

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

**AMENDMENT NO. 1  
TO  
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:*

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**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 SEPTEMBER 12, 2022**

**SINTX TECHNOLOGIES, INC.**

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

This prospectus relates to our distribution to holders of our common stock, Series B Preferred Stock, Series C Preferred Stock and certain outstanding warrants, which we refer to as the Participating Warrants, at no charge, non-transferable subscription rights to purchase units. Each unit, which we refer to as a Unit, consists of one share of Series D Convertible Preferred Stock, which we refer to as the Preferred Stock, and, based on the Estimated Conversion Price (as defined below), 2,711 warrants to purchase common stock, which we refer to as the Warrants. Each share of Preferred Stock is convertible, at the option of the holder at any time, into a number of shares of our common stock equal to the quotient of the stated value of the Preferred Stock (\$1,000) divided by the Conversion Price (initially, the Conversion Price will be equal to 90% of the lowest closing price for a share of our common stock as quoted on the Nasdaq Capital Market, during the five (5) trading days prior to the expiration of the Subscription Period (including the last day of the Subscription Period)). Each Warrant will be exercisable for one share of our common stock at an exercise price per share equal to the Conversion Price from the date of issuance through its expiration five years from the date of issuance. For purposes of this preliminary prospectus, we have assumed an estimated Conversion Price of \$0.3690 which is equal to 90% of the closing price of our common stock on September 8, 2022 (the "Estimated Conversion Price"). As noted elsewhere in this prospectus, the Estimated Conversion Price is subject to change when calculated on the expiration date of this offering.

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

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

The Subscription Rights will expire if they are not exercised by 5:00 p.m., Eastern Time, on October 10, 2022, unless the Rights Offering is extended or earlier terminated by us. If we elect to extend the Rights Offering, we will issue a press release announcing the extension no later than 9:00 a.m., Eastern Time, on the next business day after the most recently announced expiration date of the Rights Offering. We may extend the Rights Offering for additional periods in our sole discretion for any reason up to an additional 45 days. Once made, all exercises of Subscription Rights are irrevocable.

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

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

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

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

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

Our common stock is listed on the Nasdaq Capital Market, or Nasdaq, under the symbol "SINT." On September 9, 2022, the last reported sale price of our common stock was \$0.4151 per share. There is no public trading market for the Preferred Stock or the Warrants and they will not be listed for trading on Nasdaq or any other securities exchange or market. The Subscription Rights are non-transferrable and will not be listed for trading on Nasdaq or any other securities exchange or market. You are urged to obtain a current price quote for our common stock before exercising your Subscription Rights.

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

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

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

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

*Dealer-Manager*  
**Maxim Group LLC**

The date of this Prospectus is \_\_\_\_\_, 2022

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## ABOUT THIS PROSPECTUS

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

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

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

Unless the context otherwise requires, references in this prospectus to “SINTX,” “the Company,” “we,” “us” and “our” refer to SINTX Technologies, Inc. and our subsidiaries. Solely for convenience, trademarks and tradenames referred to in this prospectus may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these trademarks and tradenames.

## PROSPECTUS SUMMARY

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

### Company Overview

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

ceramics to create new, innovative products across these sectors.

### SINTX Core Business

**Biomedical Applications:** Since its inception, SINTX has been focused on medical grade silicon nitride. SINTX silicon nitride products are biocompatible, bioactive, antipathogenic, and have shown superb bone affinity. Spinal implants made from SINTX silicon nitride have been successfully implanted in humans since 2008 in the US, Europe, Brazil, and Taiwan. This established use, along with its inherent resistance to bacterial adhesion and bone affinity – mean that it may also be suitable in other fusion device applications such as hip, knee and dental implants. Bacterial infection of any biomaterial implants is always a concern. SINTX silicon nitride is inherently resistant to bacterial colonization and biofilm formation, making it antibacterial. SINTX silicon nitride products can be polished to a smooth and wear-resistant surface for articulating applications, such as bearings for hip and knee replacements.

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

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

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

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

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

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

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

### Our Strategy

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

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

### Intellectual Property

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

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

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

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

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

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

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

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

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

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

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

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

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

#### **Corporate Information**

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

#### **Summary of the Rights Offering**

##### **Securities to be Offered**

We are distributing to you, at no charge, one non-transferable Subscription Right to purchase one Unit for every share of our common stock (or share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of the Participating Warrants) that you owned on the Record Date. Each Unit consists of one share of our Preferred Stock and approximately 2,711 Warrants, based on the Estimated Conversion Price. The actual number of Warrants that will be included in the Units will depend on the Conversion Price determined at the expiration of the Rights Offering. The Units will separate upon the closing of the Rights Offering and the Preferred Stock and Warrants will be issued separately, however, they may only be purchased as a Unit, and the Unit will not trade as a separate security.

<b>Size of Offering</b>	10,000 Units.
<b>Subscription Price</b>	\$1,000 per Unit.
<b>Series D Convertible Preferred Stock</b>	Each share of Preferred Stock will be convertible, at the option of the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Preferred Stock by a conversion price equal to 90% of the lowest closing price for a share of our common stock as quoted on the Nasdaq Capital Market, during the five (5) trading days prior to the expiration of the Subscription Period (including the last day of the Subscription Period), subject to adjustment (the "Conversion Price"). For purposes of this preliminary prospectus, we have assumed an estimated Conversion Price of \$0.3690 which is equal to 90% of the closing price of our common stock on September 8, 2022 (the "Estimated Conversion Price"). Based on the Estimated Conversion Price, the Preferred Stock included in the Units would be initially convertible into an aggregate of 27,110,000 shares of common stock. The actual number of shares that the Preferred Stock may be converted into will depend on the Conversion Price determined on the expiration date. Because the actual Conversion Price will be determined on the expiration date, rights holders will not know the Conversion Price, nor will they know the number of shares of common stock underlying the Preferred Stock, at the time of exercise. The Preferred Stock has certain conversion rights and dividend rights.
<b>Warrants</b>	Each Warrant entitles the holder to purchase one share of our common stock at an exercise price equal to the Conversion Price, subject to adjustment, from the date of issuance through its expiration five years from the date of issuance. Based on the Estimated Conversion Price, the Warrants included in the Units would be initially exercisable for an aggregate of 27,110,000 shares of common stock. The actual number of shares that the Warrants may be exercised for will depend on the Conversion Price determined on the expiration date. Because the actual Conversion Price will be determined on the expiration date, rights holders will not know the Conversion Price, nor will they know the number of shares of common stock underlying the Warrants, at the time of exercise. The Warrants will be exercisable for cash, or, solely during any period when a registration statement for the exercise of the Warrants is not in effect, on a cashless basis, at any time and from time to time after the date of issuance.
<b>Record Date</b>	5:00 p.m., Eastern Time, September 23, 2022.
<b>Basic Subscription Rights</b>	Your Basic Subscription Right will entitle you to purchase one Unit at the Subscription Price. You may exercise your Basic Subscription Right for some or all of your Subscription Rights, or you may choose not to exercise your Subscription Rights. If you choose to exercise your Subscription Rights, there is no minimum number of Units you must purchase. We are distributing Basic Subscription Rights to purchase an aggregate of 25,896,283 Units, but are only selling 10,000 Units in the Rights Offering. In the event that the Rights Offering is over-subscribed, rights holders will be entitled to their pro rata portion of the Units.
<b>Over-Subscription Privilege</b>	If you exercise your Basic Subscription Rights in full, you may also choose to exercise an over-subscription privilege to purchase a portion of any Units that are not purchased by our other common, Series B Preferred, and Series C Preferred stockholders or Participating Warrant holders through the exercise of their Basic Subscription Rights, subject to proration and stock ownership limitations described elsewhere in this prospectus. The subscription agent will return any excess payments by mail without interest or deduction promptly after expiration of the subscription period.
<b>Expiration Date</b>	The Subscription Rights will expire at 5:00 p.m., Eastern Time, on October 10, 2022.
<b>Procedure for Exercising Subscription Rights</b>	To exercise your Subscription Rights, you must take the following steps:  If you are a record holder, as of the Record Date, of our common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants, you must deliver payment and a properly completed Rights Certificate to the Subscription Agent to be received before 5:00 p.m., Eastern Time, on October 10, 2022. You may deliver the documents and payments by first class mail or courier service. If you use first class mail for this purpose, we recommend using registered mail, properly insured, with return receipt requested.  If as of the Record Date you are a beneficial owner of shares of common stock, Series B Preferred Stock, Series C Preferred Stock or Participating Warrants that are registered in the name of a broker, dealer, bank or other nominee, you should instruct your broker, dealer, bank or other nominee to exercise your Subscription Rights on your behalf. Please follow the instructions of your nominee, who may require that you meet a deadline earlier than 5:00 p.m., Eastern Time, on October 10, 2022.

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

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

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

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#### INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

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

- our Annual Report on [Form 10-K](#) for the year ended December 31, 2021;
- our Quarterly Report on [Form 10-Q](#) for the quarter ended March 31, 2022;
- our Quarterly Report on [Form 10-Q](#) for the quarter ended June 30, 2022;
- our Current Report on [Form 8-K](#) filed on January 4, 2022;

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

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

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

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

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

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## WHERE YOU CAN FIND MORE INFORMATION

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

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## QUESTIONS AND ANSWERS RELATING TO THE RIGHTS OFFERING

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

### **Why are we conducting the Rights Offering?**

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

### **What is a Unit?**

Each Unit consists of one share of Series D Convertible Preferred Stock and, based on the Estimated Conversion Price, 2,711 warrants to purchase common stock, at a subscription price of \$1,000 per Unit. No fractional Units will be issued. Each share of Preferred Stock will have a stated value of \$1,000 and will be convertible into shares of our common stock at a conversion price equal to the Conversion Price determined on the expiration date. Each warrant entitles you to purchase one share of common stock at a per share exercise price equal to the Conversion Price, from the date of issuance through its expiration five years after the date of issuance. The Preferred Stock do not generally have any voting rights and will not be certificated. The shares of Preferred Stock and warrants that comprise each Unit are immediately separable and will be issued separately in this Rights Offering, however, they may only be purchased as a Unit, and the Units will not trade as a separate security.

### **What is the Rights Offering?**

We are distributing, at no charge, to holders of our common stock, Series B Preferred Stock, Series C Preferred Stock and holders of the Participating Warrants, as of the Record Date, non-transferable Subscription Rights to purchase Units at a price of \$1,000 per Unit. The Subscription Rights will not be tradable. Each Unit consists of one share of our Preferred Stock and, based on the Estimated Conversion Price, 2,711 Warrants. See “Are there risks in exercising my Subscription Rights?” below. Each Warrant will be exercisable for one share of our common stock. Upon expiration of the Rights Offering, the Preferred Stock and Warrants comprising the Units will immediately separate and will be issued separately but may only be purchased as a Unit, and the Units will not trade as a separate security. There is no public trading market for the Preferred Stock or the Warrants and they will not be listed for trading on Nasdaq or any other securities exchange or market. The common stock to be issued upon conversion of the Preferred Stock or exercise of the Warrants, like our existing shares of common stock, will be traded on the NASDAQ Capital Market under the symbol “SINT.” You will receive one Subscription Right for every share of common stock (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) that you owned as of 5:00 p.m., Eastern Time, on the Record Date. Each Subscription Right entitles the record holder to a Basic Subscription Right and an Over-Subscription Privilege. The Subscription Rights will expire if they are not exercised by 5:00 p.m., Eastern Time, on October 10, 2022, unless we extend or earlier terminate the Rights Offering.

### **What are the Basic Subscription Rights?**

For every share you owned (including each share of common stock issuable upon conversion of Series B Preferred Stock, Series C Preferred Stock and exercise of Participating Warrants) as of the Record Date, you will receive one Basic Subscription Right, which gives you the opportunity to purchase one Unit, consisting of one share of our Preferred Stock and, based on the Estimated Conversion Price, 2,711 Warrants, for a price of \$1,000 per Unit. For example, if you owned 100 shares of common stock as of the Record Date, you will receive 100 Subscription Rights and will have the right to purchase 100 shares of our Preferred Stock and, based on the Estimated Conversion Price, Warrants to

purchase 271,100 shares of our common stock for \$1,000 per Unit (or a total payment of \$100,000). You may exercise all or a portion of your Basic Subscription Rights or you may choose not to exercise any Basic Subscription Rights at all.

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

#### **What is the Over-Subscription Privilege?**

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

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

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

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

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

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

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

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

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

#### **What are the terms of the Warrants?**

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

#### **Are the Preferred Stock or Warrants listed?**

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

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

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

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

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

Assuming no other transactions by us involving our capital stock prior to the expiration of the Rights Offering, and if the Rights Offering is fully subscribed, upon consummation of the Rights Offering we will have 24,727,789 shares of common stock issued and outstanding, 26 shares of Series B Preferred Stock issued and outstanding convertible into an aggregate of 19,306 shares of our common stock, 50 shares of Series C Preferred Stock issued and outstanding convertible into an aggregate of 33,753 shares of our common stock, and 10,000 shares of Preferred Stock issued and outstanding convertible into an aggregate of 27,110,000 shares of our common stock, based on the Estimated Conversion Price, and Warrants to purchase an additional 27,110,000 shares of our common stock, based on the Estimated Conversion Price, issued and outstanding. The exact number of shares of Preferred Stock and Warrants that we will issue in this offering will depend on the number of Units that are subscribed for in the Rights Offering. In addition, because the Conversion Price will be determined on the expiration date, the actual number of shares of common stock underlying the Preferred Stock and Warrants will not be known until the expiration date.

### **How was the Subscription Price determined?**

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

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

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

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

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

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

### **How soon must I act to exercise my Subscription Rights?**

If you received a Rights Certificate and elect to exercise any or all of your Subscription Rights, the Subscription Agent must receive your completed and signed Rights Certificate and payment for both your Basic Subscription Rights and any Over-Subscription Privilege you elect to exercise before the Rights Offering expires on October 10, 2022, at 5:00 p.m., Eastern Time, unless we extend or earlier terminate the Rights Offering. If you hold your common shares, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants in the name of a broker, dealer, bank or other nominee, your nominee may establish a deadline before the expiration of the Rights Offering by which you must provide it with your instructions to exercise your Subscription Rights, along with the required subscription payment.

### **May I transfer my Subscription Rights?**

No. The Subscription Rights may be exercised only by the common, Series B Preferred and Series C Preferred stockholders and Participating Warrant holders to whom they are distributed, and they may not be sold, transferred, assigned or given away to anyone else, other than by operation of law. As a result, Rights Certificates may be completed only by the stockholder or warrant holder who receives the certificate. We do not intend to apply for the listing of the Subscription Rights on any securities exchange or recognized trading market.

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

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

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

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

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

No. Our board of directors is making no recommendation regarding your exercise of the Subscription Rights. Rights holders who exercise Subscription Rights will incur investment risk on new money invested. We cannot predict the price at which our shares of common stock will trade after the Rights Offering. On September 9, 2022, the last reported sale price of our common stock on Nasdaq was \$0.4151 per share. You should make your decision based on your assessment of our business and financial condition, our prospects for the future, the terms of the Rights Offering, the information contained in this prospectus and other considerations relevant to your circumstances. See “Risk Factors” for discussion of some of the risks involved in investing in our securities.

**How do I exercise my Subscription Rights?**

If you are a common or Series B Preferred or Series C Preferred stockholder or Participating Warrant holder of record (meaning you hold your shares of our common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants in your name and not through a broker, dealer, bank or other nominee) and you wish to participate in the Rights Offering, you must deliver a properly completed and signed Rights Certificate, together with payment of the Subscription Price for both your Basic Subscription Rights and any Over-Subscription Privilege you elect to exercise, to the Subscription Agent before 5:00 p.m., Eastern Time, on October 10, 2022. If you are exercising your Subscription Rights through your broker, dealer, bank or other nominee, you should promptly contact your broker, dealer, bank or other nominee and submit your subscription documents and payment for the Units subscribed for in accordance with the instructions and within the time period provided by your broker, dealer, bank or other nominee.

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

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

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

**What form of payment is required?**

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

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

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

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

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

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

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

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

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

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

**How much will our company receive from the Rights Offering?**

Assuming that all Units are sold in the Rights Offering, we estimate that the net proceeds from the Rights Offering will be approximately \$9.2 million, based on the Subscription Price of \$1,000 per Unit, after deducting fees and expenses payable to the dealer-manager, before deducting other estimated expenses payable by us and excluding any proceeds

received upon exercise of any Warrants. If all Warrants included in the Units are exercised for cash at the Estimated Conversion Price of \$0.3690 per share, we will receive an additional \$10 million. We intend to use the net proceeds for general corporate purposes and to fund ongoing operations and expansion of our business. See “Use of Proceeds.”

#### **Are there risks in exercising my Subscription Rights?**

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

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

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

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

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

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

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

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

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

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

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

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

#### **To whom should I send my forms and payment?**

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

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

You or, if applicable, your nominee are solely responsible for completing delivery to the Subscription Agent of your subscription documents, Rights Certificate and payment. You should allow sufficient time for delivery of your subscription materials to the Subscription Agent and clearance of payment before the expiration of the Rights Offering at 5:00 p.m. Eastern Time on October 10, 2022.

#### **Whom should I contact if I have other questions?**

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

## Who is the dealer-manager?

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

## RISK FACTORS

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

### Risks Related to the Rights Offering

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

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

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

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

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

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

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

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

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

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

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

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

Until holders of Preferred Stock or Warrants acquire shares of our common stock upon conversion or exercise of the Preferred Stock or Warrants, respectively, holders of such securities will have no rights with respect to the shares of our common stock underlying such Preferred Stock or Warrants. Upon conversion or exercise of the Preferred Stock or Warrants, respectively, the holders thereof will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date. Prior to conversion, holders of Preferred Stock will have limited voting rights.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Changes to U.S. tax laws (which changes may have retroactive application) could adversely affect the Company or holders of our Subscription Rights, shares of our common

stock and Preferred Stock, and Warrants. In recent years, many changes to U.S. federal income tax laws have been proposed and made, and additional changes to U.S. federal income tax laws are likely to continue to occur in the future.

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

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

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

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

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

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

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

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

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

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

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

The 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 Warrants prior to their date of expiration. Any Warrants not exercised by their date of expiration will expire worthless and we will be under no further obligation to the Warrant holder.

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

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

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

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

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

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

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

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

**Risks Related to Our Business**

Investors should carefully consider the risks and uncertainties and all other information contained or incorporated by reference in this prospectus, including the risks and uncertainties discussed under "Risk Factors" in our most recent Annual Report on Form 10-K, as may be amended from time to time, and in subsequent filings that are

incorporated herein by reference. All these risk factors are incorporated by reference herein in their entirety. These risks and uncertainties are not the only ones facing us. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. This prospectus and the incorporated documents also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks mentioned in this prospectus.

## FORWARD-LOOKING STATEMENTS

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

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

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

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

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

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## USE OF PROCEEDS

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

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

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

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## DILUTION

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

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

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

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

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

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

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## MARKET PRICE AND DIVIDEND POLICY

Our shares of common stock are currently quoted on The Nasdaq Capital Market under the symbol "SINT". On September 9, 2022, the last reported sales price of our common stock on Nasdaq was \$0.4151.

### Holders of Record

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

### Dividends

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

### Issuer Purchases of Equity Securities

None

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## THE RIGHTS OFFERING

### The Subscription Rights

We are distributing to the record holders of our common stock, Series B Preferred Stock, Series C Preferred Stock and Participating Warrants, at no charge, non-transferable Subscription Rights to purchase one Unit at a subscription price of \$1,000 per Unit. Each Basic Subscription Right will entitle you to purchase one share of our preferred stock and, based on the Estimated Conversion Price, 2,711 Warrants. Each share of Preferred Stock will be convertible at the option of the holder at any time, into the number of

shares of our common stock determined by dividing the \$1,000 stated value per share of the Preferred Stock by the Conversion Price determined on the expiration date. Based on the Estimated Conversion Price, the Preferred Stock included in the Units would be initially convertible into an aggregate of 27,110,000 shares of common stock. The actual number of shares that the Preferred Stock may be converted into will depend on the Conversion Price determined on the expiration date. Each Warrant will be exercisable for one share of our common stock at a per share exercise price equal to the Conversion Price from the date of issuance through the expiration five years from the date of issuance. Based on the Estimated Conversion Price, the Warrants included in the Units would be initially exercisable for an aggregate of 27,110,000 shares of common stock. The actual number of shares that the Warrants may be exercised for will depend on the Conversion Price determined on the expiration date.

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

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

### ***Basic Subscription Rights***

Your Basic Subscription Rights will entitle you to purchase Units, each comprised of one share of our Preferred Stock and, based on the Estimated Conversion Price, 2,711 Warrants. For example, if you owned 100 shares of common stock as of the Record Date, you will receive 100 Subscription Rights and will have the right to purchase 100 shares of our Preferred Stock and, based on the Estimated Conversion Price, Warrants to purchase 271,100 shares of our common stock for \$1,000 per Unit, or a total payment of \$100,000. You may exercise all or a portion of your Basic Subscription Rights, or you may choose not to exercise any of your Basic Subscription Rights. If you do not exercise your Basic Subscription Rights in full, you will not be entitled to exercise your Over-Subscription Privilege.

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

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

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

### ***Over-Subscription Privilege***

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

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

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

### ***Limitation on the Purchase of Units***

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

### ***Subscription Price***

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

### ***Determination of Subscription Price***

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

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

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

#### **No Short-Sales**

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

#### **No Recombination**

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

#### **Non-Transferability of Subscription Rights**

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

#### **Expiration Date; Extension**

The subscription period, during which you may exercise your Subscription Rights, expires at 5:00 p.m., Eastern Time, on October 10, 2022, which is the expiration of the Rights Offering. If you do not exercise your Subscription Rights before that time, your Subscription Rights will expire and will no longer be exercisable. We will not be required to issue shares to you if the Subscription Agent receives your Rights Certificate or your subscription payment after that time. We have the option to extend the Rights Offering in our sole discretion for any reason up to an additional 45 days, although we do not presently intend to do so. We may extend the Rights Offering by giving oral or written notice to the Subscription Agent before the Rights Offering expires. If we elect to extend the Rights Offering, we will issue a press release announcing the extension no later than 9:00 a.m., Eastern Time, on the next business day after the most recently announced expiration date of the Rights Offering.

If you hold your shares of common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants in the name of a broker, dealer, bank or other nominee, the nominee will exercise the Subscription Rights on your behalf in accordance with your instructions. Please note that the nominee may establish a deadline that may be before 5:00 p.m., Eastern Time, on October 10, 2022, which is the expiration date that we have established for the Rights Offering.

#### **Termination**

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

#### **Return of Funds upon Completion or Termination**

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

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

Assuming no other transactions by us involving our capital stock prior to the expiration of the Rights Offering, and if the Rights Offering is fully subscribed, upon consummation of the Rights Offering we will have 24,727,789 shares of common stock issued and outstanding, 26 shares of Series B Preferred Stock issued and outstanding, 50 shares of Series C Preferred Stock Outstanding, 10,000 shares of Preferred Stock issued and outstanding, and, based on the Estimated Conversion Price, 27,110,000 Warrants to purchase additional shares of our common stock issued and outstanding. The exact number of shares of Preferred Stock and Warrants that we will issue in this offering will depend on the number of Units that are subscribed for in the Rights Offering.

#### **Methods for Exercising Subscription Rights**

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

#### ***Subscription by Record Holders***

If, as of the Record Date, you are a holder of record of common stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants, the number of Units you may purchase pursuant to your Subscription Rights is indicated on the enclosed Rights Certificate. You may exercise your Subscription Rights by properly completing and executing the Rights Certificate and forwarding it, together with your full payment, to the Subscription Agent at the address given below under “Subscription Agent,” to be received before 5:00 p.m., Eastern Time, on October 10, 2022.

#### ***Subscription by Beneficial Owners***

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

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

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#### **Payment Method**

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

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

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

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

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

#### **Missing or Incomplete Subscription Forms or Payment**

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

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

#### **Issuance of Preferred Stock and Warrants**

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

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#### **Subscription and Information Agent**

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

If delivering by mail, hand or overnight courier:  
American Stock Transfer & Trust Company, LLC  
Operations Center

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

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

#### **Warrant Agent**

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

#### **No Fractional Shares**

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

#### **Notice to Brokers and Nominees**

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

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#### **Validity of Subscriptions**

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

#### **Stockholder Rights**

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

#### **Foreign Stockholders**

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

#### **No Revocation or Change**

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

#### **U.S. Federal Income Tax Treatment of Rights Distribution**

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

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#### **No Recommendation to Rights Holders**

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

the risks involved in investing in our common stock.

