre-funded warrants offered and sold in the offering, and as such the proposed maximum offering price of the common stock and pre-funded warrants (including the common stock issuable upon exercise of the pre-funded warrants) if any, is \$5,000,000.
- (5) The registrant may issue pre-funded warrants to purchase shares of common stock in the offering. The purchase price of each pre-funded warrant and accompanying Class E Warrant will equal the price per share at which Units comprising shares of common stock and accompanying Class E Warrant are being sold to the public in this offering, minus the pre-funded portion of the exercise price.
- (6) The Placement Agent's warrants are exercisable for a number of shares of common stock equal to up to 4% of the number of shares of common stock and pre-funded warrants in the Units sold in this offering, at an exercise price equal to 110% of the public offering price per Unit.

Table 2: Fee Offset Claims and Sources

N/A

Table 3: Combined Prospectuses

N/A