### **Fees and Expenses**

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

### **Listing**

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

### **Important**

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

### **Distribution Arrangements**

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

### **Other Matters**

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

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## **MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES**

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

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

- U.S. expatriates and former citizens or long-term residents of the United States;
- U.S. holders (as defined below) that are subject to taxing jurisdictions other than, or in addition to, the United States or otherwise hold our common stock, the Subscription Rights, shares of our Preferred Stock, Warrants or shares of our common stock in connection with a trade or business, permanent establishment, or fixed base outside the United States;
- corporations organized outside the United States, any state thereof, or the District of Columbia that are nonetheless treated as U.S. persons for U.S. federal income tax purposes;
- persons holding our common stock, the Subscription Rights, shares of our Preferred Stock, Warrants or shares of our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies, underwriters, and other financial institutions;
- brokers, dealers or traders in securities or currencies or traders that elect to mark-to-market their securities;
- "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships or other pass-through entities for U.S. federal income tax purposes (and investors therein) and S corporations (and shareholders thereof);

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

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

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

#### Tax Considerations Applicable to U.S. Holders

##### **Definition of a U.S. Holder**

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

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

##### **Receipt of Subscription Rights**

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

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

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

### **Tax Basis in the Subscription Rights**

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

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

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

### **Exercise of Subscription Rights**

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

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

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### **Expiration of Subscription Rights**

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

### **Sale or Other Disposition, Exercise or Expiration of Warrants**

As of the date of this prospectus, the exercise price of each Warrant that may be received upon exercise of a Subscription Right is not yet determinable. The tax authorities that apply to warrants with an exercise price less than the fair market value of the underlying security which will be received upon exercise thereof are complex and subject to differing interpretations. Accordingly, the tax treatment of the Warrants which may be received upon exercise of a Subscription Right is uncertain. If the exercise price of a Warrant as of the date of receipt by a U.S. holder that exercises a Subscription Right is substantially less than the fair market value of the underlying share of our common stock which may be received upon exercise of such Warrant, the Warrant may be classified for U.S. federal income tax purposes as of the date of receipt by a U.S. holder as a share of our common stock. If a Warrant is properly classified as a share of common stock for U.S. federal income tax purposes, a U.S. holder will not be required to recognize income, gain or loss upon exercise of such Warrant and a U.S. holder's tax basis in a share of our common stock will be equal to the sum of (1) the U.S. holder's tax basis in the Warrants exchanged therefor and (2) the exercise price of such Warrants. A U.S. holder's holding period in the shares of our common stock received upon exercise should generally include the holding period of such U.S. holder in the Warrants. For the U.S. federal income tax consequences of a sale or other taxable disposition (other than by exercise), or distributions (including constructive distributions) paid on the Warrants if they are properly classified as shares of our common stock for U.S. federal income tax purposes, see the discussions below under the headings "—Constructive Dividends on Warrants", "—Distributions on Preferred Stock and Common Stock", and "—Sale, Exchange or other Disposition of Preferred Stock and Common Stock". U.S. holders should consult their own tax advisors regarding the proper U.S. federal income tax classification of the Warrants. The remainder of this discussion assumes the Warrants are properly classified as warrants for U.S. federal income tax purposes.

Upon the sale or other taxable disposition of a Warrant (other than by exercise) received upon exercise of a Subscription Right, a U.S. holder will generally recognize capital gain or loss equal to the difference between the amount realized on the sale or other taxable disposition and the U.S. holder's adjusted tax basis in the Warrant. A U.S. Holder's

adjusted tax basis in a Warrant will generally equal its initial tax basis (discussed above under “—Exercise of Subscription Rights”), as adjusted for any constructive dividends on the Warrant described below. This capital gain or loss will be long-term capital gain or loss if the U.S. holder’s holding period in such Warrant is more than one year at the time of the sale or other taxable disposition. The deductibility of capital losses is subject to certain limitations.

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

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

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

#### **Constructive Dividends on Warrants**

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

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#### **Distributions on Preferred Stock and Common Stock**

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

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

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

#### **Conversion of Our Preferred Stock into Our Common Stock**

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

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

#### **Constructive Dividends on Preferred Stock or Common Stock**

The conversion rate of our Preferred Stock is subject to adjustment under certain circumstances, as described below under “Description of Securities—Preferred Stock—Preferred Stock.” Section 305(c) of the Code and U.S. Treasury Regulations thereunder may treat a U.S. holder of our Preferred Stock as having received a constructive distribution includable in such U.S. holder’s income in the manner as described above under “—Distributions on Preferred Stock and Common Stock,” if and to the extent that certain adjustments in the conversion rate (or failures to make such an adjustment) increase the proportionate interest of such U.S. holder in our earnings and profits. In certain other circumstances, an adjustment to the conversion rate of our Preferred Stock or a failure to make such an adjustment could potentially give rise to constructive distributions to U.S. holders of our common stock. Thus, under certain circumstances, U.S. holders may recognize income in the event of a constructive distribution even though they may not receive any cash or property. We are currently required to report the amount of any deemed distributions to the IRS, as well as either on our website or to holders not exempt from reporting.

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## Information Reporting and Backup Withholding

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

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

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

## Tax Considerations Applicable to Non-U.S. Holders

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

### Receipt, Exercise and Expiration of the Subscription Rights

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

### Exercise of Warrants

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

## Constructive Dividends on Warrants

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

## Distributions on Preferred Stock and Common Stock

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

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

Non-U.S. holders will be entitled to a reduction in or an exemption from withholding on dividends as a result of either (1) an applicable income tax treaty or (2) the non-U.S. holder holding our Preferred Stock or common stock in connection with the conduct of a trade or business within the United States and such dividends being effectively connected with that trade or business. To claim such a reduction in or exemption from withholding, the non-U.S. holder must provide the applicable withholding agent with a properly executed (a) IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) claiming an exemption from or reduction of the withholding tax pursuant to the benefits of an income tax treaty between the United States and the country in which the non-U.S. holder resides or is established, or (b) IRS Form W-8ECI stating that the dividends are not subject to withholding tax because they are effectively connected with the conduct by the non-U.S. holder of a trade or business within the United States, as may be applicable. These certifications must be provided to the applicable withholding agent prior to the payment of dividends and must be updated periodically. Non-U.S. holders that do not timely provide the applicable withholding agent with the required certification, but that qualify for a reduced rate under an applicable income tax treaty, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

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

income tax treaty) on its effectively connected earnings and profits for the taxable year that are attributable to such dividends, as adjusted for certain items. Non-U.S. holders should consult their own tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

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

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

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

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

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

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

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

### **Conversion of Our Preferred Stock into Our Common Stock**

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

### **Constructive Dividends on Preferred Stock**

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

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

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

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

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

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

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

jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

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

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## DESCRIPTION OF SECURITIES

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

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

### Common Stock

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

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

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

### Preferred Stock

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

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### *Series B Preferred Stock.*

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

### *Conversion*

Each share of Series B Preferred Stock is convertible into shares of our common stock at any time at the holder's option at the Series B Conversion Price described below. We may not effect any conversion of Series B Preferred Stock, with certain exceptions, to the extent that, after giving effect to an attempted conversion, the holder of Series B Preferred Stock (together with such holder's affiliates, and any persons acting as a group together with such holder or any of such holder's affiliates) would beneficially own a number of shares of common stock in excess of 4.99% (or, at the election of the holder, 9.99%) of the shares of our common stock then outstanding after giving effect to such conversion, referred to as the Preferred Stock Beneficial Ownership Limitation; provided, however, that upon notice to us, the holder may increase or decrease the Preferred Stock Beneficial Ownership Limitation, provided that in no event may the Preferred Stock Beneficial Ownership Limitation exceed 9.99% and any increase in the Preferred Stock Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us.

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

### *Conversion Price.*

The Series B Preferred Stock is convertible into shares of common stock by dividing the stated value of the Series B Preferred Stock (\$1,100) by \$1.4814 (the "Series B

Conversion Price”). The Series B Conversion Price is subject to adjustment for stock splits, stock dividends, and distributions of common stock or securities convertible, exercisable or exchangeable for common stock, subdivisions, combinations and reclassifications.

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

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

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

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

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

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

#### *Liquidation; Dividends; Repurchases.*

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

#### *Redemption Right.*

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

#### *Fundamental Transactions.*

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

#### *Voting Rights.*

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

#### *Jurisdiction and Waiver of Trial by Jury*

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

#### *Series C Preferred Stock.*

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

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

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

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

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

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

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

#### *Future Preferred Stock.*

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

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

- the liquidation preference per share;
- the purchase price per share;
- the dividend rate per share, dividend period and payment dates and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- our right, if any, to defer payment of dividends and the maximum length of any such deferral period;
- the procedures for any auction and remarketing, if any;

- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock or other securities of ours, including warrants, and, if applicable, the conversion period, the conversion price, or how it will be calculated, and under what circumstances it may be adjusted;
- voting rights, if any, of the preferred stock;
- preemption rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuances of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preferred stock.

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

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

## Description of Other Outstanding Securities of the Company

### *Warrants*

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

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

### *February 2020 Rights Offering Warrants*

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

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

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

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

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

*Exercise Price.* Each February 2020 Warrant represents the right to purchase one share of common stock at an exercise price of \$1.50 per share. In addition, the exercise price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations, or reclassifications, and for certain dilutive issuances. Subject to limited exceptions, a holder of warrants will not have the right to exercise any portion of the warrant to the extent that, after giving effect to the exercise, the holder, together with its affiliates, and any other person acting as a group together with the holder or any of its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to its exercise. The holder, upon notice to the Company, may increase or decrease the beneficial ownership limitation

provisions of the warrant, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise of the warrant.

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

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

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

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

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

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

#### *Maxim and Ascendant Warrants*

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

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

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

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

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

#### *May 2018 Public Offering Warrants*

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

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

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

The exercise price and the number of shares issuable upon exercise of the May 2018 Warrants is subject to appropriate adjustment, similar to that described with respect to the Series B Preferred Stock above, in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common stock. Subject to certain exclusions contained in the May 2018 Warrant, the exercise price is also subject to adjustment in the event that we sell or grant any option to purchase, or sell or grant any right to reprice, or otherwise dispose of or issue (or announce any offer, sale, grant or any option to purchase or other disposition) any common stock or common stock equivalents (as defined in the May 2018 Warrants), at an effective price per share less than the exercise price then in effect (including in the event we issued Series B Preferred Stock at a conversion price lower than the initial conversion price of the Series B Preferred Stock). The foregoing exercise price adjustment provisions will likely be triggered by the issuance of the Preferred Stock and Warrants in the Rights Offering. In addition, May 2018 Warrant holders may be eligible to elect an alternative price in the event we issue certain variable price securities. The May 2018 Warrant holders must pay the exercise price in cash upon exercise of the May 2018 Warrants, unless such May 2018 Warrant holders are utilizing the cashless exercise provision of the May 2018 Warrants, which is only available in certain circumstances such as if the underlying shares are not registered with the SEC pursuant to an effective registration statement.

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

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

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

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

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

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

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

#### *Repricing of Series E Warrants and Issuance of New Warrants*

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

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

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

#### *Outstanding December 2012 Warrants*

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

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

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

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

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

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

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

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

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

#### **Warrants Included in Units Issuable in the Rights Offering**

The Warrants to be issued as a part of this Rights Offering will be designated as our "Series 2" warrants. These Warrants will be separately transferable following their issuance and through their expiration five years from the date of issuance. Each Warrant will entitle the holder to purchase one share of our common stock at a per share exercise price equal to the Conversion Price from the date of issuance through its expiration. There is no public trading market for the Warrants and they will not be listed for trading on Nasdaq or any other securities exchange or market. The common stock underlying the Warrants, upon issuance, will also be traded on Nasdaq under the symbol "SINT."

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

#### *Exercisability*

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

#### *Cashless Exercise*

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

#### *Exercise Price*

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

#### *Transferability*

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

#### *No Market*

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

#### *Rights as Stockholder*

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

of the other rights of our stockholders.

#### *Amendments and Waivers*

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

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

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

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

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

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

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

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

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

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

*Super-Majority Stockholder Vote required for Certain Actions.* The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation’s certificate of incorporation or bylaws, unless the corporation’s certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our Restated Certificate of Incorporation requires the affirmative vote of the holders of at least 80% of our outstanding voting stock to amend or repeal any of the provisions discussed in this section of this prospectus entitled “Effect of Anti-Takeover Provisions of Our Restated Certificate of Incorporation, Our Restated Bylaws and Delaware Law” or to reduce the number of authorized shares of common stock or preferred stock. This 80% stockholder vote would be in addition to any separate class vote that might in the future be required pursuant to the terms of any preferred stock that might then be outstanding. An 80% vote is also required for any amendment to, or repeal of, our Restated Bylaws by the stockholders. Our Restated Bylaws may be amended or repealed by a simple majority vote of the board of directors.

#### **Potential Effects of Authorized but Unissued Stock**

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

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

#### **Transfer Agent and Warrant Agent**

The transfer agent and registrar for our common stock and the warrant agent for the Warrants is American Stock Transfer & Trust Company, LLC. The transfer agent and the

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## PLAN OF DISTRIBUTION

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

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

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

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

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

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

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

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

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

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

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## EXPERTS

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

## LEGAL MATTERS

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

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



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PROSPECTUS

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*Dealer-Manager*  
Maxim Group LLC

, 2022

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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	\$ 1,854
FINRA filing fee	3,500
Printing expenses	5,000
Legal fees and expenses	175,000
Accounting fees and expenses	70,000
Subscription Agent, Information Agent and Warrant Agent Fees and Expenses	46,000
Miscellaneous expenses	10,000
<i>Total</i>	<u>\$ 311,354</u>

\* To be provided by amendment.

**Item 14. Indemnification of Directors and Officers**

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act.

The Registrant's amended certificate of incorporation provides for indemnification of its directors and executive officers to the maximum extent permitted by the Delaware General Corporation Law, and the Registrant's amended and restated bylaws provide for indemnification of its directors and executive officers to the maximum extent permitted by the Delaware General Corporation Law.

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.**

None.

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**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
1.1	<a href="#">Form of Dealer Manager Agreement</a>	X			

2.1+	<a href="#">Asset Purchase Agreement by and among Amedica Corporation, CTL Corporation and US Spine Inc. dated as of September 5, 2018</a>		Form 8-K (Exhibit 2.1)	10/5/18	001-33624
2.2+†	<a href="#">Asset Purchase Agreement by and among SINTX Technologies, Inc. and B4C, LLC, dated July 20, 2021.</a>		Form 8-K (Exhibit 2.1)	7/26/21	001-33624
2.3+†	<a href="#">Stock Purchase Agreement by and between Larry Fehrenbacher, Sharon Fehrenbacher, and SINTX Technologies, Inc. dated June 30, 2022.</a>		Form 8-K (Exhibit 2.1)	07/06/22	001-33624
3.1	<a href="#">Restated Certificate of Incorporation of the Registrant</a>		Form 8-K (Exhibit 3.1)	2/20/14	001-33624
3.1.1	<a href="#">Certificate of Amendment to the Restated Certificate of Incorporation</a>		Form 8-K (Exhibit 3.1)	1/22/16	001-33624
3.1.2	<a href="#">Certificate of Amendment to the Restated Certificate of Incorporation</a>		Form 8-K (Exhibit 3.1)	11/16/17	001-33624
3.1.3	<a href="#">Certificate of Designation of Series B Preferred Stock</a>		Form 8-K (Exhibit 3.1)	5/15/18	001-33624
3.1.4	<a href="#">Certificate of Amendment to the Restated Certificate of Incorporation</a>		Form 8-K (Exhibit 3.1)	11/02/18	001-33624
3.1.5	<a href="#">Certificate of Amendment to the Restated Certificate of Incorporation of SINTX Technologies, Inc.</a>		Form 8-K (Exhibit 3.1)	7/26/19	001-33624
3.1.6	<a href="#">Certificate of Designation of Series C Preferred Stock</a>		Form 8-K (Exhibit 3.1)	2/07/20	001-33624
3.1.7	<a href="#">Certificate of Designation of Series D Preferred Stock</a>	X			
3.2	<a href="#">Amended and Restated Bylaws of SINTX Technologies, Inc.</a>		Form 8-K (Exhibit 3.1)	10/01/21	001-33624
4.1	<a href="#">Form of Common Stock Certificate of the Registrant</a>		Amendment No. 3 to Form S-1 (Exhibit 4.1)	1/29/14	333-192232
4.2	<a href="#">Warrant to Purchase Shares of Series F Convertible Preferred Stock by and between the Registrant and GE Capital Equity Investments, Inc., dated as of December 17, 2012</a>		Form S-1 (Exhibit 4.10)	11/8/13	333-192232

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4.3	<a href="#">Warrant to Purchase Shares of Series F Convertible Preferred Stock by and between the Registrant and Zions First National Bank, dated as of December 17, 2012</a>		Form S-1 (Exhibit 4.11)	11/8/13	333-192232
4.4	<a href="#">Common Stock Purchase Warrant</a>		Form 8-K (Exhibit 4.1)	5/15/18	001-33624
4.5	<a href="#">Form of Warrant Agency Agreement between Amedica Corporation and American Stock Transfer and Trust Company, LLC</a>		Form S-1 (Exhibit 4.28)	4/26/18	333-223032
4.6	<a href="#">Form of Common Stock Warrant</a>		Form S-1/A	1/15/20	333-234438
4.7	<a href="#">Form of Warrant Agency Agreement between Amedica Corporation and American Stock Transfer and Trust Company, LLC, dated February 6, 2020</a>		Form 8-K (Exhibit 10.1)	2/07/20	001-33624
4.8	<a href="#">Warrant Issued to Maxim Group LLC on February 6, 2020</a>		Form 8-K (Exhibit 4.1)	2/07/20	001-33624
4.9	<a href="#">Warrant Issued to Ascendant Capital Markets, LLC on February 6, 2020</a>		Form 8-K (Exhibit 4.2)	2/07/20	001-33624
4.10	<a href="#">Form of Indenture</a>		Form S-3 (Exhibit 4.2)	3/25/19	333-230492
4.11	<a href="#">Form of Common Stock Warrant</a>	X			
4.12	<a href="#">Form of Warrant Agency Agreement between Amedica Corporation and American Stock Transfer and Trust Company, LLC</a>	X			
4.13	<a href="#">Form of Non-Transferrable Subscription Rights Certificate</a>	X			
4.14	<a href="#">Form of Dealer-Manager Warrant</a>	X			
5.1	<a href="#">Opinion of Dorsey &amp; Whitney LLP</a>	X			
8.1	<a href="#">Tax Opinion of Dorsey &amp; Whitney LLP</a>	X			
10.1	<a href="#">CentrepoinTE Business Park Lease Agreement Net by and between the Registrant and CentrepoinTE Properties, LLC, dated as of April 21, 2009</a>		Form S-1 (Exhibit 10.10)	11/8/13	333-192232

10.2	<a href="#">First Addendum to Centrepointe Business Park Lease Agreement Net by and between the Registrant and Centrepointe Properties, LLC, dated as of January 31, 2012</a>		Form S-1 (Exhibit 10.11)	11/8/13	333-192232
10.3	<a href="#">Form of Change of Control Agreement*</a>		Form 8-K (Exhibit 10.1)	7/22/15	001-33624
10.4	<a href="#">Form of Indemnification Agreement by and between the Registrant and its officers and directors</a>		Amendment No. 2 to Form S-1 (Exhibit 10.14)	12/20/13	333-192232
10.5	<a href="#">Exchange Agreement dated April 4, 2016, by and among SINTX Corporation and Riverside Merchant Partners, LLC</a>		Form 8-K (Exhibit 10.2)	5/05/16	001-33624
10.6	<a href="#">Security Agreement, dated July 28, 2017</a>		Form 8-K (Exhibit 10.1)	8/3/17	001-33624
10.7	<a href="#">Form of Warrant Amendment Agreement</a>		Form S-1 (Exhibit 10.26)	4/26/18	333-223032
10.8	<a href="#">Amendment to Centrepointe Business Park Lease Agreement, dated June 7, 2019, between SINTX Technologies, Inc. and Centrepointe Properties, LLC.</a>		Form 8-K (Exhibit 10.1)	6/10/19	001-33624
10.9	<a href="#">Promissory Note issued by CTL Corporation in favor of Amedica Corporation dated as of October 1, 2018.</a>		Form 8-K (Exhibit 10.1)	10/5/18	001-33624
10.10	<a href="#">Security Agreement between Amedica Corporation and CTL Corporation dated as of October 1, 2018.</a>		Form 8-K (Exhibit 10.2)	10/5/18	001-33624
10.11	<a href="#">Guaranty between Amedica Corporation and Daniel Chon dated as of October 1, 2018.</a>		Form 8-K (Exhibit 10.3)	10/5/18	001-33624
10.12	<a href="#">ROFN Security Agreement between Amedica Corporation and CTL Corporation dated as of October 1, 2018.</a>		Form 8-K (Exhibit 10.4)	10/5/18	001-33624
10.13	<a href="#">Promissory Note, dated April 28, 2020 between SINTX Technologies, Inc. and First State Community Bank.</a>		Form 8-K (Exhibit 10.1)	4/30/20	001-33624
10.14	<a href="#">Form of Share Purchase Agreement</a>		Form 8-K (Exhibit 99.1)	6/29/20	001-33624
10.15	<a href="#">Placement Agency Agreement</a>		Form 8-K (Exhibit 99.2)	6/29/20	001-33624

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10.16	<a href="#">Form of Share Purchase Agreement</a>		Form 8-K (Exhibit 99.1)	7/20/20	001-33624
10.17	<a href="#">Placement Agency Agreement</a>		Form 8-K (Exhibit 99.2)	7/20/20	001-33624
10.18	<a href="#">Form of Share Purchase Agreement</a>		Form 8-K (Exhibit 99.1)	8/6/20	001-33624
10.19	<a href="#">Placement Agency Agreement</a>		Form 8-K (Exhibit 99.2)	8/6/20	001-33624
10.20	<a href="#">Form of Indenture</a>		Form S-3 (Exhibit 4.18)	10/2/20	333-249267
10.21	<a href="#">Equity Distribution Agreement, dated as of February 25, 2021, by and between SINTX Technologies, Inc. and Maxim Group LLC</a>		Form 8-K (Exhibit 10.1)	2/26/20	001-33624
10.22	<a href="#">2020 Equity Incentive Plan</a>		Defn 14a Proxy Statement	7/10/2020	001-33624
21.1	<a href="#">List of Subsidiaries of the Registrant</a>	X			
23.1	<a href="#">Consent of Independent Registered Public Accounting Firm, Tanner LLC</a>	X			
23.2	<a href="#">Consent of Dorsey &amp; Whitney LLP (included in Exhibit 5.1)</a>	X			
23.3	<a href="#">Consent of Dorsey &amp; Whitney LLP (included in Exhibit 8.1)</a>	X			
24.1	<a href="#">Power of Attorney (Signature Block)</a>		Form S-1 (Exhibit 24.1)	7/8/2022	333-266070
99.1	<a href="#">Form of Instructions as to Use of Subscription Rights Certificates</a>	X			
99.2	<a href="#">Form of Letter to Shareholders who are Record Holders</a>	X			
99.3	<a href="#">Form of Letter to Brokers, Dealers, Banks and Other Nominees</a>	X			
99.4	<a href="#">Form of Broker Letter to Clients Who are Beneficial Holders</a>	X			
99.5	<a href="#">Form of Beneficial Owner Election Form</a>	X			

99.6	<a href="#">Form of Nominee Holder Certification</a>	X		
99.7	<a href="#">Form of Notice of Important Tax Information</a>	X		
99.8	<a href="#">Form of Letter to Shareholders</a>	X		
107	<a href="#">Filing Fee Table</a>		Form S-1 (Exhibit 107)	7/8/2022 333-266070

\* 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.

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*(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.

(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:

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(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) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement 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.

(c) 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.

(d) 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.

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**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 September 12, 2022.

SINTX TECHNOLOGIES, INC.

By: /s/ B. Sonny Bal

B. Sonny Bal, M.D.  
Chief Executive Officer and President

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:

<b>SIGNATURE</b>	<b>TITLE</b>	<b>DATE</b>
<u>/s/ B. Sonny Bal</u> B. Sonny Bal, M.D.	Chief Executive Officer and Director (Principal Executive Officer and Principal Financial Officer)	September 12, 2022
* <u>David W. Truetzel</u>	Director	September 12, 2022
* <u>Jeffrey S. White</u>	Director	September 12, 2022
* <u>Eric A. Stookey</u>	Director	September 12, 2022
* <u>Marc Froimson</u>	Director	September 12, 2022
* By: <u>/s/ B. Sonny Bal</u> B. Sonny Bal, M.D. Attorney-in-Fact		

## SINTX TECHNOLOGIES, INC.

## DEALER-MANAGER AGREEMENT

, 2022

Maxim Group LLC  
300 Park Avenue, 16<sup>th</sup> Floor  
New York, NY 10022

*As Dealer-Manager*

Ladies and Gentlemen:

The following will confirm our agreement relating to the proposed rights offering (the “**Rights Offering**”) to be undertaken by SINTX Technologies, Inc., a Delaware corporation (the “**Company**”), pursuant to which the Company will distribute to holders of record of its common stock, par value \$0.01 per share (the “**Common Stock**”), and to holders of its Series B Preferred Stock, Series C Preferred Stock and certain outstanding warrants (the “**Participating Securities**”) subscription rights (the “**Rights**”) to subscribe for up to an aggregate of 10,000 units (the “**Units**”), each Unit consisting of one share of Series D Convertible Preferred Stock (the “**Rights Shares**”) and warrants, with each warrant representing the right to purchase one share of Common Stock (the “**Rights Warrants**”) and the Rights Shares, the Rights Warrants and the shares of Common Stock issuable upon conversion of the Rights Shares and exercise of the Rights Warrants, the “**Securities**”), at a subscription price of \$1,000 per Unit in cash (the “**Subscription Price**”).

1. The Rights Offering.

a) The Company proposes to undertake the Rights Offering pursuant to which each holder of Common Stock and Participating Securities shall receive one Right for each share of Common Stock and each share of Common Stock underlying each of the Participating Securities held of record at the close of business on September 23, 2022 (the “**Record Date**”). Holders of Rights will be entitled to subscribe for and purchase, at the Subscription Price, one (1) Unit for each Right held (the “**Basic Subscription Right**”). Rights may only be exercised for whole Right Shares and Rights Warrants; no fractional securities will be issued in the Rights Offering.

b) The Rights will not trade or be listed for quotation on any exchange or service, and shall be non-transferable.

c) Any holder of Rights who fully exercises all Basic Subscription Rights issued to such holder is entitled to subscribe for Units which were not otherwise subscribed for by others pursuant to their Basic Subscription Rights (the “**Over-Subscription Right**”). The Over-Subscription Right shall allow a holder of a Right to subscribe for an additional amount of Units above the amount which such holder was otherwise entitled to subscribe. Units acquired pursuant to the Over-Subscription Right are subject to proration, allotment and stock ownership limitations, as more fully discussed in the Prospectus (as defined herein).

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d) The Rights will expire at 5:00 p.m., New York City time, on October 10, 2022 (the “**Expiration Date**”). The Company shall have the right to extend the Expiration Date in its sole discretion up to 45 days after the Expiration Date. Any Rights not exercised on or before the Expiration Date will expire worthless without any payment to the holders of unexercised Rights.

e) All funds from the exercise of Basic Subscription Rights and Over-Subscription Rights will be deposited with American Stock Transfer & Trust Company, LLC (the “**Subscription Agent**”), and held in a segregated account with the Subscription Agent pending a final determination of the number of Rights Shares and Rights Warrants to be issued pursuant to the exercise of Basic Subscription Rights and Over-Subscription Rights. The Company may conduct a closing of the Rights Offering (a “**Closing**”) at its sole discretion at any time following the Expiration Date.

2. Appointment as Dealer-Manager; Role of Dealer-Manager.

a) On the terms and conditions set forth herein, the Company hereby appoints Maxim Group LLC (“**Maxim**”) as exclusive dealer-manager (the “**Dealer-Manager**”) for the Rights Offering and authorizes the Dealer-Manager to act as such in connection with the Rights Offering.

b) The services previously provided by Maxim under that certain engagement letter, dated June 11, 2022, between the Company and Maxim (as amended, the “**Engagement Letter**,” which such Engagement Letter shall continue to be effective and the terms therein shall continue to survive and be enforceable by Maxim in accordance with its terms, provided that, in the event of a conflict between the terms of the Engagement Letter and this Agreement, the terms of this Agreement shall prevail), or to be provided by the Dealer-Manager through the Closing, consist of the following:

i. providing market assistance in connection with the conduct of the Rights Offering (which shall include assisting the Company in drafting a presentation that may be used to market the Rights Offering to investors and assistance in the coordination of the Rights Offering together with the Subscription Agent);

ii. providing financial advice to the Company in connection with the Rights Offering (including advice regarding the structure, pricing, timing and other terms and conditions of the Rights Offering);

iii. responding to requests for information and materials in connection with the Rights Offering (it being agreed that D.F. King & Co., Inc. (the “**Information Agent**”) will be the Company’s primary third party source of information regarding the Rights Offering and will be identified by the Company as such in the Registration Statement) (the services described in clauses (i), (ii) and (iii) being collectively referred to as the “**Advisory Services**”); and

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iv. in accordance with customary practice, using best efforts to solicit the exercise of the Rights and subscriptions for the Units pursuant to the Offer Documents (as defined herein) (the services described in this clause (iv) being referred to as the “**Solicitation Services**”);

c) The services of the Dealer-Manager described in clauses (b)(iii) and (iv) above shall commence on the date that the Registration Statement is declared effective by the U.S. Securities and Exchange Commission (the “**Commission**”). The Company hereby authorizes the Dealer-Manager, or one or more registered broker-dealers chosen exclusively by the Dealer-Manager, to act as the Company’s agent in making the Rights Offering to residents of such states as to which such agent designation may be necessary to comply with applicable law.

d) The Company hereby acknowledges that Maxim is acting only as a dealer-manager in connection with the Rights Offering. The Dealer-Manager shall not

(and shall not be obligated to) underwrite or place any Rights or any Rights Shares or Rights Warrants, and the Company acknowledges and agrees that Maxim's participation as Dealer-Manager does not ensure or guarantee that the Company will raise any funds through the Rights Offering.

e) The Company further acknowledges that Maxim is acting as an independent contractor pursuant to a contractual relationship created solely by this Agreement entered into on an arm's length basis and in no event do the parties intend that Maxim be responsible as a fiduciary to the Company, its management, shareholders, creditors or any other natural person, partnership, limited liability partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture, or other entity or organization (each, a "**Person**") in connection with any activity that Maxim may undertake or has undertaken in furtherance of the Rights Offering, either before or after the date hereof. Maxim hereby expressly disclaims any fiduciary or similar obligations to the Company, either in connection with the transactions contemplated by this Agreement or any matters leading up to such transactions, and the Company hereby confirms its understanding and agreement to that effect. The Company and Maxim agree that each party is responsible for making its own independent judgments with respect to any such transactions, and that any opinions or views expressed by Maxim to the Company regarding such transactions, including but not limited to any opinions or views with respect to the price or market for the Company's securities, do not constitute advice or recommendations to the Company. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against Maxim with respect to any breach or alleged breach of any fiduciary or similar duty to the Company in connection with the transactions contemplated by this Agreement or any matters leading up to such transactions.

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3. No Liability for Acts of Brokers, Dealers, Banks and Trust Companies The Dealer-Manager shall not be subject to any liability to the Company or any of the Company's Subsidiaries (as defined below) or "Affiliates," as such term is defined in Rule 144 under the Securities Act of 1933, as amended (the "**Securities Act**"), for any act or omission on the part of any broker or dealer in securities (other than the Dealer-Manager) or any bank or trust company or any other Person, and the Dealer-Manager shall not be liable for its own acts or omissions in performing its obligations as advisor or Dealer-Manager hereunder or otherwise in connection with the Rights Offering or the related transactions, except for any losses, claims, damages, liabilities and expenses determined in a final judgment by a court of competent jurisdiction to have resulted directly from any such acts or omissions undertaken or omitted to be taken by such Dealer-Manager through its gross negligence, intentional omission or willful misconduct. In informing holders of Participating Securities, no Dealer-Manager shall be deemed to be acting as the agent of the Company or as the agent of any broker, dealer, bank or trust company, and no broker, dealer, bank or trust company shall be deemed to be acting as such Dealer-Manager's agent or as the agent of the Company. As used herein, the term "Subsidiary" means a significant subsidiary of the Company as defined in Rule 1-02 (w) of Regulation S-X of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"). Unless the context specifically requires otherwise, the term "Company" as used in this Agreement means the Company and its Subsidiaries collectively on a consolidated basis.

#### 4. The Offer Documents

a) There will be used in connection with the Rights Offering certain materials in addition to the Registration Statement, any Preliminary Prospectus or the Prospectus (each as defined herein), including: (i) all exhibits to the Registration Statement which pertain to the conduct of the Rights Offering; and (ii) any soliciting materials relating to the Rights Offering approved by the Company (collectively with the Registration Statement, any Preliminary Prospectus and the Prospectus, the "**Offer Documents**"). The Dealer-Manager shall be given such opportunity to review and comment upon the Offer Documents.

b) The Company agrees to furnish the Dealer-Manager with as many copies as it may reasonably request of the final forms of the Offer Documents and the Dealer-Manager is authorized to use copies of the Offer Documents in connection with its acting as Dealer-Manager. The Dealer-Manager hereby agrees that it will not disseminate any written material for or in connection with the Rights Offering other than the Offer Documents.

c) The Company represents and agrees that no solicitation material, other than the Offer Documents and the documents to be filed therewith as exhibits thereto (each in the form of which has been approved by the Dealer-Manager), will be used in connection with the Rights Offering by or on behalf of the Company without the prior approval of the Dealer-Manager, which approval will not be unreasonably withheld. In the event that the Company uses or permits the use of any such solicitation material in connection with the Rights Offering, then the Dealer-Manager shall be entitled to withdraw as Dealer-Manager in connection with the Rights Offering and the related transactions without any liability or penalty to the Dealer-Manager or any other Person identified in Section 11 hereof as an "indemnified party," and the Dealer-Manager shall be entitled to receive the payment of all fees and expenses payable under this Agreement or the Engagement Letter which have accrued to the date of such withdrawal.

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#### 5. Representations and Warranties. The Company represents and warrants to the Dealer-Manager that:

a) The Registration Statement on Form S-1 (Registration No. 333-266070) with respect to the Rights, the Units, the Rights Shares, the Rights Warrants and the shares of Common Stock issuable upon conversion of the Rights Shares and exercise of the Rights Warrants has: (i) been prepared by the Company in conformity with, in all material respects, the requirements of the Securities Act and the rules and regulations of the Commission (the "**Rules and Regulations**") promulgated under the Securities Act; (ii) been filed with the Commission under the Securities Act; and (iii) become effective under the Securities Act. Copies of such Registration Statement as amended to date have been delivered or made available by the Company to the Dealer-Manager. For purposes of this Agreement, "**Effective Time**" means the date and the time as of which such registration statement, or the most recent post-effective amendment thereto, if any, was declared effective by the Commission; "**Effective Date**" means the date of the Effective Time; "**Preliminary Prospectus**" means each prospectus included in such registration statement, or amendments thereof, before it becomes effective under the Securities Act and any prospectus filed with the Commission by the Company with the consent of the Dealer-Manager pursuant to Rule 424(a) of the Rules and Regulations; "**Registration Statement**" means such Registration Statement, as amended at the Effective Time, including any documents incorporated by reference therein; and "**Prospectus**" means such final prospectus, as first filed with the Commission pursuant to paragraph (1) or (4) of Rule 424(b) of the Rules and Regulations, as amended by any prospectus supplement thereto. The Commission has not issued any order preventing or suspending the use of any Preliminary Prospectus or the Prospectus. All references in this Agreement to the Registration Statement, a Preliminary Prospectus, and the Prospectus, or any amendments or supplements to any of the foregoing shall be deemed to include any copy thereof filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System ("**EDGAR**"). Additionally, any reference in this Agreement to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-1 under the Securities Act, as of the effective date of the Registration Statement or the date of such Preliminary Prospectus or the Prospectus, as the case may be. The Prospectus delivered to the Dealer-Manager for use in connection with the Rights Offering will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T promulgated by the Commission.

b) The Registration Statement (together with all exhibits filed as part of the Registration Statement) conforms, and any Preliminary Prospectus and the Prospectus and any further amendments or supplements to the Registration Statement conforms or will conform, when they are filed with or become effective by the Commission, as the case may be, in each case, in all material respects, to the requirements of the Securities Act and the Rules and Regulations and collectively do not and will not, as of the applicable Effective Date (as to the Registration Statement and any amendment thereto) and as of the applicable filing date (as to the Prospectus and any amendment or supplement thereto) contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein (with respect to the Prospectus, in the light of the circumstances under which they were made) not misleading; provided that no representation or warranty is made by the Company as to information contained in or omitted from the Registration Statement or the Prospectus in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Dealer-Manager specifically for inclusion therein, it being acknowledged and agreed that such information provided by or on behalf of the Dealer-Manager consists solely and exclusively of the following disclosure contained in the Prospectus (collectively, the "**Dealer-Manager Information**"): the name of Maxim Group LLC acting in its capacity as dealer-manager for the Rights Offering.

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c) Neither: (i) any Issuer-Represented General Free Writing Prospectus(es) (as defined below) issued at or prior to the Closing and the Prospectus, all considered together (collectively, the “**General Disclosure Package**”), nor (ii) any individual Issuer-Represented Limited-Use Free Writing Prospectus(es) (as defined below), when considered together with the General Disclosure Package, includes or will include as of the Closing any untrue statement of a material fact or omits or will omit as of the Closing to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The preceding sentence does not apply to statements in or omissions from any Prospectus included in the Registration Statement, the General Disclosure Package or any Issuer-Represented Limited-Use Free Writing Prospectus (as defined below) in conformity with written the Dealer-Manager Information. For purposes of this Agreement, (x) “**Issuer-Represented Free Writing Prospectus**” means any “issuer free writing prospectus,” as defined in Rule 433 under the Securities Act, relating to the Rights Offering that (A) is required to be filed with the Commission by the Company, or (B) is exempt from filing pursuant to Rule 433(d)(5)(i) under the Securities Act because it contains a description of the Rights or of the Rights Offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g) under the Securities Act; (y) “**Issuer-Represented General Free Writing Prospectus**” means any Issuer-Represented Free Writing Prospectus that is intended for general distribution to prospective investors, as evidenced by its being specified in Schedule I to this Agreement; and (z) “**Issuer-Represented Limited-Use Free Writing Prospectus**” means any Issuer-Represented Free Writing Prospectus that is not an Issuer-Represented General Free Writing Prospectus.

d) Each Issuer-Represented Free Writing Prospectus, if any, as of its issue date and at all subsequent times until the Closing or until any earlier date that the Company notified or notifies the Dealer-Manager as described in the next sentence, did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the then-current Registration Statement or Prospectus. If at any time following issuance of an Issuer-Represented Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer-Represented Free Writing Prospectus conflicted or would conflict with the information contained in the then-current Registration Statement or Prospectus relating to the Rights Offering or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at that subsequent time, not misleading, the Company has notified or will notify promptly the Dealer-Manager so that any use of such Issuer-Represented Free Writing Prospectus may cease until it is promptly amended or supplemented by the Company, at its own expense, to eliminate or correct such conflict, untrue statement or omission.

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e) The Company has not distributed and will not distribute any prospectus or other offering material in connection with the offering and sale of the Securities other than the General Disclosure Package, any Issuer-Represented Limited-Use Free Writing Prospectus or the Prospectus or other materials permitted by the Securities Act to be distributed by the Company. Unless the Company obtains the prior consent of the Dealer-Manager, the Company has not made and will not make any offer relating to the Securities that would constitute an “issuer free writing prospectus,” as defined in Rule 433 under the Securities Act, or that would otherwise constitute a “free writing prospectus,” as defined in Rule 405 under the Securities Act, required to be filed with the Commission; provided that the prior written consent of the Dealer-Manager shall be deemed to have been given in respect of any free writing prospectus referenced on Schedule I attached hereto. The Company has complied and will comply with the requirements of Rules 164 and 433 under the Securities Act applicable to any Issuer-Represented Free Writing Prospectus as of its issue date and at all subsequent times through the Closing, including timely filing with the Commission where required, legending and record keeping. To the extent an electronic road show is used, the Company has satisfied and will satisfy the conditions in Rule 433 under the Securities Act to avoid a requirement to file with the Commission any electronic road show.

f) There are no contracts, agreements, plans or other documents which are required to be described in the Prospectus or filed as exhibits to the Registration Statement by the Securities Act or by the Rules and Regulations which have not been described in the Prospectus or filed as exhibits to the Registration Statement or referred to in, or incorporated by reference into, the exhibit table of the Registration Statement as permitted by the Rules and Regulations.

g) The Company and each of its Subsidiaries have been duly incorporated and are validly existing as corporations in good standing under the laws of their respective jurisdictions of incorporation, are duly qualified to do business and are in good standing as foreign corporations in each jurisdiction in which their respective ownership or lease of property or the conduct of their respective businesses requires such qualification, and have all power and authority necessary to own or hold their respective properties and to conduct the businesses in which they are engaged, except where the absence of such power or authority (either individually and in the aggregate) could not reasonably be expected to have a material adverse effect on: (i) the business, condition (financial or otherwise), results of operations, shareholders’ equity, properties or prospects (as such prospects are disclosed or described in the Prospectus) of the Company or its Subsidiaries; (ii) the long-term debt or capital stock of the Company or its Subsidiaries; or (iii) the Rights Offering or consummation of any of the other transactions contemplated by this Agreement, the Registration Statement or the Prospectus (any such effect being a “**Material Adverse Effect**”).

h) This Agreement has been duly authorized, executed and delivered by the Company and, assuming the due authorization, execution and delivery by the Dealer-Manager, constitutes the valid and legally binding agreement of the Company, enforceable against the Company in accordance with its terms, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting creditors’ rights generally and by general principles of equity.

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i) Neither the Company nor any of its Subsidiaries: (i) is in violation of its charter or by-laws, (ii) in default under or in breach of, and no event has occurred which, with notice or lapse of time or both, would constitute a default or breach under or result in the creation or imposition of any lien, charge, mortgage, pledge, security interest, claim, equity, trust or other encumbrance, preferential arrangement, defect or restriction of any kind whatsoever (each, a “**Lien**”) upon any of their property or assets pursuant to, any material contract, agreement, indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which it is a party or by which it is bound or to which any of its properties or assets is subject or (iii) is in violation in any respect of any law, rule, regulation, ordinance, directive, judgment, decree or order, foreign and domestic, to which it or its properties or assets may be subject or has failed to obtain any material license, permit, certificate, franchise or other governmental authorization or permit necessary to the ownership of its properties or assets or to the conduct of its business, except, in the case of clause (ii) above, any violation, default or failure to possess the same that would not have a Material Adverse Effect.

j) Prior to or on the date hereof the Company and the Subscription Agent and the Information Agent have or will have entered into a subscription agent agreement (the “**Subscription Agent Agreement**”) and information agent agreement (the “**Information Agent Agreement**”) and together with the Subscription Agent Agreement, the “**Agent Agreements**”). When executed by the Company, the Agent Agreements will have been duly authorized, executed and delivered by the Company and, assuming due authorization, execution and delivery by the Subscription Agent and the Information Agent, as the case may be, will constitute a valid and legally binding agreement of the Company enforceable in accordance with its terms, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting creditors’ rights generally and by general principles of equity.

k) The Rights to be issued and distributed by the Company have been duly and validly authorized and, when issued and delivered in accordance with the terms of the Offer Documents, will be duly and validly issued, and will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms, no holder of the Rights is or will be subject to personal liability by reason of being such a holder, and the Rights conform to the description thereof contained in the Prospectus.

l) The Rights Warrants and Dealer-Manager Warrants (as hereinafter defined) conform to the description thereof in the Registration Statement and in the Prospectus and, when issued and delivered by the Company in accordance with the terms of the Offer Documents, will be duly and validly issued, and will constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms. The shares of Common Stock issuable upon exercise of the Rights

Warrants and Dealer-Manager Warrants have been duly authorized and reserved for issuance upon exercise of the Rights Warrants and Dealer-Manager Warrants, respectively, by all necessary corporate action on the part of the Company and, when issued and delivered and paid for upon such exercise in accordance with the terms of the Rights Warrants and the Dealer-Manager Warrants, as applicable, will be validly issued, fully paid, nonassessable and free of preemptive rights and will conform to the description thereof in the Prospectus.

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m) The Rights Shares have been duly and validly authorized and reserved for issuance upon exercise of the Rights and are free of statutory and contractual preemptive rights and are sufficient in number to meet the exercise requirements of the Rights Offering; and Rights Shares, when so issued and delivered against payment therefor in accordance with the terms of the Rights Offering and the Certificate of Designation to be filed prior to the Closing by the Company with the Secretary of State of Delaware (the “**Certificate of Designation**”), will be duly and validly issued, fully paid and non-assessable and free of preemptive rights, with no personal liability attaching to the ownership thereof, and will conform to the description thereof contained in the Prospectus. The shares of Common Stock issuable upon conversion of the Rights Shares have been duly authorized and reserved for issuance upon conversion of the Rights Shares by all necessary corporate action on the part of the Company and, when issued and delivered and paid for, if applicable, upon such conversion in accordance with the terms of the Rights Shares and the Certificate of Designation, will be validly issued, fully paid, nonassessable and free of preemptive rights and will conform to the description thereof in the Prospectus.

n) The Common Stock is listed for trading on the NASDAQ Capital Market (“**NASDAQ**”). Except as set forth in the Registration Statement, the Company has not received an oral or written notification from NASDAQ or any court or any other Governmental Authority of any inquiry or investigation or other action that would cause the Common Stock, including the Common Stock underlying the Rights Shares, the Rights Warrants or the Dealer-Manager Warrants, to not be listed for trading on NASDAQ. “**Governmental Authority**” means any federal, state, local, foreign or other governmental, quasi-governmental or administrative body, instrumentality, department or agency or any court, tribunal, administrative hearing body, arbitration panel, commission, or other similar dispute resolving panel or body and shall include any Person acting on behalf of a such Governmental Authority. “**Law**” means any federal, state, local, municipal, foreign or other law, statute, legislation, principle of common law, ordinance, code, edict, decree, proclamation, treaty, convention, rule, regulation, directive, requirement, writ, injunction, settlement, Permit or Order that is or has been issued, enacted, adopted, passed, approved, promulgated, made, implemented or otherwise put into effect by or under the authority of any Governmental Authority.

o) The Company has an authorized capitalization as set forth under the caption “Description of Securities” in the Prospectus and all of the issued shares of capital stock of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and have been issued in compliance with federal and state securities laws. None of the outstanding shares of the Company capital stock were issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. There are no authorized or outstanding options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Company or any of its subsidiaries other than those accurately described in the Registration Statement. The description of the Company’s stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, set forth in the Registration Statement accurately and fairly presents in all material respects the information required to be shown with respect to such plans, arrangements, options and rights.

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p) The Company and its Subsidiaries own or lease all such assets or properties as are necessary to the conduct of its business as presently operated and as proposed to be operated as described in the Registration Statement and the Prospectus. The Company or its Subsidiaries have good and marketable title in fee simple to all assets or real property and good and marketable title to all personal property owned by them, in each case free and clear of any Lien, except for such (i) Liens as are described in the Registration Statement and the Prospectus, (ii) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (iii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made in accordance with generally accepted accounting principles, and the payment of which is neither delinquent nor subject to penalties. Any assets or real property and buildings held under lease or sublease by the Company or any Subsidiary is held under valid, subsisting and enforceable leases with such exceptions as are not material to, and do not interfere with, the use made and proposed to be made of such property and buildings by the Company or such Subsidiary. Neither the Company nor any Subsidiary has received any notice of any material claim adverse to its ownership of any real or personal property or of any material claim against the continued possession of any real property, whether owned or held under lease or sublease by the Company or any Subsidiary.

q) The Company and each of its Subsidiaries have all material consents, approvals, authorizations, orders, registrations, qualifications, licenses, filings and permits of, with and from all judicial, regulatory and other Governmental Authorities and all third parties, foreign and domestic, including, without limitation, those administered by the U.S. Food and Drug Administration of the U.S. Department of Health and Human Services (“**FDA**”), the European Medicines Agency (“**EMA**”), the Brazilian Health Regulatory Agency (“**ANVISA**”), the Australian Department of Health (“**ADH**”), or any foreign, federal, state or local governmental or regulatory authority performing functions similar to those performed by the FDA, EMA, ANVISA and ADH (collectively, with the Licensing Requirements described below, the “**Consents**”), to own, lease and operate their properties and conduct their businesses as presently being conducted and as disclosed in the Registration Statement and the Prospectus, and, to the Company’s knowledge, each such Consent is valid and in full force and effect. The Company has not received notice of any investigation or proceedings which results in or, if decided adversely to the Company, would reasonably be expected to result in the revocation of any Consent or would reasonably be expected to have a Material Adverse Effect. No Consent contains a materially burdensome restriction not adequately disclosed in the Registration Statement and the Prospectus. To the Company’s knowledge, the Company and its Subsidiaries are in compliance with all such Consents, and all such Consents are valid and in full force and effect. Neither the Company nor any Subsidiary has received notification of any revocation, suspension, termination or invalidation (or proceedings related thereto) of any such Consent and, to the Company’s knowledge after reasonable investigation, no event has occurred that allows or results in, or after notice or lapse of time or both would allow or result in, revocation, suspension, termination or invalidation (or proceedings related thereto) of any such Consent and the Company has no reason to believe that any such Consent will not be renewed (if renewal is required).

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r) The execution, delivery and performance of this Agreement by the Company, the issuance of the Rights in accordance with the terms of the Offer Documents, the issuance of Rights Shares and the Rights Warrants in accordance with the terms of the Rights Offering and, with respect to the Rights Shares, the Certificate of Designation, the issuance of the Dealer-Manager Warrants in accordance with this Agreement, the issuance of shares of Common Stock upon conversion of the Rights Shares and exercise of the Rights Warrants and Dealer-Manager Warrants, and the consummation by the Company of the transactions contemplated hereby will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default or “change of control” under, any material indenture, mortgage, deed of trust, loan agreement or other material agreement (including any agreement with any broker dealer, placement agent, financial advisor or similar person or entity) or instrument to which the Company or any of its Subsidiaries or any of its Affiliates is a party or by which the Company or any of its Subsidiaries or its Affiliates is bound or to which any of the properties or assets of the Company or any of its Subsidiaries or its Affiliates is subject, nor will such actions result in any violation of the provisions of the charter or by-laws of the Company or any of its Subsidiaries or any statute or any order, rule or regulation of any Governmental Authority, except where such violation would not reasonably be expected to have a Material Adverse Effect; and except for the registration of the Rights, Rights Shares and the Rights Warrants under the Securities Act and such consents, approvals, authorizations, registrations or qualifications as may be required under the Exchange Act and applicable state securities laws in connection with the distribution of the Rights and the sale of the Rights Shares and Rights Warrants by the Company, no consent, approval, authorization or order of, or filing or registration with, any such court or Governmental Authority is required for the execution, delivery and performance of this Agreement by the Company and the consummation by it of the transactions contemplated hereby.

s) Except as otherwise set forth in the Registration Statement and the Prospectus, there are no contracts, agreements or understandings between the Company and any Person granting such Person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company

owned or to be owned by such Person or to require the Company to include such securities in the securities registered pursuant to the Registration Statement or in any securities being registered pursuant to any other registration statement filed by the Company under the Securities Act. No holder of any security of the Company has any rights of rescission of similar rights with respect to such securities held by them.

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t) Neither the Company nor any of its Subsidiaries has sustained, since the date of the latest balance sheet included in the Prospectus or after such date and as disclosed in the Prospectus, any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree; and, since such date or after such date and as disclosed in the Prospectus, there has not been any change in the capital stock or long-term debt of the Company or any of its Subsidiaries or any material adverse change, or any development involving a prospective material adverse change, in or affecting the general affairs, management, financial position, stockholders' equity, results of operations or prospects (as such prospects are disclosed or described in the Prospectus) of the Company and its Subsidiaries (a "**Material Adverse Change**"). Since the date of the latest balance sheet presented in the Prospectus, the Company has not incurred or undertaken any liabilities or obligations, whether direct or indirect, liquidated or contingent, matured or unmatured, or entered into any transactions, including any acquisition or disposition of any business or asset, which are material to the Company, except for liabilities, obligations and transactions which are disclosed in the Registration Statement, any Preliminary Prospectus and the Prospectus.

u) Tanner LLC ("**Tanner**"), whose reports relating to the Company are included in the Registration Statement, are independent public accountants as required by the Securities Act, the Exchange Act, the Rules and Regulations and the rules and regulations promulgated by the Public Company Accounting Oversight Board (the "**PCAOB**"). Tanner is duly registered and in good standing with the PCAOB. Tanner has not, during the periods covered by the financial statements included in the Registration Statement, the Preliminary Prospectus and the Prospectus, provided to the Company any non-audit services, as such term is used in Section 10A(g) of the Exchange Act.

v) The financial statements, including the notes thereto, and any supporting schedules included in the Registration Statement, any Preliminary Prospectus and the Prospectus present fairly, in all material respects, the financial position as of the dates indicated and the cash flows and results of operations for the periods specified of the Company. Except as otherwise stated in the Registration Statement, any Preliminary Prospectus and the Prospectus, said financial statements have been prepared in conformity with United States generally accepted accounting principles applied on a consistent basis throughout the periods involved. Any supporting schedules included in the Registration Statement, any Preliminary Prospectus and the Prospectus present fairly, in all material respects, the information required to be stated therein. No other financial statements or supporting schedules are required to be included or incorporated by reference in the Registration Statement. The other financial and statistical information included in the Registration Statement, any Preliminary Prospectus and the Prospectus present fairly, in all material respects, the information included therein and have been prepared on a basis consistent with that of the financial statements that are included in the Registration Statement, such Preliminary Prospectus and the Prospectus and the books and records of the respective entities presented therein.

w) There are no pro forma or as adjusted financial statements which are required to be included in the Registration Statement, any Preliminary Prospectus and the Prospectus in accordance with Regulation S-X under the Securities Act which have not been included as so required. The pro forma and/or as adjusted financial information included in the Registration Statement, any Preliminary Prospectus and the Prospectus has been properly compiled and prepared in accordance with the applicable requirements of the Securities Act and the Rules and Regulations and include all adjustments necessary to present fairly, in all material respects, in accordance with generally accepted accounting principles the pro forma and as adjusted financial position of the respective entity or entities presented therein at the respective dates indicated and their cash flows and the results of operations for the respective periods specified. The assumptions used in preparing the pro forma and as adjusted financial information included in the Registration Statement, any Preliminary Prospectus and the Prospectus provide a reasonable basis for presenting the significant effects directly attributable to the transactions or events described therein. The related pro forma and pro forma as adjusted adjustments give appropriate effect to those assumptions; and the pro forma and pro forma as adjusted financial information reflect the proper application of those adjustments to the corresponding historical financial statement amounts.

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x) The statistical, industry-related and market-related data included in the Registration Statement, any Preliminary Prospectus and the Prospectus are based on or derived from sources which the Company reasonably believes are reliable and accurate, and such data agree with the sources from which they are derived. All required third party consents have been obtained in order for such data to be included in the Registration Statement, any Preliminary Prospectus and the Prospectus.

y) Except as disclosed in the Registration Statement and the Prospectus, the Company maintains a system of internal accounting and other controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with United States generally accepted accounting principles and to maintain accountability for assets, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accounting for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

z) The Company's Board of Directors has validly appointed an audit committee and compensation committee whose composition satisfies the requirements of the rules and regulations of the Commission and NASDAQ and the Company's Board of Directors and/or audit committee and the compensation committee has each adopted a charter and such charters are in full force and effect as of the date hereof. Neither the Company's Board of Directors nor the audit committee thereof has been informed, nor is any director of the Company aware, of: (i) except as disclosed in the Registration Statement and the Prospectus, any significant deficiencies or material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; or (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

aa) The Company is in material compliance with the provisions of the Sarbanes-Oxley Act of 2002, as amended ("**Sarb-Ox**") applicable to the Company, and the rules and regulations promulgated thereunder and related or similar rules and regulations promulgated by any other Governmental Authority or self-regulatory entity or agency, except for violations which, singly or in the aggregate, are disclosed in the Prospectus or would not have a Material Adverse Effect.

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bb) No relationship, direct or indirect, exists between or among any of the Company or any Affiliate of the Company, on the one hand, and any director, officer, shareholder, customer or supplier of the Company or any Affiliate of the Company, on the other hand, which is required by the Securities Act, the Exchange Act or the Rules and Regulations to be described in the Registration Statement or the Prospectus which is not so described as required. Except as disclosed in the Registration Statement and the Prospectus, there are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees of indebtedness by the Company to or for the benefit of any of the officers or directors of the Company or any of their respective family members. The Company has not, in violation of Sarb-Ox, directly or indirectly, including through any Affiliate of the Company (other than as permitted under the Sarb-Ox for depositary institutions), extended or maintained credit, arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any director or executive officer of the Company.

cc) Except as described in the Prospectus, there are no legal or governmental proceedings pending to which the Company or any of its Subsidiaries is a party or of which any property or asset of the Company or any of its Subsidiaries is the subject, including without limitation any proceeding before the FDA, EMA, ANVISA and ADH or comparable federal, state local or foreign governmental bodies (it being understood that the interaction between the Company and the FDA, EMA, ANVISA and ADH and such comparable governmental bodies relating to the clinical development and product approval process shall not be deemed proceeding for the purposes of this representation), which, if determined adversely to the Company or any of its Subsidiaries, are reasonably likely to have a Material Adverse Effect; and to the Company's

knowledge, except as disclosed in the Prospectus, no such proceedings are threatened or contemplated by Governmental Authorities or threatened by others. The Company has not received any written cure notice or show cause notice regarding performance of a contract or agreement or any written or oral notice of, any claim, action, litigation, inquiry, proceeding (arbitral, administrative, legal or otherwise, including any informal proceeding), cause of action, audit, suit, settlement, stipulation, hearing, investigation, charge, complaint, demand or similar matter, for, or assertion of, a condition of default, breach of contract, or material violation of applicable Law, in connection with a contract or agreement.

dd) The Company and its Subsidiaries have filed all necessary federal, state and foreign income and franchise tax returns and have paid all taxes required to be paid by any of them and, if due and payable, any related or similar assessment, fine or penalty levied against any of them, except where the failure to make such filings or make such payments, either individually or in the aggregate, could not reasonably be expected to have, a Material Adverse Effect. The Company has made adequate charges, accruals and reserves in its financial statements above in respect of all federal, state and foreign income and franchise taxes for all periods as to which the tax liability of the Company or any of its Subsidiaries has not been finally determined.

ee) Each of the Company and its Subsidiaries maintains insurance of the types and in the amounts which the Company believes to be reasonable and sufficient for a company of its size operating in the Company's industry, including, but not limited to: (i) directors' and officers' insurance (including insurance covering the Company, its directors and officers for liabilities or losses arising in connection with the Rights Offering, including, without limitation, liabilities or losses arising under the Securities Act, the Exchange Act, the Rules and Regulations and applicable foreign securities laws), (ii) insurance covering real and personal property owned or leased against theft, damage, destruction, acts of vandalism and all other risks customarily insured against, (iii) business interruption insurance and (iv) product-related or clinical trial related insurance. There are no material claims by the Company or any of its Subsidiaries under any policy or instrument described in this paragraph as to which any insurance company is denying liability or defending under a reservation of rights clause. All of the insurance policies described in this paragraph are in full force and effect. Neither the Company nor any of its Subsidiaries has been refused any insurance coverage sought or applied for, and the Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

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ff) Intellectual Property.

i. The Company owns, licenses or possesses the right to use sufficient trademarks, trade names, patents, patent rights, copyrights, domain names, licenses, approvals, trade secrets, inventions, technology, know-how and other similar rights (collectively, "**Intellectual Property Rights**") as are reasonably necessary or material to conduct its business as now conducted and contemplated to be conducted, each as described in the Registration Statement, any Preliminary Prospectus and the Prospectus. To the Company's knowledge, all Intellectual Property Rights are valid and enforceable.

ii. Except as set forth in the Registration Statement, any Preliminary Prospectus and the Prospectus: (A) there is no actual, pending or, to the Company's knowledge, threatened action, suit, proceeding, or claim by others challenging the rights of the Company and its Subsidiaries and Affiliates in or to any Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (B) there is no actual, pending or, to the Company's knowledge, threatened action, suit, proceeding, or claim by others that the Company or its Subsidiaries or Affiliates infringes, misappropriates, or otherwise violates any Intellectual Property Rights of others, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (C) there is no actual, pending or, to the Company's knowledge, threatened action, suit, proceeding, or claim by others challenging the validity or scope of any such Intellectual Property Rights owned by the Company or its Subsidiaries or Affiliates and the Company is unaware of any facts which would form a reasonable basis for any such claim; (D) to the Company's knowledge, the operation of the business of the Company, its Subsidiaries and its Affiliates as now conducted and in connection with the development and commercialization of its technology described in the Registration Statement, any Preliminary Prospectus and the Prospectus does not infringe any claim of any patent or published patent application nor would such infringement, misappropriation or violation arise upon the commercialization of any product or service described in the Registration Statement, any Preliminary Prospectus and the Prospectus as under development; (E) to the Company's knowledge, there is no "prior art" of which the Company is aware that may render any patent owned or licensed by the Company invalid or any patent application owned or licensed by the Company or its Subsidiaries or Affiliates unpatentable which has not been disclosed to the applicable government patent office; and (F) the patents, trademarks, and copyrights maintained by the Company or its Subsidiaries or Affiliates are in full force and in effect, and none of such patents, trademarks and copyrights have been adjudged invalid or unenforceable in whole or in part. Neither the Company nor its Subsidiaries or Affiliates is a party to or bound by any options, licenses or agreements with respect to the Intellectual Property Rights of any other Person that are required to be set forth in the Registration Statement, any Preliminary Prospectus and Prospectus and are not described therein in all material respects.

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iii. The Company has duly and properly filed or caused to be filed with the U. S. Patent and Trademark Office (the "**PTO**") and applicable foreign and international patent authorities all patent applications owned by the Company, its Subsidiaries or Affiliates (the "**Company Patent Applications**"). The product candidates described in the Registration Statement, any Preliminary Prospectus and the Prospectus as under development by the Company fall within the scope of the claims of one or more patents or patent applications owned by, or exclusively licensed to, the Company. The Company has complied in all material respects with the PTO's duty of candor and disclosure for the Company Patent Applications and has made no material misrepresentation in the Company Patent Applications. The Company Patent Applications disclose patentable subject matters, and the Company has not been notified of any inventorship challenges nor has any interference been declared or provoked nor is any material fact known by the Company that would preclude the issuance of patents with respect to the Company Patent Applications or would render such patents invalid or unenforceable. No third party possesses rights to the Company's Intellectual Property Rights that, if exercised, could enable such party to develop products competitive to those the Company intends to develop as described in the Prospectus.

iv. Other than as disclosed in the Registration Statement, any Preliminary Prospectus and Prospectus, to the Company's knowledge, there are no rulemaking or similar proceedings before the PTO or applicable foreign and international patent authorities, which affect or involve the Company or any of the processes or technologies that the Company has developed, is developing or proposes to develop or uses or proposes to use which, if the subject of an action unfavorable to the Company, would result in a Material Adverse Change.

v. From and after January 1, 2015, the Company has obtained legally binding written agreements from all officers, employees and third parties with whom the Company has shared confidential proprietary information: (A) of the Company, or (B) received from others which the Company is obligated to treat as confidential, which agreements require such employees and third parties to keep such information confidential. The Company has taken all necessary actions to obtain ownership of all works of authorship and inventions made by its employees, consultants and contractors during the time they were employed by or under contract with the Company and which relate to the Company's business as currently conducted. All founders and former and current key employees and consultants and contractors have signed confidentiality and invention assignment agreements with the Company.

vi. The Company possesses valid and current licenses, registrations, certificates, permits and other authorizations issued by the appropriate foreign, federal, state or local regulatory authorities as necessary to conduct its respective businesses (collectively, the "**Licensing Requirements**") and are enforceable by or against the parties thereto in accordance to its terms, except where the failure of a Licensing Requirement would not have a Material Adverse Effect. The Company has not received any notice of proceedings relating to the revocation or modification of, or noncompliance with, any such license, certificate, permit or authorization, which could result in a Material Adverse Effect. No action, suit or proceeding, other than routine audits, by or before any court or Governmental Authority or any arbitrator involving the Company with respect to the removal, revocation, suspension or other termination of the authority to operate under the Licensing Requirements is pending or, to the Company's knowledge, threatened. The Company does not believe that any pending audit is reasonably likely to result in the removal, revocation, suspension or other termination of the Company's authority to operate under the Licensing Requirements.

vii. The consummation of the transactions contemplated by this Agreement will not result in the loss or impairment of or payment of any additional amounts with respect to, nor require the consent of any other person in respect of, the Company's right to own, use, or hold for use any of the Intellectual Property Rights as owned, used or held for use in the conduct of the business as currently conducted.

viii. To the Company's knowledge, the Company has at all times complied with all applicable laws relating to privacy, data protection, and the collection and use of personal information collected, used, or held for use by the Company in the conduct of the Company's business. No claims have been asserted or threatened against the Company alleging a violation of any person's privacy or personal information or data rights and the consummation of the transactions contemplated hereby will not breach or otherwise cause any violation of any law related to privacy, data protection, or the collection and use of personal information collected, used, or held for use by the Company in the conduct of the Company's business, except such claims as would not reasonably be likely to result in a Material Adverse Effect. The Company takes reasonable measures to ensure that such information is protected against unauthorized access, use, modification, or other misuse.

gg) Except as described in any Preliminary Prospectus, the Prospectus and the Registration Statement, the Company: (i) is and at all times has been in compliance with all statutes, rules, regulations or guidance applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured, distributed or sold by the Company or any component thereof (such statutes, rules, regulations or guidance, collectively, "**Applicable Laws**"); (ii) is, and to the Company's knowledge, the Company's manufacturing facility, after reasonable investigation, and operations of its suppliers are, in compliance with all applicable federal, state, local and foreign laws, regulations, orders and decrees governing its business as prescribed by the FDA, the EMA, ANVISA and ADH or any other applicable federal, state or foreign governmental authority agencies or bodies engaged in the regulation of the business of the Company, (iii) has not received any notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the FDA, the EMA, the ANVISA and the ADH or any other Governmental Authority alleging or asserting noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("**Authorizations**"); (iv) possesses all Authorizations and such Authorizations are valid and in full force and effect and are not in violation of any term of any such Authorizations; (v) has not received notice of any claim, suit, proceeding, hearing, enforcement, audit, investigation, arbitration or other action from any Governmental Authority or third party alleging that any product operation or activity is in violation of any Applicable Laws or Authorizations and has no knowledge that any such Governmental Authority or third party is considering any such claim, suit, proceeding, hearing, enforcement, audit, investigation, arbitration or other action; (vi) has not received notice that any Governmental Authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations and has no knowledge that any such Governmental Authority is considering such action; and (vii) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct in all material respects on the date filed (or were corrected or supplemented by a subsequent submission), except, in the case of each of clauses (i), (ii), (iii) (iv), (vi) and (vii) for any default, violation or event that would not, individually or in the aggregate, have or reasonably be expected to have a Material Adverse Effect.

hh) The studies and tests conducted or sponsored by or on behalf of the Company (the "**Studies and Tests**") that are described or referred to in any Preliminary Prospectus, the Prospectus and the Registration Statement were and, if still pending, are being conducted in accordance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all Applicable Laws and Authorizations; the descriptions of the results of such studies, tests and trials contained in any Preliminary Prospectus, the Prospectus and the Registration Statement are accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials. The Company is not aware of any studies or tests, the results of which the Company believes reasonably call into question the study or test described or referred to in any Preliminary Prospectus, the Prospectus and the Registration Statement when viewed in the context in which such results are described. The Company has not received any notices or correspondence with the FDA, the EMA, the ANVISA and the ADH or any foreign, state or local governmental body exercising comparable authority suggesting or requiring a clinical hold, termination, suspension or material modification of the Studies and Tests and that such clinical hold, termination, suspension or material modification would reasonably be expected to have a Material Adverse Effect, and, to the Company's knowledge after reasonable investigation, there are no reasonable grounds for the same. The Company has obtained (or caused to be obtained) informed consent by or on behalf of each human subject who participated in Studies and Tests. In using or disclosing patient information received by the Company in connection with the Studies and Tests, the Company has complied in all material respects with all applicable laws and regulatory rules, including, without limitation, the Health Insurance Portability and Accountability Act of 1996 and the rules and regulations thereunder. To the Company's knowledge after reasonable investigation, none of the Studies and Tests involved any investigator who has been disqualified as a clinical investigator or has been found by the FDA, EMA, ANVISA or ADH to have engaged in scientific misconduct or debarred or excluded from participation in any governmental health care payment program. There has not been any violation of applicable law or regulation by the Company in its product development efforts, submissions or reports to any regulatory authority that could reasonably be expected to require investigation, corrective action or enforcement action, except where such violation would not, singly or in the aggregate, result in a Material Adverse Effect.

ii) Neither the Company nor, to the Company's knowledge, any of the Company's directors, officers or employees has violated: (i) the Bank Secrecy Act, as amended, (ii) the Money Laundering Control Act of 1986, as amended, (iii) the Foreign Corrupt Practices Act, or (iv) the Uniting and Strengthening of America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, and/or the rules and regulations promulgated under any such law, or any successor law, except for such violations which, singly or in the aggregate, would not have a Material Adverse Effect.

jj) Neither the Company nor any of its Affiliates has, prior to the date hereof, made any offer or sale of any securities which are required to be "integrated" pursuant to the Securities Act or the Rules and Regulations with the issuance or exercise of the Rights or the sale of the Rights Shares or Rights Warrants pursuant to the Registration Statement.

kk) Transactions Affecting Disclosure to FINRA.

i. Except as described in the Registration Statement and the Prospectus, there are no claims, payments, arrangements, agreements or understandings relating to the payment of a finder's, consulting or origination fee or other compensation by the Company with respect to the issuance or exercise of the Rights or the sale of the Rights Shares or Rights Warrants or any other arrangements, agreements or understandings of the Company or, to the Company's knowledge, the Company's officers, directors and employees or Affiliates that may affect the Dealer-Manager's compensation, as determined by the Financial Industry Regulatory Authority, Inc. ("**FINRA**").

ii. Except as previously disclosed by the Company to the Dealer-Manager in writing, no officer, director, or beneficial owner of 5% or more of any class of the Company's securities (whether debt or equity, registered or unregistered, regardless of the time acquired or the source from which derived) or any other Affiliate is a member or a Person associated, or affiliated with a member of FINRA.

iii. No proceeds from the exercise of the Rights will be paid to any FINRA member, or any Persons associated or affiliated with a member of FINRA, except as specifically contemplated herein.

iv. Except as previously disclosed by the Company to the Dealer-Manager, no Person to whom securities of the Company have been privately issued within the 180-day period prior to the initial filing date of the Registration Statement has any relationship or affiliation or association with any member of FINRA.

ll) There are no contracts, agreements or understandings between the Company and any Person that would give rise to a valid claim against the Company or the Dealer-Manager for a brokerage commission, finder's fee or other like payment in connection with the transactions contemplated by this Agreement. Other than the Dealer-Manager, the Company has not employed any brokers, dealers or underwriters in connection with the Rights Offering, and except provided for in Sections 6 and 7 hereof, no other commissions, fees or discounts will be paid by the Company or otherwise in connection with the Rights Offering.

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mm) The Company and its Subsidiaries have at all times operated their businesses in material compliance with all Environmental Laws, and no material expenditures are or will be required in order to comply therewith. The Company has not received any notice or communication that relates to or alleges any actual or potential violation or failure to comply with any Environmental Laws that will result in a Material Adverse Effect. As used herein, the term "**Environmental Laws**" means all applicable laws and regulations, including any licensing, permits or reporting requirements, and any action by a Governmental Authority pertaining to the protection of the environment, protection of public health, protection of worker health and safety, or the handling of hazardous materials, including without limitation, the Clean Air Act, 42 U.S.C. § 7401, et seq., the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, et seq., the Federal Water Pollution Control Act, 33 U.S.C. § 1321, et seq., the Hazardous Materials Transportation Act, 49 U.S.C. § 1801, et seq., the Resource Conservation and Recovery Act, 42 U.S.C. § 690-1, et seq., and the Toxic Substances Control Act, 15 U.S.C. § 2601, et seq.

nn) Except as set forth in the Registration Statement, any Preliminary Prospectus or the Prospectus, the Company is not a party to an "employee benefit plan," as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974 ("**ERISA**") which: (i) is subject to any provision of ERISA and (ii) is or was at any time maintained, administered or contributed to by the Company and covers any employee or former employee of the Company or any ERISA Affiliate (as defined hereafter). These plans are referred to collectively herein as the "**Employee Plans**." For purposes of this paragraph, "**ERISA Affiliate**" of any Person means any other person or entity which, together with that person or entity, could be treated as a single employer under Section 414(m) of the Internal Revenue Code of 1986, as amended (the "**Code**"), or is an "affiliate," whether or not incorporated, as defined in Section 407(d)(7) of ERISA, of the Person.

oo) Each employment, severance or other similar arrangement or policy and each material plan or arrangement providing for insurance coverage (including any self-insured arrangements), workers' compensation, disability benefits, severance benefits, supplemental unemployment benefits, vacation benefits, retirement benefits or for deferred compensation, profit-sharing, bonuses, stock options, stock appreciation or other forms of incentive compensation, or post-retirement insurance, compensation or benefits to which the Company or any Subsidiary is a party and which: (i) is not an Employee Plan, (ii) is entered into, maintained or contributed to, as the case may be, by the Company or any of their respective ERISA Affiliates, and (iii) covers any employee or former employee of the Company or any of their respective ERISA Affiliates (such contracts, plans and arrangements being referred to collectively in this Agreement as the "**Benefit Arrangements**") is fully and accurately disclosed in the Registration Statement to the extent it is material and required to be disclosed by the Securities Act and the Rules and Regulations and has been maintained in substantial compliance with its terms and with requirements prescribed by any and all statutes, orders, rules and regulations that are applicable to that Benefit Arrangement.

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pp) Except as set forth in the Registration Statement, any Preliminary Prospectus or the Prospectus, there is no material liability in respect of post-retirement health and medical benefits for retired employees of the Company or any of their respective ERISA Affiliates other than medical benefits required to be continued under applicable law, determined using assumptions that are reasonable in the aggregate, over the fair market value of any fund, reserve or other assets segregated for the purpose of satisfying such liability (including for such purposes any fund established pursuant to Section 401(h) of the Code). With respect to any of the Company's Employee Plans which are "group health plans" under Section 4980B of the Code and Section 607(1) of ERISA, there has been material compliance with all requirements imposed there under such that the Company or their respective ERISA Affiliates have no (and will not incur any) loss, assessment, tax penalty, or other sanction with respect to any such plan.

qq) The execution of this Agreement and consummation of the Rights Offering does not constitute a triggering event under any Employee Plan or any other employment contract, whether or not legally enforceable, which (either alone or upon the occurrence of any additional or subsequent event) will or may result in any payment (of severance pay or otherwise), acceleration, increase in vesting, or increase in benefits to any current or former participant, employee or director of the Company.

rr) No "prohibited transaction" (as defined in either Section 406 of the ERISA or Section 4975 of Code), "accumulated funding deficiency" (as defined in Section 302 of ERISA) or other event of the kind described in Section 4043(b) of ERISA (other than events with respect to which the 30-day notice requirement under Section 4043 of ERISA has been waived) has occurred with respect to any employee benefit plan for which the Company would have any liability; each employee benefit plan of the Company is in compliance in all material respects with applicable law, including (without limitation) ERISA and the Code; the Company has not incurred and does not expect to incur liability under Title IV of ERISA with respect to the termination of, or withdrawal from any "pension plan"; and each employee benefit plan of the Company that is intended to be qualified under Section 401(a) of the Code is so qualified and nothing has occurred, whether by action or by failure to act, which could cause the loss of such qualification.

ss) There has been no security breach or other compromise of or relating to any of the Company's or any Subsidiary's information technology and computer systems, networks, hardware, software, data (including the data of its respective customers, employees, suppliers, vendors and any third party data maintained by or on behalf of it), equipment or technology (collectively, "**IT Systems and Data**") and (y) the Company and the Subsidiaries have not been notified of, and has no knowledge of any event or condition that would reasonably be expected to result in, any security breach or other compromise to its IT Systems and Data; (ii) the Company and the Subsidiaries are presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification, except as would not, individually or in the aggregate, have a Material Adverse Effect; (iii) the Company and the Subsidiaries have implemented and maintained commercially reasonable safeguards to maintain and protect its material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and Data; and (iv) the Company and the Subsidiaries have implemented backup and disaster recovery technology consistent with industry standards and practices.

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tt) Neither the Company nor, to the Company's knowledge, any of the Company's officers, directors, employees or agents has at any time during the last five (5) years: (i) made any unlawful contribution to any candidate for foreign office, or failed to disclose fully any contribution in violation of law; or (ii) made any payment to any federal or state governmental officer or official, or other Person charged with similar public or quasi-public duties, other than payments that are not prohibited by the laws of the United States of any jurisdiction thereof.

uu) The Company has not and will not, directly or indirectly through any officer, director or Affiliate of the Company or through any other Person: (i) taken any action designed to cause or to result in, or that has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the issuance of the Rights or the sale or resale of the Rights Shares, Rights Warrants or shares of Common Stock issuable upon conversion or exercise, as applicable, thereof, (ii) since the filing of the Registration Statement sold, bid for or purchased, or paid any Person (other than the Dealer-Manager) any compensation for soliciting exercises or purchases of, the Rights or the Rights Shares or Rights Warrants; and (iii) until the later of the expiration of the Rights or the completion of the distribution (within the meaning of Regulation M under the Exchange Act) of the Rights Shares and Rights Warrants, sell, bid for or purchase, apply or agree to pay to any Person (other than the Dealer-Manager) any compensation for soliciting another to purchase any other securities of the Company (except for the solicitation of the exercises of Rights pursuant to this Agreement or pursuant to the Company's "at-the-market" offering program with Maxim). The foregoing shall not apply to the offer, sale, agreement to

sell or delivery with respect to: (i) Rights Shares and Rights Warrants offered and sold upon exercise of the Rights, as described in the Prospectus; or (ii) any shares of Common Stock sold pursuant to the Company's employee benefit plans.

vv) As used in this Agreement, references to matters being "material" with respect to the Company or any matter relating to the Company shall mean a material item, event, change, condition, status or effect related to the condition (financial or otherwise), properties, assets (including intangible assets), liabilities, business, prospects (as such prospects are disclosed or described in any Preliminary Prospectus or the Prospectus), operations or results of operations of the Company and its Subsidiaries, taken as a whole.

ww) As used in this Agreement, the term "Company's knowledge" (or similar language) shall mean the knowledge of the officers of the Company who are named in the Prospectus, with the assumption that such officers shall have made reasonable and diligent inquiry of the matters presented (with reference to what is customary and prudent for the applicable individuals in connection with the discharge by the applicable individuals of their duties as officers or directors of the Company).

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xx) Any certificate signed by or on behalf of the Company and delivered to the Dealer-Manager or to Ellenoff Grossman & Schole LLP, counsel for Maxim, shall be deemed to be a representation and warranty by the Company to the Dealer-Manager as to the matters covered thereby.

6. Compensation of the Dealer-Manager. In consideration of the services rendered and to be rendered by the Dealer-Manager to the Company in connection with the Rights Offering, the Company agrees to pay the Dealer-Manager the following:

a) an aggregate cash fee equal to 7.0% of the total gross proceeds generated from the Rights Offering (it being understood that if the Company engages Ascendant Capital Markets LLC ("**Ascendant**") as a financial advisor in this Offering, the Dealer-Manager shall receive 85% of such cash fee and Ascendant shall receive 15% of such cash fee);

b) the Company shall grant to the Dealer-Manager warrants (the "**Dealer-Manager Warrants**") to purchase, in the aggregate, a number of shares of Common Stock equal to 4.0% of the Common Stock issuable upon conversion of the Rights Shares sold in this Offering, which such Dealer-Manager Warrants shall be non-exercisable for six (6) months after the date of the Closing and shall expire five (5) years after the effective date of the registration statement for the Rights Offering, shall be exercisable at a price equal to 110.0% of the conversion price of the Rights Shares, shall not be redeemable, shall 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 the effective date of the registration statement for the Rights Offering, except that they may be assigned, in whole or in part, to any officer or partner of the Dealer Manager (or Ascendant as the case may be), may be exercised as to all or a lesser number of shares of the Company's Common Stock, and shall contain unlimited "piggyback" registration rights for a period of five years after the effective date of the registration statement for the Rights Offering at the Company's expense (it being understood that if the Company engages Ascendant as a financial advisor in this Offering, the Dealer Manager shall receive 85% of the Dealer-Manager Warrants and Ascendant shall receive 15% of the Dealer-Manager Warrants); and

c) Dealer-Manager shall receive up to \$100,000 for all fees and expenses related to the Rights Offering (including those listed in Section 7 below). Any portion of any advance made by the Company to the Dealer-Manager that is not offset by actual expenses will be returned to the Company.

The compensation set forth in this Section 6 of this Agreement shall be paid to the Dealer-Manager at each Closing. Except as provided in Section 6(c) or Section 11, the Dealer-Manager shall be responsible for its own expenses.

7. Expenses. The Company shall pay or cause to be paid:

a) all filing fees relating to the registration of the Rights, Rights Shares, Rights Warrants and Dealer-Manager Warrants and shares of Common Stock underlying the Rights Shares, Rights Warrants and Dealer-Manager Warrants;

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b) all of its expenses (including any taxes) incurred in connection with the Rights Offering (including "road show" expenses) and the preparation, issuance, execution, authentication and delivery of the Rights and the Rights Shares and Rights Warrants and Dealer-Manager Warrants and the shares of Common Stock underlying the Rights Shares and Rights Warrants and Dealer-Manager Warrants;

c) all fees, expenses and disbursements of the Company's accountants, legal counsel and other third party advisors (including any public relations or solicitation firms hired by the Company);

d) all fees and expenses of the Subscription Agent and the Information Agent set forth in the Agent Agreements;

e) all fees, expenses and disbursements (including, without limitation, fees and expenses of the Company's accountants and counsel) in connection with the preparation, printing, filing, delivery and shipping of the Registration Statement (including the financial statements therein and all amendments and exhibits thereto), each Preliminary Prospectus, the Prospectus, the other Offer Documents and any amendments or supplements of the foregoing;

f) all fees, expenses and disbursements relating to the registration or qualification of the Rights and the Rights Shares, Rights Warrants, Dealer-Manager Warrants and the shares of Common Stock underlying the Rights Shares and Rights Warrants and Dealer-Manager Warrants under the "blue sky" securities laws of any states or other jurisdictions and all fees and expenses associated with the preparation of the preliminary and final forms of Blue Sky Memoranda;

g) all filing fees of the Commission;

h) all filing fees relating to the review of the Rights Offering by FINRA;

i) any applicable listing or other fees;

j) the cost of printing certificates representing the Rights and the Rights Shares, Rights Warrants, Dealer-Manager Warrants and shares of Common Stock underlying the Rights Shares and Rights Warrants and Dealer-Manager Warrants;

k) all advertising charges pertaining to the Rights Offering agreed to by the Company;

l) the cost and charges of the Company's transfer agent(s) or registrar(s) agreed to by the Company; and

m) all other costs and expenses incident to the performance of its obligations hereunder for which provision is not otherwise made in this Section.

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The Company shall perform its obligations set forth in this Section 7 whether or not the Rights Offering commences or any Rights are exercised pursuant to the Rights Offering and subject to the cap on expense reimbursement to the Dealer-Manager set forth in Section 6(c) above.

8. Shareholder Lists; Subscription Agent.

a) The Company will cause the Dealer-Manager to be provided with any cards or lists showing the names and addresses of, and the number of shares of Common Stock or shares of Common Stock underlying the Participating Securities held by, the holders of shares of Common Stock and Participating Securities as of a recent date and will use its best efforts to cause the Dealer-Manager to be advised from time to time during the period, as the Dealer-Manager shall request, of the Rights Offering as to any transfers of record of shares of Common Stock or Participating Securities.

b) The Company will arrange for the Subscription Agent to advise the Dealer-Manager daily as to such matters as they may reasonably request, including the number of Rights which have been exercised pursuant to the Rights Offering.

9. Covenants. The Company covenants and agrees with the Dealer-Manager:

a) To use its best efforts to cause the Registration Statement and any amendments thereto to become effective, provided that the Company shall have the right to discontinue the Rights Offering and withdraw the Registration Statement if the Company's Board of Directors determines in good faith that it is no longer in the best interests of the Company and its stockholders; to advise the Dealer-Manager, promptly after it receives notice thereof, of the time when the Registration Statement, or any amendment thereto, becomes effective or any supplement to the Prospectus or any amended Prospectus has been filed and to furnish the Dealer-Manager with copies thereof; to prepare a Prospectus in a form approved by the Dealer-Manager (such approval not to be unreasonably withheld or delayed) and to file such Prospectus pursuant to Rule 424(b) under the Securities Act within the time prescribed by such rule; to advise the Dealer-Manager, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or the Prospectus, of the suspension of the qualification of the Rights for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the Registration Statement or the Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or the Prospectus or suspending any such qualification, to use promptly its reasonable best efforts to obtain its withdrawal;

b) To deliver promptly to the Dealer-Manager such number of the following documents as the Dealer-Manager shall reasonably request: (i) conformed copies of the Registration Statement as originally filed with the Commission and each amendment thereto (in each case excluding exhibits other than this Agreement, any other Offer Documents filed as exhibits, and the computation of per share earnings); (ii) each Preliminary Prospectus, the Prospectus and any amended or supplemented Prospectus; and (iii) any document incorporated by reference in the Prospectus (excluding exhibits thereto); and, if the delivery of a prospectus is required at any time during which the Prospectus relating to the Rights or the Rights Shares or Rights Warrants is required to be delivered under the Securities Act and if at such time any events shall have occurred as a result of which the Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Prospectus is delivered, not misleading, or, if for any other reason it shall be necessary during such period to amend or supplement the Prospectus or to file under the Exchange Act any document incorporated by reference in the Prospectus in order to comply with the Securities Act or the Exchange Act, to notify the Dealer-Manager and, upon its request, to file such document and to prepare and furnish without charge to the Dealer-Manager as many copies as the Dealer-Manager may from time to time reasonably request of an amended or supplemented Prospectus which will correct such statement or omission or effect such compliance;

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c) To file promptly with the Commission any amendment to the Registration Statement or the Prospectus or any supplement to the Prospectus that may, in the judgment of the Company or the Dealer-Manager, be necessary or advisable in connection with the distribution of the Rights or the sale of the Securities or be requested by the Commission;

d) Prior to filing with the Commission any: (i) Preliminary Prospectus, (ii) amendment to the Registration Statement, any document incorporated by reference in the Prospectus or (iii) any Prospectus pursuant to Rule 424 of the Rules and Regulations, to furnish a copy thereof to the Dealer-Manager and counsel for the Dealer-Manager and obtain the consent of the Dealer-Manager to the filing (which consent shall not be unreasonably withheld);

e) Until the completion of the Rights Offering, following the effective date of the Registration Statement, to furnish to the Dealer-Manager copies of all materials not available via EDGAR furnished by the Company to its shareholders and all public reports and all reports and financial statements furnished by the Company to the principal national securities exchange upon which any of the Company's securities may be listed pursuant to requirements of or agreements with such exchange or to the Commission pursuant to the Exchange Act or any rule or regulation of the Commission thereunder;

f) To qualify or register the Rights and the Rights Shares and Rights Warrants for sale under (or obtain exemptions from the application of) the state securities or blue sky laws of those jurisdictions designated by the Dealer-Manager, to comply with such laws and to continue such qualifications, registrations and exemptions in effect so long as required for the distribution of the Rights and the Rights Shares and Rights Warrants; provided, however, that the Company shall not be required to qualify as a foreign corporation or to take any action that would subject it to general service of process in any such jurisdiction where it is not presently qualified or where it would be subject to taxation as a foreign corporation. The Company will advise the Dealer-Manager promptly of the suspension of the qualification or registration of (or any such exemption relating to) the Rights and the Rights Shares and Rights Warrants for offering, sale or trading in any jurisdiction or any initiation or threat of any proceeding for any such purpose, and in the event of the issuance of any order suspending such qualification, registration or exemption, the Company shall use its best efforts to obtain the withdrawal thereof at the earliest possible moment.

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g) To apply the net proceeds from the exercise of the Rights in the manner described under the caption "Use of Proceeds" in the Prospectus.

h) Prior to the effective date of the Registration Statement, to apply for the listing of the shares of Common Stock issuable upon conversion of the Rights Shares and exercise of the Rights Warrants and Dealer-Manager Warrants on NASDAQ and to use its best efforts to complete that listing, subject only to official notice of issuance (if applicable), prior to the expiration of the Rights Offering.

i) To take such steps as shall be necessary to ensure that neither the Company nor any Subsidiary shall become an "investment company" within the meaning of such term under the Investment Company Act of 1940 and the rules and regulations of the Commission thereunder.

j) To advise the Dealer-Manager, directly or through the Subscription Agent, from time to time, as the Dealer-Manager shall request, of the number of Rights Shares and Rights Warrants subscribed for, and arrange for the Subscription Agent to furnish the Dealer-Manager with copies of written reports it furnishes to the Company concerning the Rights Offering;

k) To commence mailing the Offer Documents to record holders of the Common Stock not later than the second business day following the record date for the Rights Offering, and complete such mailing as soon as practicable;

l) To reserve and keep available for issue upon the exercise of the Rights such number of authorized but unissued shares of Common Stock as will be sufficient to permit the conversion in full of all Rights Shares and exercise in full of all Rights Warrants issued upon such exercise in full of the Rights, except as otherwise contemplated by the Prospectus;

m) To reserve and keep available for issuance upon the exercise of the Dealer-Manager Warrants such number of authorized but unissued shares of Common Stock as will be sufficient to permit exercise in full of the Dealer-Manager Warrants;

n) To file with the Secretary of State of Delaware prior to Closing the Certificate of Designation; and

o) To not take, directly or indirectly, any action designed to cause or to result in, or that has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the issuance of the Rights or the sale or resale of the Rights Shares or Rights Warrants.

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10. **Conditions of Dealer-Manager's Obligations.** The obligations of the Dealer-Manager hereunder are subject to (and the occurrence of any Closing shall be conditioned upon) the accuracy, as of the date hereof and at all times during the Rights Offering, of the representations and warranties of the Company contained herein, to the performance by the Company of its obligations hereunder (in each case in the reasonable opinion of the Dealer-Manager) and to the following additional conditions:

a) (i) The Registration Statement shall have become effective and the Prospectus shall have been timely filed with the Commission in accordance with the Rules and Regulations; (ii) all post-effective amendments to the Registration Statement shall have become effective; and (iii) no stop order suspending the effectiveness of the Registration Statement or any amendment or supplement thereto shall have been issued and no proceedings for the issuance of any such order shall have been initiated or threatened, and any request of the Commission for additional information (to be included in the Registration Statement or the Prospectus or otherwise) shall have been disclosed to the Dealer-Manager and complied with to the Dealer-Manager's reasonable satisfaction.

b) The Dealer-Manager shall not have been advised by the Company or shall have discovered and disclosed to the Company that the Registration Statement or the Prospectus or any amendment or supplement thereto, contains an untrue statement of fact which in the Dealer-Manager's reasonable opinion, or in the reasonable opinion of counsel to the Dealer-Manager, is material, or omits to state a fact which, in the Dealer-Manager's reasonable opinion, or in the reasonable opinion of counsel to the Dealer-Manager, is material and is required to be stated therein or is necessary to make the statements therein not misleading.

c) All corporate proceedings and other legal matters incident to the authorization, form and validity of this Agreement, the Rights, the Rights Shares, the Rights Warrants, the Registration Statement and the Prospectus, and all other legal matters relating to this Agreement and the transactions contemplated hereby shall be reasonably satisfactory in all material respects to counsel for the Dealer-Manager, and the Company shall have furnished to such counsel all documents and information that they may reasonably request to enable them to pass upon such matters.

d) Concurrently with the execution of this Agreement and at Closing, there shall have been furnished to the Dealer-Manager (i) a signed opinion and negative assurance letter (addressed to the Dealer-Manager) of Dorsey & Whitney LLP, counsel for the Company, (ii) a signed opinion and the negative assurance letter (addressed to the Dealer-Manager) of Life Science Law PC, counsel for the Company, and (iii) the signed opinion (addressed to the Dealer-Manager) of Polsinelli PC, intellectual property counsel for the Company, each dated the date hereof and as of such Closing, in form and substance satisfactory to counsel for Maxim.

e) Concurrently with the execution of this Agreement and at Closing, there shall have been furnished to the Dealer-Manager the certificate of the Company's Chief Executive Officer with respect to certain regulatory matters dated the date hereof and as of such Closing, and in form and substance satisfactory to counsel for Maxim.

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f) Concurrently with the execution of this Agreement and at Closing, the Company shall have furnished to the Dealer-Manager a customary comfort letter of Tanner, addressed to the Dealer-Manager and dated the date hereof and as of such Closing: (i) confirming that they are independent registered public accountants of the Company within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualification of accountants under the PCAOB and applicable rules of the Commission, and (ii) stating, as of the date of the letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Prospectus, as of a date not more than two days prior to the date of the letter), the conclusions and findings of such firm with respect to the financial information and other matters specified by the Dealer-Manager.

g) The Company shall have furnished to the Dealer-Manager a certificate, dated the date hereof and of such Closing, of its Chief Executive Officer or President and its Chief Financial Officer stating that:

i. To the best of their knowledge after reasonable investigation, the representations, warranties, covenants and agreements of the Company in Section 5 hereof are true and correct in all material respects;

ii. The conditions set forth in this Section 10 have been fulfilled;

iii. Neither the Company nor any of its Subsidiaries has sustained any material loss or interference with its business, whether or not covered by insurance, or from any labor dispute or any legal or governmental proceeding;

iv. Subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus, there has not been any Material Adverse Change or any development involving a prospective Material Adverse Change; and

v. They have carefully examined the Registration Statement and the Prospectus and, in their opinion (A) the Registration Statement and the Prospectus, as of the Effective Date, did not include any untrue statement of a material fact and did not omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and (B) since the Effective Date no event has occurred which should have been set forth in a supplement or amendment to the Registration Statement or the Prospectus and has not been.

h) The Company shall have furnished to the Dealer-Manager a certificate, dated the date hereof and of such Closing, of its Secretary certifying to the organizational documents, good standing in the state of incorporation of the Company and each Subsidiary and board resolutions relating to the Rights Offering and the issuance of the Securities from the Company.

i) Neither the Company nor any of its Subsidiaries shall have sustained since the date of the latest audited financial statements included in the Prospectus any Material Adverse Change, the effect of which is, in the judgment of the Dealer-Manager, so material and adverse as to make it impracticable or inadvisable to proceed with the Rights Offering.

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j) The Common Stock shall then be listed and trading on NASDAQ and NASDAQ shall have approved the listing of the shares of Common Stock issuable upon conversion of the Rights Shares and exercise of the Rights Warrants for listing, subject only to official notice of issuance.

k) All opinions, letters, evidence and certificates mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Dealer-Manager. If any of the conditions specified in this Section 10 shall not have been fulfilled when and as required by this Agreement, this Agreement and all obligations of the Dealer-Manager hereunder may be canceled at, or at any time during the Rights Offering, by the Dealer-Manager. Any such cancellation shall be without liability of any Dealer-Manager to the Company. Notice of such cancellation shall be given to the Company in writing, or by telephone and confirmed in writing.

(l) That the Company has retained a Subscription Agent for the Rights Offering reasonably acceptable to the Dealer-Manager, to perform services in connection with the Rights Offering that are customary for such agents.

#### 11. Indemnification and Contribution.

a) The Company agrees to hold harmless and indemnify Maxim and its respective affiliates and any officer, director, employee or agent of Maxim or any such affiliates and any Person controlling (within the meaning of Section 20(a) of the Exchange Act) Maxim or any of such affiliates from and against any and all (A) losses, claims, damages and liabilities whatsoever, under the Securities Act or otherwise (as incurred or suffered), arising out of or based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in the Offer Documents or any amendment or supplement thereto, in any other solicitation material used by the Company or authorized by it for use in connection with the Rights Offering, or in any blue sky application or other document prepared or executed by the Company (or based on any written information furnished by the Company) specifically for the purpose of qualifying any or all of the Rights or the Rights Shares or Rights Warrants under the securities laws of any state or other jurisdiction (any such application, document or information being hereinafter called a "Blue Sky Application") or arising out of or based upon the omission or alleged omission to state in any such document a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading (other than statements or omissions made in reliance upon and in conformity with the Dealer-Manager Information); (ii) any withdrawal or termination by the Company of, or failure by the Company to make or consummate, the Rights Offering in violation of this agreement, (iii) actions taken or omitted to be taken by an indemnified party with the consent of the Company or in conformity with actions taken or omitted to be taken by the Company; (iv) any failure by the Company to comply with any agreement or covenant contained in this Agreement or any inaccuracy in the representations and warranties herein; or (v) arising out of, relating to or in connection with or alleged to arise out of, relate to or be in connection with, the Rights Offering, any of the other transactions contemplated thereby or the performance of Maxim's services to the Company with respect to the Rights Offering, and (B) all reasonable expenses (including, but not limited to, any and all reasonable legal expenses) incurred in connection with investigating, preparing to defend or defending any lawsuit, claim or other proceeding, commenced or threatened, whether or not resulting in any liability, which legal or other expenses shall be reimbursed by the Company promptly after receipt of any invoices therefore from Maxim. However, the Company will not be obligated to indemnify an indemnified party for any loss, claim, damage, liability or expense pursuant to the preceding sentence which has been determined in a final judgment by a court of competent jurisdiction to have resulted directly from willful misconduct or gross negligence on the part of any indemnified party.

b) The Dealer-Manager shall indemnify and hold harmless the Company, its officers, directors and employees, each of its directors and each Person, if any, who controls the Company within the meaning of the Securities Act, from and against any loss, claim, damage or liability, joint or several, or any action in respect thereof, to which the Company or any such director, officer or controlling Person may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, liability or action arises out of, or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained (A) in any Offer Documents, or in any such amendment or supplement, in any other solicitation material used by the Company or authorized by it for use in connection with the Rights Offering or (B) in any Blue Sky Application; or (ii) the omission or alleged omission to state in any Offer Documents, or in any such amendment or supplement, in any other solicitation material used by the Company or authorized by it for use in connection with the Rights Offering, or in any Blue Sky Application, any material fact required to be stated therein or necessary to make the statements therein not misleading, but in each case solely and exclusively to the extent that the untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with the Dealer-Manager Information, and shall reimburse the Company and any such director, officer or controlling Person for any legal or other expenses reasonably incurred by the Company or any such director, officer or controlling Person in connection with investigating or defending or preparing to defend against any such loss, claim, damage, liability or action as such expenses are incurred.

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c) If any lawsuit, claim or proceeding is brought against any indemnified party in respect of which indemnification may be sought against the indemnifying party pursuant to this Section 11, such indemnified party shall promptly notify the indemnifying party of the commencement of such lawsuit, claim or proceeding; provided, however, that the failure so to notify the indemnifying party shall not relieve the indemnifying party from any obligation or liability which it may have under this Section 11 except to the extent that it has been prejudiced in any material respect by such failure and in any event shall not relieve the indemnifying party from any other obligation or liability which it may have to such indemnified party otherwise than under this Section 11. In case any such lawsuit, claim or proceeding shall be brought against any indemnified party and such indemnified party shall notify the indemnifying party of the commencement of such lawsuit, claim or proceeding, the indemnifying party shall be entitled to participate in such lawsuit, claim or proceeding, and, after written notice from the indemnifying party to such indemnified party, to assume the defense of such lawsuit, claim or proceeding with counsel of its choice at its expense; provided, however, that such counsel shall be satisfactory to the indemnified party in the exercise of its reasonable judgment. Notwithstanding the election of the indemnifying party to assume the defense of such lawsuit, claim or proceeding, such indemnified party shall have the right to employ separate counsel and to participate in the defense of such lawsuit, claim or proceeding, and the indemnifying party shall bear the reasonable fees, costs and expenses of such separate counsel (and shall pay such reasonable fees, costs and expenses promptly after receipt of any invoice therefor) if: (i) the use of counsel chosen by the indemnifying party to represent such indemnified party would present such counsel with a conflict of interest; (ii) the defendants in, or targets of, any such lawsuit, claim or proceeding include both an indemnified party and the indemnifying party, and such indemnified party shall have reasonably concluded that there may be legal defenses available to it or to other indemnified parties which are different from or in addition to those available to the indemnifying party (in which case the indemnifying party shall not have the right to direct the defense of such action on behalf of the indemnified party); (iii) the indemnifying party shall not have employed counsel satisfactory to such indemnified party, in the exercise of such indemnified party's reasonable judgment, to represent such indemnified party within a reasonable time after notice of the institution of any such lawsuit, claim or proceeding; or (iv) the indemnifying party shall authorize such indemnified party to employ separate counsel at the expense of the indemnifying party. The foregoing indemnification commitments shall apply whether or not the indemnified party is a formal party to any such lawsuit, claim or proceeding. The indemnifying party shall not be liable for any settlement of any lawsuit, claim or proceeding effected without its consent (which consent will not be unreasonably withheld), but if settled with such consent, the indemnifying party agrees, subject to the provisions of this Section 11, to indemnify the indemnified party from and against any loss, damage or liability by reason of such settlement. The Company agrees to notify Maxim promptly, or cause Maxim to be notified promptly, of the assertion of any lawsuit, claim or proceeding against the Company, any of its officers or directors or any Person who controls any of the foregoing within the meaning of Section 20(a) of the Exchange Act, arising out of or relating to the Rights Offering. The Company further agrees that any settlement of a lawsuit, claim or proceeding against it arising out of Rights Offering shall include an explicit and unconditional release from the parties bringing such lawsuit, claim or proceeding of Maxim and its respective affiliates, and any officer, director, employee or agent of Maxim, and any Person controlling (within the meaning of Section 20(a) of the Exchange Act) Maxim.

d) The amount paid or payable by an indemnified party as a result of the losses, claims, damages, liabilities or expenses referred to in the immediately preceding paragraph shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating, preparing to defend or defending any such action or claim.

e) The foregoing rights to indemnification and contribution shall be in addition to any other rights which any indemnified parties may have under common law or otherwise but shall supersede, amend and restate, retroactively the rights to indemnification, reimbursement and contribution provided for under the Engagement Letter.

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f) In order to provide for contribution in circumstances in which the indemnification provided for in this Section 11 for any reason held to be unavailable from any indemnifying party or is insufficient to hold harmless a party indemnified thereunder, the Company, on the one hand, and Maxim, on the other hand, shall contribute to the aggregate losses, claims, damages, liabilities and expenses of the nature contemplated by such indemnification provision (including any investigation, legal and other expenses incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claims asserted, but after deducting in the case of losses, claims, damages, liabilities and expenses suffered by the Company, any contribution received by the Company from Persons, other than Maxim, who may also be liable for contribution, including Persons who control the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, officers of the Company who signed the Registration Statement and directors of the Company) as incurred to which the Company and Maxim may be subject, in such proportions as is appropriate to reflect the relative benefits received by the Company, on the one hand, and Maxim, on the other hand, from the Rights Offering or, if such allocation is not permitted by applicable law, in such proportions as are appropriate to reflect not only the relative benefits referred to above but also the relative fault of the Company, on the one hand, and Maxim, on the other hand, in connection with the statements or omissions which resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and Maxim, on the other hand, shall be deemed to be in the same proportion as: (x) the total proceeds from the Rights Offering (net of the fees of the Dealer-Manager set forth in Section 6 hereof, but before deducting expenses) received by the Company bears to (y) the respective fees of the Dealer-Manager set forth and allocated in Section 6 hereof actually received by the Dealer-Manager. The relative fault of each of the Company, on the one hand, and Maxim, on the other hand, shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or Maxim (which consists solely and exclusively of the Dealer-Manager Information) and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Dealer-Manager agree that it would not be just and equitable if contribution pursuant to this Section 11(f) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section 11 shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any judicial, regulatory or other legal or governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission. Notwithstanding the provisions of this Section 11: (i) no Dealer-Manager shall be required to contribute any amount in excess of the fees actually received by such Dealer-Manager from the Company in connection with the Rights Offering and (ii) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 11, each Person controlling the Dealer-Manager within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act shall have the same rights to contribution as such Dealer-Manager, and each Person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, each officer of the Company who shall have signed the Registration Statement and each director of the Company shall have the same rights to contribution as the Company, subject in each case to clauses (i) and (ii) of the immediately preceding sentence. Any party entitled to contribution will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party in respect of which a claim for contribution may be made against another party or parties, notify each party or parties from whom contribution may be sought, but the omission to so notify such party or parties shall not relieve the party or parties from whom contribution may be sought from any obligation it or they may have under this Section 11(f) or otherwise.

## 12. Effective Date of Agreement; Right of First Refusal; Exclusivity; Termination; Standstill

a) This Agreement shall become effective upon the later of the time on which the Dealer-Manager shall have received notification of the effectiveness of the Registration Statement and the time which this Agreement shall have been executed by all of the parties hereto.

b) Upon the successful completion of any Closing of the Offering for gross proceeds of at least six million dollars (\$6,000,000), for a period of nine (9) months from the final Closing (but not longer than three years from the commencement of sales of the Offering), the Company grants the Dealer-Manager the right of first refusal to act as (a) lead managing underwriter and book runner for any and all future public and private equity and public debt offerings (each, a "**Subsequent Offering**"). The Dealer-Manager shall notify the Company within ten (10) days of its receipt of the written offer with respect to such Subsequent Offering contemplated above as to whether or not it agrees to accept such retention. If the Dealer-Manager should decline such retention, the Company shall have no further obligation to the Dealer-Manager with respect to that such Subsequent Offering.

c) Upon effectiveness of this Agreement through the later of December 31, 2022 and the Closing (or the earlier termination of this Agreement) (unless extended by the parties hereto, the "**Engagement Period**"), Maxim shall be the Company's exclusive dealer manager in connection with the Rights Offering. Until the later of the end of the Engagement Period and Closing (or the earlier termination of this Agreement), and as long as Maxim is proceeding in good faith with activities in connection with the Rights Offering, the Company agrees not to solicit, negotiate with or enter into any agreement with any other source of financing (whether equity, debt or otherwise other than bank financings or financings in connection with strategic alliances), any placement agent, financial advisor or any other Person.

d) At any time during the Rights Offering, this Agreement may be terminated by the Dealer-Manager by giving notice as hereinafter provided to the Company if:

i. the Company shall have failed, refused or been unable, at any applicable time during the Rights Offering, to perform any material agreement on its part to be performed hereunder,

ii. any other material condition of the Dealer-Manager's obligations as set forth in Section 10 or elsewhere hereunder is not fulfilled,

iii. trading in securities generally on the Nasdaq Stock Market shall have been suspended or minimum prices shall have been established on any such exchanges or such market by the Commission, by such exchange or by any other regulatory body or Governmental Authority,

iv. a banking moratorium shall have been declared by Federal or state authorities,

v. there shall have occurred any outbreak or escalation of hostilities or acts of terrorism involving the United States or there is a declaration of a national emergency or war by the United States or there shall have been any other calamity or crisis or any change in political, financial or economic conditions of the United States, or

vi. there shall have occurred such a material adverse change in general economic, political or financial conditions (or the effect of international conditions on the financial markets in the United States shall be such) as to make it, in the judgment of the Dealer-Manager, inadvisable or impracticable to solicit exercises of the Rights or perform any other of its obligations hereunder.

e) At any time during the Rights Offering, this Agreement may be terminated by the Company by giving notice as hereinafter provided to the Dealer-Manager if the Company's Board of Directors determines in good faith that the Rights Offering is no longer in the best interests of the Company and its stockholders.

f) Any termination of this Agreement pursuant to this Section 12 shall be without liability on the part of the Company or the Dealer-Manager, except as otherwise provided in Section 11 hereof. Any notice referred to above may be given at the address specified in Section 14 hereof in writing or by facsimile or telephone, and if

by telephone, shall be immediately confirmed in writing.

g) If the Company elects to terminate this Agreement for any reason even though Maxim was prepared to proceed with the Rights Offering and if within twelve (12) months following such termination, the Company completes any financing of equity, equity-linked or debt or other capital raising activity of the Company (other than the exercise by any person or entity of any options, warrants, or other convertible securities or issuances by the Company in connection with restricting of existing debt and other than an Exempt Issuance) with any of the investors introduced to the Company by Maxim during the Engagement Period via conference call or in-person meeting, then the Company shall pay to the Dealer-Manager upon closing of such financing the compensation set forth in Sections 6(a) and 6(b).

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h) From the date hereof until 90 days after Closing, neither the Company nor any Subsidiary shall issue, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of Common Stock or Common Stock Equivalents other than an Exempt Issuance. For purposes of this Section 12(g), "Common Stock Equivalents" means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock and "Exempt Issuance" means the issuance of (a) shares of Common Stock or options to employees, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to the Company, (b) securities upon the exercise or exchange of or conversion of any Rights Shares or Rights Warrants issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of this Agreement, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities (other than in connection with stock splits or combinations or terms that change automatically) or to extend the term of such securities and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that such securities are issued as "restricted securities" (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith, and provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

13. Survival of Certain Provisions. The agreements contained in Sections 11 and 12(b), (c) and (g) hereof and the representations, warranties and agreements of the Company contained in Sections 5, 6 and 7 hereof shall survive the consummation of or failure to commence the Rights Offering and shall remain in full force and effect, regardless of any termination or cancellation of this Agreement or any investigation made by or on behalf of any indemnified party; *provided* however that in the event of any failure to commence or consummate the Rights Offering, the agreements contained in Section 6 shall terminate and be of no further force or effect and *provided* that the Dealer-Manager will not be entitled to the compensation in Section 12(b) in the event the Company terminates the Offering for cause prior to the successful completion of any Closing which shall include the material failure to provide the services contemplated by this Agreement.

14. Notices. All notices or other communications hereunder shall be in writing, and (a) if sent to the Dealer-Manager, shall be mailed, delivered, or faxed and confirmed in writing, to: Maxim Group LLC, 300 Park Avenue, 16<sup>th</sup> Floor, New York, New York 10022, Fax Number: (212) 895-3783, Attention: Clifford A. Teller, Co-President, in each case, with a copy to Ellenoff Grossman & Schole LLP, 1345 Avenue of the Americas, 11<sup>th</sup> Floor, New York, New York, 10105 Fax Number: (212) 370-7889, Attention: Sarah Williams, Esq. and (b) if sent to the Company shall be mailed, delivered, or faxed and confirmed in writing to the Company and its counsel at the address set forth in the Registration Statement, with a copy to Dorsey & Whitney LLP, 111 South Main Street, Suite 2100, Salt Lake City, Utah 84111 Attention: David Marx. Any such notices and other communications shall take effect at the time of receipt thereof.

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15. Parties. This Agreement shall inure to the benefit of and be binding upon the Dealer-Manager, the Company and their respective successors. This Agreement and the terms and provisions hereof are for the sole benefit of only those Persons, except that the representations, warranties, indemnities and agreements of the Company contained in this Agreement shall also be deemed to be for the benefit of the Person or Persons, if any, who control the Dealer-Manager within the meaning of Section 15 of the Act. Nothing in this Agreement shall be construed to give any Person, other than the Persons referred to in this Section, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision contained herein.

16. Amendment. This Agreement may not be amended or modified except in writing signed by each of the parties hereto.

17. Governing Law; Venue. This Agreement shall be deemed to have been executed and delivered in New York and both this Agreement and the transactions contemplated hereby shall be governed as to validity, interpretation, construction, effect, and in all other respects by the laws of the State of New York, without regard to the conflicts of laws principals thereof (other than Section 5-1401 of The New York General Obligations Law). Each of the Dealer-Manager and the Company: (a) agrees that any legal suit, action or proceeding arising out of or relating to this Agreement and/or the transactions contemplated hereby shall be instituted exclusively in the Supreme Court of the State of New York, New York County, or in the United States District Court for the Southern District of New York; (b) waives any objection which it may have or hereafter to the venue of any such suit, action or proceeding; and (c) irrevocably consents to the jurisdiction of Supreme Court of the State of New York, New York County, or in the United States District Court for the Southern District of New York in any such suit, action or proceeding. Each of the Dealer-Manager and the Company further agrees to accept and acknowledge service of any and all process which may be served in any such suit, action or proceeding in the Supreme Court of the State of New York, New York County, or in the United States District Court for the Southern District of New York and agrees that service of process upon the Company mailed by certified mail to the Company's address or delivered by Federal Express via overnight delivery shall be deemed in every respect effective service of process upon the Company, in any such suit, action or proceeding, and service of process upon the Dealer-Manager mailed by certified mail to the Dealer-Manager's address or delivered by Federal Express via overnight delivery shall be deemed in every respect effective service process upon such Dealer-Manager, in any such suit, action or proceeding. THE COMPANY (ON BEHALF OF ITSELF AND, TO THE FULLEST EXTENT PERMITTED BY LAW, ON BEHALF OF ITS RESPECTIVE EQUITY HOLDERS AND CREDITORS) HEREBY WAIVES ANY RIGHT THEY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY CLAIM BASED UPON, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, THE REGISTRATION STATEMENT, ANY PRELIMINARY PROSPECTUS AND THE PROSPECTUS.

18. Entire Agreement. This Agreement, together with the exhibit attached hereto and as the same may be amended from time to time in accordance with the terms hereof, contains the entire agreement among the parties hereto relating to the subject matter hereof and there are no other or further agreements outstanding not specifically mentioned herein.

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19. Severability. If any term or provision of this Agreement or the performance thereof shall be invalid or unenforceable to any extent, such invalidity or unenforceability shall not affect or render invalid or unenforceable any other provision of this Agreement and this Agreement shall be valid and enforced to the fullest extent permitted by law.

20. Headings. The headings herein are inserted for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this

Agreement.

21. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument. Delivery of a signed counterpart of this Agreement by facsimile or other electronic transmission shall constitute valid and sufficient delivery thereof.

[Signature Page Follows]

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If the foregoing correctly sets forth your understanding, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement among us as of the date first written above.

Very truly yours,

SINTX TECHNOLOGIES, INC.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Accepted by the Dealer-Manager  
as of the date first written above:**

MAXIM GROUP LLC

By: \_\_\_\_\_

Name: Clifford A. Teller

Title: Co-President

[Signature Page to Dealer-Manager Agreement]

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**SINTX TECHNOLOGIES, INC.**  
**CERTIFICATE OF DESIGNATION OF PREFERENCES,**  
**RIGHTS AND LIMITATIONS**  
**OF**  
**SERIES D CONVERTIBLE PREFERRED STOCK**

PURSUANT TO SECTION 151 OF THE  
DELAWARE GENERAL CORPORATION LAW

The undersigned, B. Sonny Bal and Kevin Ontiveros, do hereby certify that:

1. They are the President and Assistant Secretary, respectively, of SINTX Technologies, Inc., a Delaware corporation (the "Corporation").
2. The Corporation is authorized to issue 130,000,000 shares of preferred stock, [ ] of which have been issued.
3. The following resolutions were duly adopted by the board of directors of the Corporation (the "Board of Directors"):

WHEREAS, the certificate of incorporation of the Corporation provides for a class of its authorized stock known as preferred stock, consisting of 130,000,000 shares, \$0.01 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized to fix from time to time, by resolution or resolutions providing for the establishment and/or issuance of any series of preferred stock, the designation and number of the shares of such series and the powers, preferences and rights of such series, and the qualifications, limitations or restrictions thereof, to the fullest extent such authority may be conferred upon the Board of Directors under the Delaware General Corporation Law; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as aforesaid, to fix the rights, preferences, restrictions and other matters relating to a series of the preferred stock, which shall consist of up to 10,000 shares of the preferred stock which the Corporation has the authority to issue, as follows:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors does hereby provide for the issuance of a series of preferred stock for cash or exchange of other securities, rights or property and does hereby fix and determine the rights, preferences, restrictions and other matters relating to such series of preferred stock as follows:

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**TERMS OF PREFERRED STOCK**

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

"Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 of the Securities Act.

"Alternate Consideration" shall have the meaning set forth in Section 7(d).

"Beneficial Ownership Limitation" shall have the meaning set forth in Section 6(d).

"Business Day" means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

"Buy-In" shall have the meaning set forth in Section 6(c)(iv).

"Closing" means the closing of the purchase and sale of the Securities pursuant to the Dealer Manager Agreement.

"Commission" means the United States Securities and Exchange Commission.

"Common Stock" means the Corporation's common stock, par value \$0.01 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.

"Common Stock Equivalents" means any securities of the Corporation or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

"Conversion Amount" means the sum of the Stated Value at issue.

"Conversion Date" shall have the meaning set forth in Section 6(a).

"Conversion Price" shall have the meaning set forth in Section 6(b).

"Conversion Shares" means, collectively, the shares of Common Stock issuable upon conversion of the shares of Preferred Stock in accordance with the terms hereof.

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"Dealer Manager Agreement" means the dealer manager agreement, dated \_\_\_\_\_, 2022, between the Corporation and Maxim Group LLC.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

"Exchange Agent" means American Stock Transfer & Trust Company, LLC, and any successor transfer agent of the Corporation.

"Fundamental Transaction" shall have the meaning set forth in Section 7(d).

“Holder” shall mean each of the holders of the Preferred Stock.

“Liquidation” shall have the meaning set forth in Section 5.

“New York Courts” shall have the meaning set forth in Section 8(d).

“Notice of Conversion” shall have the meaning set forth in Section 6(a).

“Original Issue Date” means the date of the first issuance of any shares of the Preferred Stock regardless of the number of transfers of any particular shares of Preferred Stock and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Preferred Stock” shall have the meaning set forth in Section 2.

“Securities” means the Preferred Stock, the Warrants, the Conversion Shares and the Warrant Shares.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Share Delivery Date” shall have the meaning set forth in Section 6(c).

“Stated Value” shall have the meaning set forth in Section 2.

“Subscription Rights Certificate” shall mean, as to each Holder, the subscription rights certificate completed by such Holder and countersigned by American Stock Transfer & Trust Company, LLC.

“Subsidiary” means any direct or indirect subsidiary of the Corporation.

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“Successor Entity” shall have the meaning set forth in Section 7(d).

“Trading Day” means a day on which the principal Trading Market is open for business.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, or the New York Stock Exchange (or any successors to any of the foregoing).

“Transaction Documents” means this Certificate of Designation, the Dealer Manager Agreement, the Warrant Agreement, the Warrants, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated therein.

“Transfer Agent” means American Stock Transfer & Trust Company, LLC, the current transfer agent of the Corporation with a mailing address of 6201 15th Avenue, Brooklyn, New York 11219, and any successor transfer agent of the Corporation.

“Warrant Agreement” means the warrant agency agreement, dated on or about \_\_\_\_\_, 2022, between the Corporation and the Transfer Agent.

“Warrants” means, collectively, the Common Stock purchase warrants delivered to the Holders at the Closing in accordance with the Warrant Agreement, which Warrants shall be exercisable immediately and have a term of exercise equal to five (5) years, in the form of Exhibit A attached to the Warrant Agreement.

“Warrant Shares” means the shares of Common Stock issuable upon exercise of the Warrants.

**Section 2. Designation, Amount and Par Value.** The series of preferred stock shall be designated as its Series D Convertible Preferred Stock (the “Preferred Stock”) and the number of shares so designated shall be up to 10,000 (which shall not be subject to increase without the written consent of a majority of the holders of the Preferred Stock then outstanding). Each share of Preferred Stock shall have a par value of \$0.01 per share and a stated value equal to \$1,000 (the “Stated Value”). The shares of Preferred Stock shall initially be issued and maintained in the form of securities held in book-entry form and the Depository Trust Company or its nominee (“DTC”) shall initially be the sole registered holder of the shares of Preferred Stock.

**Section 3. Dividends.** Except for stock dividends or distributions for which adjustments are to be made pursuant to Section 7, the Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of Preferred Stock equal (on an as-if-converted-to-Common-Stock basis, disregarding for such purposes any conversion limitations hereunder) to and 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 the Common Stock. No other dividends shall be paid on shares of Preferred Stock, subject to and in accordance with Section 7 below. The Corporation shall not pay any dividends on the Common Stock unless the Corporation simultaneously complies with this provision.

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**Section 4. Voting Rights.** Except as otherwise provided herein or as otherwise required by law, the Preferred Stock shall have no voting rights. However, as long as any shares of Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of the Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Preferred Stock or alter or amend this Certificate of Designation, (b) amend its certificate of incorporation or other charter documents in any manner that adversely affects any rights of the Holders disproportionately to the rights of holders of other capital stock of the Corporation, (c) increase the number of authorized shares of Preferred Stock, or (d) enter into any agreement with respect to any of the foregoing.

**Section 5. Liquidation.** Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a “Liquidation”), the Holders shall be entitled to receive out of the assets, whether capital or surplus, of the Corporation the same amount that a holder of Common Stock would receive if the Preferred Stock were fully converted (disregarding for such purpose any conversion limitations hereunder) to Common Stock which amounts shall be paid pari passu with all holders of Common Stock. For the avoidance of any doubt, a Fundamental Transaction shall not be deemed a Liquidation. The Corporation shall mail written notice of any such Liquidation, not less than 45 days prior to the payment date stated therein, to each Holder.

**Section 6. Conversion.**

a) Conversions at Option of Holder and Company.

i. Each share of Preferred Stock shall be convertible, at any time and from time to time from and after the Original Issue Date at the option of the Holder thereof, into that number of shares of Common Stock (subject to the limitations set forth in Section 6(d)) determined by dividing the Stated Value of such share of Preferred Stock by the Conversion Price. Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as Annex A (a "Notice of Conversion"). Each Notice of Conversion shall specify the number of shares of Preferred Stock to be converted, the number of shares of Preferred Stock owned prior to the conversion at issue, the number of shares of Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers by facsimile such Notice of Conversion to the Corporation (such date or the date the Corporation effects an optional conversion, the "Conversion Date"). The Conversion Date for a holder whose interest in the shares of Preferred Stock is a beneficial interest in certificate(s) representing the shares of Preferred Stock held in book-entry form through DTC (or another established clearing corporation performing similar functions), shall be the date that DTC (or another established clearing corporation performing similar functions) provides such Notice of Conversion to the Corporation and its Exchange Agent.

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ii. Upon delivery of the Notice of Conversion, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Conversion Shares with respect to which the shares of Preferred Stock have been converted irrespective of the date of delivery of the Conversion Shares, provided that the Holder shall deliver such converted shares of Preferred Stock to the Transfer Agent via the DTC's Deposit/Withdrawal at Custodian system within two Trading Days of delivery of the Notice of Conversion. If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue. Shares of Preferred Stock converted into Common Stock or redeemed in accordance with the terms hereof shall be canceled and shall not be reissued. Notwithstanding anything herein to the contrary, with respect to any conversion at the option of the Corporation hereunder, the Corporation shall exercise such option to convert shares of Preferred Stock on a pro rata basis among Holders based on such Holders' shares of Preferred Stock.

iii. Without limiting the rights and remedies of a holder of Preferred Stock hereunder and without limiting the right of a Holder to deliver a Notice of Conversion to the Corporation, a holder whose interest in the shares of Preferred Stock is a beneficial interest in certificate(s) representing the shares of Preferred Stock held in book-entry form through DTC (or another established clearing corporation performing similar functions), shall effect conversions made pursuant to this Section 6(a) by delivering to DTC (or such other clearing corporation, as applicable) the appropriate instruction form for conversion, complying with the procedures to effect conversions that are required by DTC (or such other clearing corporation, as applicable).

b) Conversion Price. The conversion price for the Preferred Stock shall equal \$\_\_\_\_\_, subject to adjustment herein (the "Conversion Price").

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c) Mechanics of Conversion

i. Delivery of Conversion Shares Upon Conversion. Not later than the earlier of (y) two (2) Trading Days after each Conversion Date and (z) the number of Trading Days comprising the Standard Settlement Period (as defined below) (the "Share Delivery Date"), the Corporation shall deliver, or cause to be delivered, to the converting Holder the number of Conversion Shares being acquired upon the conversion of the Preferred Stock, which Conversion Shares shall be free of restrictive legends and trading restrictions. The Corporation shall deliver the Conversion Shares electronically through the Depository Trust Company or another established clearing corporation performing similar functions. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Corporation's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Conversion.

ii. Failure to Deliver Conversion Shares. If, in the case of any Notice of Conversion, such Conversion Shares are not delivered to or as directed by the applicable Holder by the Share Delivery Date, the Holder shall be entitled to elect by written notice to the Corporation at any time on or before its receipt of such Conversion Shares, to rescind such Conversion, in which event the Corporation shall promptly return to the Holder any original Preferred Stock certificate delivered to the Corporation and the Holder shall promptly return to the Corporation the Conversion Shares issued to such Holder pursuant to the rescinded Notice of Conversion.

iii. Obligation Absolute; Partial Liquidated Damages. The Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder. In the event a Holder shall elect to convert any or all of the Stated Value of its Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or anyone associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Preferred Stock of such Holder shall have been sought and obtained, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the Stated Value of Preferred Stock which is subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, the Corporation shall issue Conversion Shares and, if applicable, cash, upon a properly noticed conversion. If the Corporation fails to deliver to a Holder such Conversion Shares pursuant to Section 6(c)(i) by the Share Delivery Date applicable to such conversion, the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$5,000 of Stated Value of Preferred Stock being converted, \$50 per Trading Day (increasing to \$100 per Trading Day on the third Trading Day and increasing to \$200 per Trading Day on the sixth Trading Day after such damages begin to accrue) for each Trading Day after the Share Delivery Date until such Conversion Shares are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

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iv. Compensation for Buy-In on Failure to Timely Deliver Conversion Shares Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable Conversion Shares by the Share Delivery Date pursuant to Section 6(c)(i), and if

after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount, if any, by which (x) such Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Preferred Stock equal to the number of shares of Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(c)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Preferred Stock with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver the Conversion Shares upon conversion of the shares of Preferred Stock as required pursuant to the terms hereof.

v. Reservation of Shares Issuable Upon Conversion. The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Preferred Stock, each as herein provided, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other holders of the Preferred Stock), not less than such aggregate number of shares of the Common Stock as shall (subject to the terms and conditions set forth in the Warrant Agreement) be issuable (taking into account the adjustments and restrictions of Section 7) upon the conversion of the then outstanding shares of Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable.

vi. Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of the Preferred Stock. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such conversion, the Corporation shall at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Conversion Price or round up to the next whole share. Notwithstanding anything to the contrary contained herein, but consistent with the provisions of this subsection with respect to fractional Conversion Shares, nothing shall prevent any Holder from converting fractional shares of Preferred Stock

vii. Transfer Taxes and Expenses. The issuance of Conversion Shares on conversion of this Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such Conversion Shares, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such Conversion Shares upon conversion in a name other than that of the Holders of such shares of Preferred Stock and the Corporation shall not be required to issue or deliver such Conversion Shares unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid. The Corporation shall pay all Transfer Agent fees required for same-day processing of any Notice of Conversion and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Conversion Shares.

d) Beneficial Ownership Limitation. The Corporation shall not effect any conversion of the Preferred Stock, and a Holder shall not have the right to convert any portion of the Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or any of such Holder's Affiliates (such Persons, "Attribution Parties")) would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Stated Value of Preferred Stock beneficially owned by such Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein (including, without limitation, the Preferred Stock or the Warrants) beneficially owned by such Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 6(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this Section 6(d) applies, the determination of whether the Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and of how many shares of Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and how many shares of the Preferred Stock are convertible, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such Notice of Conversion has not violated the restrictions set forth in this paragraph and the Corporation shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 6(d), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Corporation's most recent periodic or annual report filed with the Commission, as the case may be, (ii) a more recent public announcement by the Corporation or (iii) a more recent written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request (which may be via email) of a Holder, the Corporation shall within two Trading Days confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Preferred Stock, by such Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any shares of Preferred Stock, 9.99%) of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of Preferred Stock held by the applicable Holder. A Holder, upon notice to the Corporation, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 6(d) applicable to its Preferred Stock provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon conversion of this Preferred Stock held by the Holder and the provisions of this Section 6(d) shall continue to apply. Any such increase in the Beneficial Ownership Limitation will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Corporation and shall only apply to such Holder and no other Holder. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6(d) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of Preferred Stock.

a) Stock Dividends and Stock Splits. If the Corporation, at any time while this Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions that is payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of, or payment of a dividend on, this Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

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b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of such Holder's Preferred Stock (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) Pro Rata Distributions. During such time as this Preferred Stock is outstanding, if the Corporation shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Preferred Stock, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Preferred Stock (without regard to any limitations on conversion hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

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d) Fundamental Transaction. If, at any time while this Preferred Stock is outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person (other than a transaction solely to change the domicile of the Corporation), (ii) the Corporation, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent conversion of this Preferred Stock, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock), the number of shares of Common Stock of the successor or acquiring corporation or of the Corporation, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Preferred Stock is convertible immediately prior to such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock). For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Corporation shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Preferred Stock following such Fundamental Transaction. The amount of any consideration to be received by a Holder in connection with a Fundamental Transaction shall be payable in the same type or form of consideration (and in the same proportion) that is being offered and paid to the holders of Common Stock of the Corporation 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. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designation with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders' right to convert such preferred stock into Alternate Consideration. The Corporation shall cause any successor entity in a Fundamental Transaction in which the Corporation is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents in accordance with the provisions of this Section 7(d) pursuant to written agreements prior to such Fundamental Transaction and shall, at the option of the holder of this Preferred Stock, deliver to the Holder in exchange for this Preferred Stock a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Preferred Stock which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of this Preferred Stock (without regard to any limitations on the conversion of this Preferred Stock) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of this Preferred Stock immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designation and the other Transaction Documents referring to the "Corporation" shall refer instead to the Successor Entity), and may exercise every right and power of the Corporation and shall assume all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Corporation herein.

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e) Calculations. All calculations under this Section 7 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 7, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

f) Notice to the Holders.

i. Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder by facsimile or email a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Conversion by Holder. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of this Preferred Stock, and shall cause to be delivered by facsimile or email to each Holder at its last facsimile number or email address as it shall appear upon the stock books of the Corporation, at least twenty (20) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Corporation or any of the Subsidiaries, the Corporation shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to convert the Conversion Amount of this Preferred Stock (or any part hereof) during the 20-day period commencing on the date of such notice through the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

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Section 8. Miscellaneous.

a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile or e-mail, or sent by a nationally recognized overnight courier service, addressed to the Corporation, at the address set forth above Attention: Chief Executive Officer, facsimile number 855.839.3500, e-mail address sbal@sintx.com, or such other facsimile number, e-mail address or address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section 8. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile or e-mail, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number, e-mail address or address of such Holder appearing on the books of the Corporation, or if no such facsimile number, e-mail address or address appears on the books of the Corporation, at the principal place of business of such Holder, as set forth in such Holder's Subscription Rights Certificate. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or e-mail at the e-mail address set forth in this Section 8 prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or e-mail at the e-mail address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

b) Absolute Obligation. Except as expressly provided herein, no provision of this Certificate of Designation shall alter or impair the obligation of the Corporation, which is absolute and unconditional, to pay liquidated damages, accrued dividends and accrued interest, as applicable, on the shares of Preferred Stock at the time, place, and rate, and in the coin or currency, herein prescribed.

c) Lost or Mutilated Preferred Stock Certificate. If a Holder's Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership hereof reasonably satisfactory to the Corporation.

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d) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Certificate of Designation shall be governed by and construed and enforced in accordance with the internal laws of the State of Delaware, without regard to the principles of conflict of laws thereof. All legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by any of the Transaction Documents (whether brought against a party hereto or its respective Affiliates, directors, officers, stockholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the "New York Courts"). Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such New York Courts, or such New York Courts are improper or inconvenient venue for such proceeding. The Corporation and each Holder hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Certificate of Designation and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by applicable law. The Corporation and each Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Certificate of Designation or the transactions contemplated hereby. If the Corporation or any Holder shall commence an action or proceeding to enforce any provisions of this Certificate of Designation, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

e) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Certificate of Designation shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Certificate of Designation or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Certificate of Designation on one or more occasions shall not be considered a waiver or deprive that party (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Certificate of Designation on any other

occasion. Any waiver by the Corporation or a Holder must be in writing.

f) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

g) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

h) Headings. The headings contained herein are for convenience only, do not constitute a part of this Certificate of Designation and shall not be deemed to limit or affect any of the provisions hereof.

i) Status of Converted or Redeemed Preferred Stock. Shares of Preferred Stock may only be issued pursuant to the Dealer Manager Agreement. If any shares of Preferred Stock shall be converted, redeemed or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series D Convertible Preferred Stock.

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RESOLVED, FURTHER, that the Chairman, the president or any vice-president, and the secretary or any assistant secretary, of the Corporation be and they hereby are authorized and directed to prepare and file this Certificate of Designation of Preferences, Rights and Limitations in accordance with the foregoing resolution and the provisions of Delaware law.

IN WITNESS WHEREOF, the undersigned have executed this Certificate this \_\_\_ day of September, 2022.

Name: \_\_\_\_\_ Name: \_\_\_\_\_  
Title: \_\_\_\_\_ Title: \_\_\_\_\_

ANNEX A

NOTICE OF CONVERSION

(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER TO CONVERT SHARES OF PREFERRED STOCK)

The undersigned hereby elects to convert the number of shares of Series D Convertible Preferred Stock indicated below into shares of common stock, par value \$0.01 per share (the "Common Stock"), of SINTX Technologies, Inc., a Delaware corporation (the "Corporation"), according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a Person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as may be required by the Corporation in accordance with the Dealer Manager Agreement. No fee will be charged to the Holders for any conversion, except for any such transfer taxes.

Conversion calculations:

Date to Effect Conversion: \_\_\_\_\_

Number of shares of Preferred Stock owned prior to Conversion: \_\_\_\_\_

Number of shares of Preferred Stock to be Converted: \_\_\_\_\_

Stated Value of shares of Preferred Stock to be Converted: \_\_\_\_\_

Number of shares of Common Stock to be Issued: \_\_\_\_\_

Applicable Conversion Price: \_\_\_\_\_

Number of shares of Preferred Stock subsequent to Conversion: \_\_\_\_\_

Address for Delivery: \_\_\_\_\_

or

DWAC Instructions:

Broker no: \_\_\_\_\_

Account no: \_\_\_\_\_

[HOLDER]

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

## COMMON STOCK PURCHASE WARRANT

## SINTX TECHNOLOGIES, INC.

Warrant Shares: \_\_\_\_\_

Initial Exercise Date: \_\_\_\_\_, 2022

THIS COMMON STOCK PURCHASE WARRANT (the “Warrant”) certifies that, for value received, \_\_\_\_\_ or its assigns (the “Holder”) is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date hereof (the “Initial Exercise Date”) and on or prior to 5:00 p.m. (New York City time) on \_\_\_\_\_<sup>1</sup> (the “Termination Date”) but not thereafter, to subscribe for and purchase from SINTX Technologies, Inc., a Delaware corporation (the “Company”), up to \_\_\_\_\_ shares (as subject to adjustment hereunder, the “Warrant Shares”) of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b). This Warrant shall initially be issued and maintained in the form of a security held in book-entry form and the Depository Trust Company or its nominee (“DTC”) shall initially be the sole registered holder of this Warrant, subject to a Holder’s right to elect to receive a Warrant in certificated form pursuant to the terms of the Warrant Agency Agreement, in which case this sentence shall not apply.

Section 1. Definitions. In addition to the terms defined elsewhere in this Warrant, the following terms have the meanings indicated in this Section 1:

“Affiliate” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

“Bid Price” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the bid price of the Common Stock for the time in question (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

<sup>1</sup> Insert the date that is the five year anniversary of the Initial Exercise Date.

“Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the common stock of the Company, par value \$0.01 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Registration Statement” means the Company’s registration statement on Form S-1 (File No. 333-266070) and any prospectus included therein in compliance with Rule 424(b) of the Securities Act.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Subsidiary” means any subsidiary of the Company and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

“Trading Day” means a day on which the Common Stock is traded on a Trading Market.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange (or any successors to any of the foregoing).

“Transfer Agent” means American Stock Transfer & Trust Company, LLC, the current transfer agent of the Corporation with a mailing address of 6201 15<sup>th</sup> Avenue, Brooklyn, New York 11219, and any successor transfer agent of the Company.

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses

of which shall be paid by the Company.

“Warrant Agency Agreement” means that certain warrant agency agreement, dated on or about the Initial Exercise Date, between the Company and the Warrant Agent.

“Warrant Agent” means the Transfer Agent and any successor warrant agent of the Company.

“Warrants” means this Warrant and other Common Stock purchase warrants issued by the Company pursuant to the Registration Statement.

## Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company of a duly executed facsimile copy or PDF copy submitted by email (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the “Notice of Exercise”). Within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer or cashier’s check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Business Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

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Notwithstanding the foregoing in this Section 2(a), a holder whose interest in this Warrant is a beneficial interest in certificate(s) representing this Warrant held in book-entry form through DTC (or another established clearing corporation performing similar functions), shall effect exercises made pursuant to this Section 2(a) by delivering to DTC (or such other clearing corporation, as applicable) the appropriate instruction form for exercise, complying with the procedures to effect exercise that are required by DTC (or such other clearing corporation, as applicable), subject to a Holder’s right to elect to receive a Warrant in certificated form pursuant to the terms of the Warrant Agency Agreement, in which case this sentence shall not apply.

b) Exercise Price. The exercise price per share of Common Stock under this Warrant shall be \$\_\_\_\_\_, subject to adjustment hereunder (the “Exercise Price”).

c) Cashless Exercise. If at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the Warrant Shares to the Holder, then this Warrant may also be exercised, in whole or in part, at such time by means of a “cashless exercise” in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

(A) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of “regular trading hours” (as defined in Rule 600(b)(64) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise or (z) the Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. as of the time of the Holder’s execution of the applicable Notice of Exercise if such Notice of Exercise is executed during “regular trading hours” on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of “regular trading hours” on a Trading Day) pursuant to Section 2(a) hereof or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of “regular trading hours” on such Trading Day;

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(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised. The Company agrees not to take any position contrary to this Section 2(c).

Notwithstanding anything herein to the contrary, on the Termination Date, this Warrant shall be automatically exercised via cashless exercise pursuant to this Section 2(c).

d) Mechanics of Exercise.

- i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's or its designee's balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by Holder or (B) this Warrant is being exercised via cashless exercise, and otherwise by physical delivery of a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) two (2) Trading Days after the delivery to the Company by the Holder of the Notice of Exercise, (ii) one (1) Trading Day after delivery of the aggregate Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise (such date, the "Warrant Share Delivery Date"). Upon delivery of the Notice of Exercise, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise.

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ii. Delivery of New Warrants Upon Exercise. If this Warrant is not held in global form through DTC (or any successor depository) and if this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

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vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section

13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within two Trading Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any Warrants, 9.99%) of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

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### Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Intentionally omitted.

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

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d) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation). To the extent that this Warrant has not been partially or completely exercised at the time of such Distribution, such portion of the Distribution shall be held in abeyance for the benefit of the Holder until the Holder has exercised this Warrant.

e) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person (other than a transaction solely to change the domicile of the Company), (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder

(without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction, the Company or any Successor Entity (as defined below) shall, at the Holder’s option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction (or, if later, the date of the public announcement of the applicable Fundamental Transaction), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value (as defined below) of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction; provided, however, that, if the Fundamental Transaction is not within the Company’s control, including not approved by the Company’s Board of Directors, Holder shall only be entitled to receive from the Company or any Successor Entity, as of the date of consummation of such Fundamental Transaction, the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of this Warrant, that is being offered and paid to the holders of Common Stock of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction. “Black Scholes Value” means the value of this Warrant based on the Black-Scholes Option Pricing Model obtained from the “OV” function on Bloomberg, L.P. (“Bloomberg”) determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the greater of (i) the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (ii) the greater of (x) the last VWAP immediately prior to the public announcement of such Fundamental Transaction and (y) the last VWAP immediately prior to the consummation of such Fundamental Transaction and (D) a remaining option time equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date and (E) a zero cost of borrow. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds within five Business Days of the Holder’s election (or, if later, on the effective date of the Fundamental Transaction). The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 3(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein.

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f) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by facsimile or email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party (other than a transaction solely to change the domicile of the Company), any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

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#### Section 4. Transfer of Warrant.

a) Transferability. This Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and

in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date on which the Holder delivers an assignment form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. If this Warrant is not held in global form through DTC (or any successor depository), this Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the initial issuance date of this Warrant and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

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c) Warrant Register. The Warrant Agent shall register this Warrant, upon records to be maintained by the Warrant Agent for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time. The Company and the Warrant Agent may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

#### Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

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Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Warrant (whether brought against a party hereto or their respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Warrant and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of this Warrant, the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for their reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

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f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, and the Holder does not utilize cashless exercise, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Exercise, shall be in writing and delivered personally, by facsimile or e-mail, or sent by a nationally recognized overnight courier service, addressed to the Company, at 1885 West 2100 South, Salt Lake City, Utah 84119, , Attention: Chief Executive Officer, facsimile number: 855.839.3500, email address: sbal@sintx.com, or such other facsimile number, email address or address as the Company may specify for such purposes by notice to the Holders. Any and all notices or other communications or deliveries to be provided by the Company hereunder shall be in writing and delivered personally, by facsimile or e-mail, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number, e-mail address or address of such Holder appearing on the books of the Company. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or via e-mail at the e-mail address set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or via e-mail at the e-mail address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K.

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i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company, on the one hand, and the Holder or the beneficial owner of this Warrant, on the other hand.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

o) Warrant Agency Agreement. If this Warrant is held in global form through DTC (or any successor depository), this Warrant is issued subject to the Warrant Agency Agreement. To the extent any provision of this Warrant conflicts with the express provisions of the Warrant Agency Agreement, the provisions of this Warrant shall govern and be controlling.

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(Signature Page Follows)

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IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

**SINTX TECHNOLOGIES, INC.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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**NOTICE OF EXERCISE**

TO: SINTX TECHNOLOGIES, INC.

(1) The undersigned hereby elects to purchase \_\_\_\_\_ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

in lawful money of the United States; or

if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

\_\_\_\_\_

The Warrant Shares shall be delivered to the following DWAC Account Number:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_  
*Signature of Authorized Signatory of Investing Entity:* \_\_\_\_\_  
Name of Authorized Signatory: \_\_\_\_\_  
Title of Authorized Signatory: \_\_\_\_\_  
Date: \_\_\_\_\_

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**ASSIGNMENT FORM**

*(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)*

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: \_\_\_\_\_  
(Please Print)

Address: \_\_\_\_\_  
(Please Print)

Phone Number: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Dated: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature: \_\_\_\_\_  
Holder's Address: \_\_\_\_\_

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SINTX Technologies, Inc.

and

American Stock Transfer & Trust Company, LLC, as  
Warrant Agent

Warrant Agency Agreement

Dated as of \_\_\_\_\_, 2022

WARRANT AGENCY AGREEMENT

WARRANT AGENCY AGREEMENT, dated as of September \_\_\_\_\_, 2022 (“Agreement”), between SINTX Technologies, Inc., a Delaware corporation (the “Company”), and American Stock Transfer & Trust Company, LLC, a New York limited liability company (the “Warrant Agent”).

WITNESSETH

WHEREAS, the Company is engaged in a public rights offering (the “Offering”) pursuant to which the Company has distributed, at no charge, non-transferable subscription rights to purchase units (the “Units”) to each of the Company’s holders of common stock (the “Common Stock”), Series B Preferred Stock, Series C Preferred Stock, and to certain of the Company’s warrant holders pursuant to an effective registration statement on Form S-1 (File No. 333-266070) (the “Registration Statement”);

WHEREAS, the Units consists of shares of Series D Convertible Preferred Stock (the “Preferred Stock”) and warrants (collectively, the “Warrants”) to purchase shares of Common Stock, and the Company wishes to issue the Warrants in book entry form entitling the respective holders of the Warrants (the “Holders”, which term shall include a Holder’s transferees, successors and assigns and “Holder” shall include, if the Warrants are held in “street name,” a Participant (as defined below) or a designee appointed by such Participant) to purchase an aggregate of up to \_\_\_\_\_ shares of Common Stock upon the terms and subject to the conditions hereinafter set forth;

WHEREAS, the Preferred Stock and Warrants to be issued in connection with the Offering shall be immediately separable and will be issued separately, but will be purchased together in the Offering; and

WHEREAS, the Company wishes the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing so to act, in connection with the issuance, registration, transfer, exchange, exercise and replacement of the Warrants and, in the Warrant Agent’s capacity as the Company’s transfer agent, the delivery of the Warrant Shares (as defined below).

NOW, THEREFORE, in consideration of the premises and the mutual agreements herein set forth, the parties hereby agree as follows:

Section 1. Certain Definitions. For purposes of this Agreement, the following terms have the meanings indicated:

(a) “Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York Stock are authorized or required by law or other governmental action to close.

(b) “Close of Business” on any given date means 5:00 p.m., New York City time, on such date; provided, however, that if such date is not a Business Day it means 5:00 p.m., New York City time, on the next succeeding Business Day.

(c) “Person” means an individual, corporation, association, partnership, limited liability company, joint venture, trust, unincorporated organization, government or political subdivision thereof or governmental agency or other entity.

(d) “Warrant Certificate” means a certificate issued to a Holder, representing such number of Warrant Shares as is indicated therein, provided that any reference to the delivery of a Warrant Certificate in this Agreement shall include delivery of a Definitive Certificate or a Global Warrant (each as defined below).

(e) “Warrant Shares” means the shares of Common Stock underlying the Warrants and issuable upon exercise of the Warrants.

All other capitalized terms used but not otherwise defined herein shall have the meaning ascribed to such terms in the Warrant.

Section 2. Appointment of Warrant Agent. The Company hereby appoints the Warrant Agent to act as agent for the Company in accordance with the terms and conditions hereof, and the Warrant Agent hereby accepts such appointment. The Company may from time to time appoint a Co-Warrant Agent as it may, in its sole discretion, deem necessary or desirable. The Warrant Agent shall have no duty to supervise, and will in no event be liable for the acts or omissions of, any co-Warrant Agent.

Section 3. Global Warrants.

(a) The Warrants shall be initially issuable in book entry form. Unless otherwise instructed by the Company, all of the Warrants shall initially be represented by one or more book entry form Warrants (the “Global Warrants”) deposited with the Warrant Agent and registered in the name of Cede & Co., a nominee of The Depository Trust Company (the “Depository”), or as otherwise directed by the Depository. Ownership of beneficial interests in the Warrants shall be shown on, and the transfer of such ownership shall be effected through, records maintained by (i) the Depository or its nominee for each Global Warrant or (ii) institutions that have accounts with the Depository (such institution, with respect to a Warrant in its account, a “Participant”).

(b) If the Depository subsequently ceases to make its book-entry settlement system available for the Warrants, the Company may instruct the Warrant Agent regarding other arrangements for book-entry settlement. In the event that the Warrants are not eligible for, or it is no longer necessary to have the Warrants available in, book-entry form, the Warrant Agent shall provide written instructions to the Depository to deliver to the Warrant Agent for cancellation each Global Warrant, and the Company shall instruct the Warrant Agent to deliver to each Holder a Warrant Certificate.

(c) A Holder has the right to elect at any time or from time to time a Warrant Exchange (as defined below) pursuant to a Warrant Certificate Request Notice (as

defined below). Upon written notice by a Holder to the Warrant Agent for the exchange of some or all of such Holder's Global Warrants for a Warrant Certificate (such separate certificate, a "Definitive Certificate") evidencing the same number of Warrants, which request shall be in the form attached hereto as Annex A (a "Warrant Certificate Request Notice") and the date of delivery of such Warrant Certificate Request Notice by the Holder, the "Warrant Certificate Request Notice Date" and the deemed surrender upon delivery by the Holder of a number of Global Warrants for the same number of Warrants evidenced by a Warrant Certificate, a "Warrant Exchange"), the Warrant Agent shall promptly effect the Warrant Exchange and shall promptly issue and deliver to the Holder a Definitive Certificate for such number of Warrants in the name set forth in the Warrant Certificate Request Notice. Such Definitive Certificate shall be dated the original issue date of the Warrants, shall be manually executed by an authorized signatory of the Company and shall be in the form attached hereto as Exhibit 1. In connection with a Warrant Exchange, the Company agrees to deliver, or to direct the Warrant Agent to deliver, the Definitive Certificate to the Holder within two (2) Business Days of the Warrant Certificate Request Notice pursuant to the delivery instructions in the Warrant Certificate Request Notice ("Warrant Certificate Delivery Date"). If the Company fails for any reason to deliver to the Holder the Warrant Certificate subject to the Warrant Certificate Request Notice by the Warrant Certificate Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares evidenced by such Warrant Certificate (based on the VWAP (as defined in the Warrant) of the Common Stock on the Warrant Certificate Request Notice Date), \$10 per Business Day (increasing to \$20 per Business Day on the fifth Business Day after such liquidated damages begin to accrue) for each Business Day after such Warrant Certificate Delivery Date until such Warrant Certificate is delivered or, prior to delivery of such Warrant Certificate, the Holder rescinds such Warrant Exchange. The Company covenants and agrees that, upon the date of delivery of the Warrant Certificate Request Notice, the Holder shall be deemed to be the holder of the Definitive Certificate and, notwithstanding anything to the contrary set forth herein, the Definitive Certificate shall be deemed for all purposes to contain all of the terms and conditions of the Warrants evidenced by such Warrant Certificate and the terms of this Agreement, other than Section 3(c) and 3(d), which shall not apply to the Warrants evidenced by a Definitive Certificate. Notwithstanding anything to the contrary contained in this Agreement, in the event of inconsistency between any provision in this Agreement and any provision in a Definitive Certificate, as it may from time to time be amended, the terms of such Definitive Certificate shall control.

(d) A Holder of a Definitive Certificate (pursuant to a Warrant Exchange or otherwise) has the right to elect at any time or from time to time a Global Warrants Exchange (as defined below) pursuant to a Global Warrants Request Notice (as defined below). Upon written notice by a Holder to the Company for the exchange of some or all of such Holder's Warrants evidenced by a Definitive Certificate for a beneficial interest in Global Warrants held in book-entry form through the Depository evidencing the same number of Warrants, which request shall be in the form attached hereto as Annex B (a "Global Warrants Request Notice") and the date of delivery of such Global Warrants Request Notice by the Holder, the "Global Warrants Request Notice Date" and the surrender upon delivery by the Holder of the Warrants evidenced by Definitive Certificates for the same number of Warrants evidenced by a beneficial interest in Global Warrants held in book-entry form through the Depository, a "Global Warrants Exchange"), the Company shall promptly effect the Global Warrants Exchange and shall promptly direct the Warrant Agent to issue and deliver to the Holder Global Warrants for such number of Warrants in the Global Warrants Request Notice, which beneficial interest in such Global Warrants shall be delivered by the Depository's Deposit or Withdrawal at Custodian system to the Holder pursuant to the instructions in the Global Warrants Request Notice. In connection with a Global Warrants Exchange, the Company shall direct the Warrant Agent to deliver the beneficial interest in such Global Warrants to the Holder within ten (10) Business Days of the Global Warrants Request Notice pursuant to the delivery instructions in the Global Warrant Request Notice ("Global Warrants Delivery Date"). The Company covenants and agrees that, upon the date of delivery of the Global Warrants Request Notice, the Holder shall be deemed to be the beneficial holder of such Global Warrants.

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Section 4. Form of Warrant. The Warrants, together with the form of election to purchase Common Stock (the "Exercise Notice") and the form of assignment to be printed on the reverse thereof, whether a Warrant Certificate or a Global Warrant, shall be substantially in the form of Exhibit 1 hereto.

Section 5. Countersignature and Registration. The Warrant Certificates shall be executed on behalf of the Company by its Chief Executive Officer, Chief Operating Officer or Chief Financial Officer, either manually or by facsimile signature, and, if applicable, have affixed thereto the Company's seal or a facsimile thereof which shall be attested by the Secretary or an Assistant Secretary of the Company, either manually or by facsimile signature. The Warrant Certificates shall be countersigned by the Warrant Agent either manually or by facsimile signature and shall not be valid for any purpose unless so countersigned. In case any officer of the Company who shall have signed a Warrant shall cease to be such officer of the Company before countersignature by the Warrant Agent and issuance and delivery by the Company, such Warrant, nevertheless, may be countersigned by the Warrant Agent, issued and delivered with the same force and effect as though the person who signed such Warrant had not ceased to be such officer of the Company; and any Warrant may be signed on behalf of the Company by any person who, at the actual date of the execution of such Warrant, shall be a proper officer of the Company to sign such Warrant, although at the date of the execution of this Warrant Agreement any such person was not such an officer.

The Warrant Agent will keep or cause to be kept, at one of its offices, or at the office of one of its agents, books for registration and transfer of the Warrant Certificates issued hereunder. Such books shall show the names and addresses of the respective Holders of the Warrant Certificates, the number of warrants evidenced on the face of each of such Warrant Certificate and the date of each of such Warrant Certificate. The Warrant Agent will create a special account for the issuance of Warrant Certificates.

Section 6. Transfer, Split Up, Combination and Exchange of Warrant Certificates; Mutilated, Destroyed, Lost or Stolen Warrant Certificates. Subject to the provisions of the Warrant and the last sentence of this first paragraph of Section 6 and subject to applicable law, rules or regulations, or any "stop transfer" instructions the Company may give to the Warrant Agent, at any time after the closing date of the Offering, and at or prior to the Close of Business on the Termination Date, any Warrant Certificate or Warrant Certificates or Global Warrant or Global Warrants may be transferred, split up, combined or exchanged for another Warrant Certificate or Warrant Certificates or Global Warrant or Global Warrants, entitling the Holder to purchase a like number of shares of Common Stock as the Warrant Certificate or Warrant Certificates or Global Warrant or Global Warrants surrendered then entitled such Holder to purchase. Any Holder desiring to transfer, split up, combine or exchange any Warrant Certificate or Global Warrant shall make such request in writing delivered to the Warrant Agent, and shall surrender the Warrant Certificate or Warrant Certificates to be transferred, split up, combined or exchanged at the principal office of the Warrant Agent, provided that no such surrender is applicable to the Holder of a Global Warrant. Any requested transfer of Warrants, whether a Global Warrant or a Warrant Certificate, shall be accompanied by reasonable evidence of authority of the party making such request that may be required by the Warrant Agent. Thereupon the Warrant Agent shall, subject to the last sentence of this first paragraph of Section 6, countersign and deliver to the Person entitled thereto any Warrant Certificate or Global Warrant, as the case may be, as so requested. The Company may require payment from the Holder of a sum sufficient to cover any tax or governmental charge that may be imposed in connection with any transfer, split up, combination or exchange of Warrants. The Company shall compensate the Warrant Agent per the fee schedule mutually agreed upon by the parties hereto and provided separately on the date hereof.

Upon receipt by the Warrant Agent of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of a Warrant Certificate, which evidence shall include an affidavit of loss, or in the case of mutilated certificates, the certificate or portion thereof remaining, and, in case of loss, theft or destruction, of indemnity in customary form and amount, and satisfaction of any other reasonable requirements established by Section 8-405 of the Uniform Commercial Code as in effect in the State of Delaware, and reimbursement to the Company and the Warrant Agent of all reasonable expenses incidental thereto, and upon surrender to the Warrant Agent and cancellation of the Warrant Certificate if mutilated, the Company will make and deliver a new Warrant Certificate of like tenor to the Warrant Agent for delivery to the Holder in lieu of the Warrant Certificate so lost, stolen, destroyed or mutilated.

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Section 7. Exercise of Warrants; Exercise Price; Termination Date.

(a) The Warrants shall be exercisable commencing on the Initial Exercise Date. The Warrants shall cease to be exercisable and shall terminate and become void, and all rights thereunder and under this Agreement shall cease, at or prior to the Close of Business on the Termination Date. Subject to the foregoing and to Section 7(b) below, the Holder of a Warrant may exercise the Warrant in whole or in part upon providing the items required by Section 7(c) below to the Warrant Agent at the principal office of the Warrant Agent or to the office of one of its agents as may be designated by the Warrant Agent from time to time. In the case of the Holder of a

Global Warrant, the Holder shall deliver the executed Exercise Notice and payment of the Exercise Price pursuant to Section 2(a) of the Warrant. Notwithstanding any other provision in this Agreement, a holder whose interest in a Global Warrant is a beneficial interest in a Global Warrant held in book-entry form through the Depository (or another established clearing corporation performing similar functions), shall effect exercises by delivering to the Depository (or such other clearing corporation, as applicable) the appropriate instruction form for exercise, complying with the procedures to effect exercise that are required by the Depository (or such other clearing corporation, as applicable). The Company acknowledges that the bank accounts maintained by the Warrant Agent in connection with the services provided under this Agreement will be in the Warrant Agent's name and that the Warrant Agent may receive investment earnings in connection with the investment at Warrant Agent risk and for its benefit of funds held in those accounts from time to time. Neither the Company nor the Holders will receive interest on any deposits or Exercise Price.

(b) Upon receipt of an Exercise Notice for a cashless exercise pursuant to Section 2(c) of the Warrant (each, a "Cashless Exercise"), the Company will promptly calculate and transmit to the Warrant Agent the number of Warrant Shares issuable in connection with such Cashless Exercise and deliver a copy of the Exercise Notice to the Warrant Agent, which shall issue such number of Warrant Shares in connection with such Cashless Exercise.

(c) Upon the Warrant Agent's receipt, at or prior to the Close of Business on the Termination Date set forth in a Warrant, of the executed Exercise Notice, accompanied by payment of the Exercise Price pursuant to Section 2(a) of the Warrant for the shares to be purchased (other than in the case of a Cashless Exercise), an amount equal to any applicable tax, governmental charge or expense reimbursement referred to in Section 6 in cash, or by certified check or bank draft payable to the order of the Company and, in the case of an exercise of a Warrant in the form of a Warrant Certificate for all of the Warrant Shares represented thereby, the Warrant Certificate, the Warrant Agent shall cause the Warrant Shares underlying such Warrant to be delivered to or upon the order of the Holder of such Warrant, registered in such name or names as may be designated by such Holder, no later than the date that is two (2) Trading Days after the date of delivery of the Exercise Notice (the "Warrant Share Delivery Date"). If the Company is then a participant in the DWAC system of the Depository and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by Holder or (B) the Warrant is being exercised via Cashless Exercise, then the certificates for Warrant Shares shall be transmitted by the Warrant Agent to the Holder by crediting the account of the Holder's broker with the Depository through its DWAC system. For the avoidance of doubt, if the Company becomes obligated to pay any amounts to any Holders pursuant to Section 2(d)(i) or 2(d)(iv) of the Warrant, such obligation shall be solely that of the Company and not that of the Warrant Agent. Notwithstanding anything else to the contrary in this Agreement, except in the case of a Cashless Exercise, if any Holder fails to duly deliver payment to the Warrant Agent of an amount equal to the aggregate Exercise Price of the Warrant Shares to be purchased upon exercise of such Holder's Warrant as set forth in Section 7(a) hereof, the Warrant Agent will not be obligated to deliver certificates representing any such Warrant Shares (via DWAC or otherwise) until following receipt of such payment, and the applicable Warrant Share Delivery Date shall be deemed extended by one day for each day (or part thereof) until such payment is delivered to the Warrant Agent.

(d) The Warrant Agent shall deposit all funds received by it in payment of the Exercise Price for all Warrants in the account of the Company maintained with the Warrant Agent for such purpose (or to such other account as directed by the Company in writing) and shall advise the Company via telephone at the end of each day on which funds for the exercise of any Warrant are received of the amount so deposited to its account. The Warrant Agent shall promptly confirm such telephonic advice to the Company in writing.

(e) In case the Holder of any Warrant Certificate exercises fewer than all Warrants evidenced thereby and surrenders such Warrant Certificate in connection with such partial exercise, a new Warrant Certificate evidencing the number of Warrant Shares equivalent to the number of Warrant Shares remaining unexercised may be issued by the Warrant Agent to the Holder of such Warrant Certificate or to his duly authorized assigns in accordance with Section 2(d)(ii) of the Warrant, subject to the provisions of Section 6 hereof.

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Section 8. Cancellation and Destruction of Warrant Certificates. All Warrant Certificates surrendered for the purpose of exercise, transfer, split up, combination or exchange shall, if surrendered to the Company or to any of its agents, be delivered to the Warrant Agent for cancellation or in canceled form, or, if surrendered to the Warrant Agent, shall be canceled by it, and no Warrant Certificates shall be issued in lieu thereof except as expressly permitted by any of the provisions of this Agreement. The Company shall deliver to the Warrant Agent for cancellation and retirement, and the Warrant Agent shall so cancel and retire, any other Warrant Certificate purchased or acquired by the Company otherwise than upon the exercise thereof. The Warrant Agent shall deliver all canceled Warrant Certificates to the Company, or shall, at the written request of the Company, destroy such canceled Warrant Certificates, and in such case shall deliver a certificate of destruction thereof to the Company, subject to any applicable law, rule or regulation requiring the Warrant Agent to retain such canceled certificates.

Section 9. Certain Representations: Reservation and Availability of Shares of Common Stock or Cash.

(a) This Agreement has been duly authorized, executed and delivered by the Company and, assuming due authorization, execution and delivery hereof by the Warrant Agent, constitutes a valid and legally binding obligation of the Company enforceable against the Company in accordance with its terms, and the Warrants have been duly authorized, executed and issued by the Company and, assuming due authentication thereof by the Warrant Agent pursuant hereto and payment therefor by the Holders as provided in the Registration Statement, constitute valid and legally binding obligations of the Company enforceable against the Company in accordance with their terms and entitled to the benefits thereof; in each case except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium and other similar laws relating to or affecting creditors' rights generally or by general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(b) As of the date hereof and prior to the Offering, the authorized capital stock of the Company consists of (i) 250,000,000 shares of Common Stock, of which shares of Common Stock are issued and outstanding, and (ii) 130,000,000 shares of undesignated preferred stock, par value \$0.01 per share, 7,392 of which are designated Series A Convertible Preferred Stock, 0 of which are issued and outstanding, 15,000 of which are designated Series B Preferred Stock, 26 of which are issued and outstanding, and 9,440 of which are designated Series C Preferred Stock, 50 of which are issued and outstanding. 1,115,742 shares of Common Stock are reserved for issuance upon exercise of outstanding Warrants. Except as disclosed in the Registration Statement, there are no other outstanding obligations, warrants, options or other rights to subscribe for or purchase from the Company any class of capital stock of the Company.

(c) The Company covenants and agrees that it will cause to be reserved and kept available out of its authorized and unissued shares of Common Stock or its authorized and issued shares of Common Stock held in its treasury, free from preemptive rights, the number of shares of Common Stock that will be sufficient to permit the exercise in full of all outstanding Warrants.

(d) The Warrant Agent will create a special account for the issuance of Common Stock upon the exercise of Warrants.

(e) The Company further covenants and agrees that it will pay when due and payable any and all federal and state transfer taxes and charges which may be payable in respect of the original issuance or delivery of the Warrant Certificates or certificates evidencing Common Stock upon exercise of the Warrants. The Company shall not, however, be required to pay any tax or governmental charge which may be payable in respect of any transfer involved in the transfer or delivery of Warrant Certificates or the issuance or delivery of certificates for Common Stock in a name other than that of the Holder of the Warrant Certificate evidencing Warrants surrendered for exercise or to issue or deliver any certificate for shares of Common Stock upon the exercise of any Warrants until any such tax or governmental charge shall have been paid (any such tax or governmental charge being payable by the Holder of such Warrant Certificate at the time of surrender) or until it has been established to the Company's reasonable satisfaction that no such tax or governmental charge is due.

Section 10. Common Stock Record Date. Each Holder shall be deemed to have become the holder of record for the Warrant Shares pursuant to Section 2(d)(i) of the Warrants.

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Section 11. Adjustment of Exercise Price, Number of Shares of Common Stock or Number of the Company Warrants. The Exercise Price, the number of shares covered by each Warrant and the number of Warrants outstanding are subject to adjustment from time to time as provided in Section 3 of the Warrant. In the event that at any time, as a result of an adjustment made pursuant to Section 3 of the Warrant, the Holder of any Warrant thereafter exercised shall become entitled to receive any shares of capital stock of the Company other than shares of Common Stock, thereafter the number of such other shares so receivable upon exercise of any Warrant shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the shares contained in Section 3 of the Warrant, and the provisions of Sections 7, 9 and 13 of this Agreement with respect to the shares of Common Stock shall apply on like terms to any such other shares. All Warrants originally issued by the Company subsequent to any adjustment made to the Exercise Price pursuant to the Warrant shall evidence the right to purchase, at the adjusted Exercise Price, the number of shares of Common Stock purchasable from time to time hereunder upon exercise of the Warrants, all subject to further adjustment as provided herein.

Section 12. Certification of Adjusted Exercise Price or Number of Shares of Common Stock. Whenever the Exercise Price or the number of shares of Common Stock issuable upon the exercise of each Warrant is adjusted as provided in Section 11 or 13, the Company shall (a) promptly prepare a certificate setting forth the Exercise Price of each Warrant as so adjusted, and a brief statement of the facts accounting for such adjustment, (b) promptly file with the Warrant Agent and with each transfer agent for the Common Stock a copy of such certificate and (c) instruct the Warrant Agent to send a brief summary thereof to each Holder of a Warrant.

Section 13. Fractional Shares of Common Stock.

(a) The Company shall not issue fractions of Warrants or distribute a Global Warrant or Warrant Certificates that evidence fractional Warrants. Whenever any fractional Warrant would otherwise be required to be issued or distributed, the actual issuance or distribution shall reflect a rounding of such fraction either up or down to the nearest whole Warrant.

(b) The Company shall not issue fractions of shares of Common Stock upon exercise of Warrants or distribute stock certificates that evidence fractional shares of Common Stock. Whenever any fraction of a share of Common Stock would otherwise be required to be issued or distributed, the actual issuance or distribution in respect thereof shall be made in accordance with Section 2(d)(v) of the Warrant.

Section 14. Conditions of the Warrant Agent's Obligations. The Warrant Agent accepts its obligations herein set forth upon the terms and conditions hereof, including the following to all of which the Company agrees and to all of which the rights hereunder of the Holders from time to time of the Warrant shall be subject:

(a) Compensation and Indemnification. The Company agrees promptly to pay the Warrant Agent the compensation detailed on Exhibit 2 hereto for all services rendered by the Warrant Agent and to reimburse the Warrant Agent for reasonable out-of-pocket expenses (including reasonable counsel fees) incurred without gross negligence, bad faith or willful misconduct by the Warrant Agent in connection with the services rendered hereunder by the Warrant Agent. The Company also agrees to indemnify the Warrant Agent for, and to hold it harmless against, any loss, liability or expense incurred without gross negligence, bad faith or willful misconduct on the part of the Warrant Agent, arising out of or in connection with its acting as Warrant Agent hereunder, including the reasonable costs and expenses of defending against any claim of such liability.

(b) Agent for the Company. In acting under this Warrant Agreement and in connection with the Warrant Certificates, the Warrant Agent is acting solely as agent of the Company and does not assume any obligations or relationship of agency or trust for or with any of the Holders of Warrant Certificates or beneficial owners of Warrants.

(c) Counsel. The Warrant Agent may consult with counsel satisfactory to it, which may include counsel for the Company, and the written advice of such counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in accordance with the advice of such counsel.

(d) Documents. The Warrant Agent shall be protected and shall incur no liability for or in respect of any action taken or omitted by it in reliance upon any Warrant Certificate, notice, direction, consent, certificate, affidavit, statement or other paper or document reasonably believed by it to be genuine and to have been presented or signed by the proper parties.

(e) Certain Transactions. The Warrant Agent, and its officers, directors and employees, may become the owner of, or acquire any interest in, Warrants, with the same rights that it or they would have if it were not the Warrant Agent hereunder, and, to the extent permitted by applicable law, it or they may engage or be interested in any financial or other transaction with the Company and may act on, or as depository, trustee or agent for, any committee or body of Holders of Warrant Securities or other obligations of the Company as freely as if it were not the Warrant Agent hereunder. Nothing in this Warrant Agreement shall be deemed to prevent the Warrant Agent from acting as trustee under any indenture to which the Company is a party.

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(f) No Liability for Interest. Unless otherwise agreed with the Company, the Warrant Agent shall have no liability for interest on any monies at any time received by it pursuant to any of the provisions of this Agreement or of the Warrant Certificates.

(g) No Liability for Invalidity. The Warrant Agent shall have no liability with respect to any invalidity of this Agreement or any of the Warrant Certificates (except as to the Warrant Agent's countersignature thereon).

(h) No Responsibility for Representations. The Warrant Agent shall not be responsible for any of the recitals or representations herein or in the Warrant Certificates (except as to the Warrant Agent's countersignature thereon), all of which are made solely by the Company.

(i) No Implied Obligations. The Warrant Agent shall be obligated to perform only such duties as are herein and in the Warrants specifically set forth and no implied duties or obligations shall be read into this Agreement or the Warrants against the Warrant Agent. The Warrant Agent shall not be under any obligation to take any action hereunder which may tend to involve it in any expense or liability, the payment of which within a reasonable time is not, in its reasonable opinion, assured to it. The Warrant Agent shall not be accountable or under any duty or responsibility for the use by the Company of any of the Warrants authenticated by the Warrant Agent and delivered by it to the Company pursuant to this Agreement or for the application by the Company of the proceeds of the Warrants. The Warrant Agent shall have no duty or responsibility in case of any default by the Company in the performance of its covenants or agreements contained herein or in the Warrants or in the case of the receipt of any written demand from a Holder of a Warrant Certificate with respect to such default, including, without limiting the generality of the foregoing, any duty or responsibility to initiate or attempt to initiate any proceedings at law.

Section 15. Purchase or Consolidation or Change of Name of Warrant Agent. Any corporation into which the Warrant Agent or any successor Warrant Agent may be merged or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which the Warrant Agent or any successor Warrant Agent shall be party, or any corporation succeeding to the corporate trust business of the Warrant Agent or any successor Warrant Agent, shall be the successor to the Warrant Agent under this Agreement without the execution or filing of any paper or any further act on the part of any of the parties hereto, provided that such corporation would be eligible for appointment as a successor Warrant Agent under the provisions of Section 17. In case at the time such successor Warrant Agent shall succeed to the agency created by this Agreement any of the Warrants shall have been countersigned but not delivered, any such successor Warrant Agent may adopt the countersignature of the predecessor Warrant Agent and deliver such Warrants so countersigned; and in case at that time any of the Warrants shall not have been countersigned, any successor Warrant Agent may

countersign such Warrants either in the name of the predecessor Warrant Agent or in the name of the successor Warrant Agent; and in all such cases such Warrants shall have the full force provided in the Warrants and in this Agreement.

In case at any time the name of the Warrant Agent shall be changed and at such time any of the Warrants shall have been countersigned but not delivered, the Warrant Agent may adopt the countersignature under its prior name and deliver Warrants so countersigned; and in case at that time any of the Warrants shall not have been countersigned, the Warrant Agent may countersign such Warrants either in its prior name or in its changed name; and in all such cases such Warrants shall have the full force provided in the Warrants and in this Agreement.

Section 16. Duties of Warrant Agent. The Warrant Agent undertakes the duties and obligations imposed by this Agreement upon the following terms and conditions, by all of which the Company, by its acceptance hereof, shall be bound:

(a) The Warrant Agent may consult with legal counsel reasonably acceptable to the Company (who may be legal counsel for the Company), and the opinion of such counsel shall be full and complete authorization and protection to the Warrant Agent as to any action taken or omitted by it in good faith and in accordance with such opinion.

(b) Whenever in the performance of its duties under this Agreement the Warrant Agent shall deem it necessary or desirable that any fact or matter be proved or established by the Company prior to taking or suffering any action hereunder, such fact or matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a certificate signed by the Chief Executive Officer, Chief Operating Officer or Chief Financial Officer of the Company; and such certificate shall be full authentication to the Warrant Agent for any action taken or suffered in good faith by it under the provisions of this Agreement in reliance upon such certificate.

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(c) Subject to the limitation set forth in Section 14, the Warrant Agent shall be liable hereunder only for its own gross negligence, bad faith or willful misconduct, or for a breach by it of this Agreement.

(d) The Warrant Agent shall not be liable for or by reason of any of the statements of fact or recitals contained in this Agreement or in the Warrants (except its countersignature thereof) by the Company or be required to verify the same, but all such statements and recitals are and shall be deemed to have been made by the Company only.

(e) The Warrant Agent shall not be under any responsibility in respect of the validity of this Agreement or the execution and delivery hereof (except the due execution hereof by the Warrant Agent) or in respect of the validity or execution of any Warrant (except its countersignature thereof); nor shall it be responsible for any breach by the Company of any covenant or condition contained in this Agreement or in any Warrant; nor shall it be responsible for the adjustment of the Exercise Price or the making of any change in the number of shares of Common Stock required under the provisions of Section 11 or 13 or responsible for the manner, method or amount of any such change or the ascertaining of the existence of facts that would require any such adjustment or change (except with respect to the exercise of Warrants evidenced by Warrant Certificates after actual notice of any adjustment of the Exercise Price); nor shall it by any act hereunder be deemed to make any representation or warranty as to the authorization or reservation of any shares of Common Stock to be issued pursuant to this Agreement or any Warrant or as to whether any shares of Common Stock will, when issued, be duly authorized, validly issued, fully paid and nonassessable.

(f) Each party hereto agrees that it will perform, execute, acknowledge and deliver or cause to be performed, executed, acknowledged and delivered all such further and other acts, instruments and assurances as may reasonably be required by the other party hereto for the carrying out or performing by any party of the provisions of this Agreement.

(g) The Warrant Agent is hereby authorized to accept instructions with respect to the performance of its duties hereunder from the Chief Executive Officer, Chief Operating Officer or Chief Financial Officer of the Company, and to apply to such officers for advice or instructions in connection with its duties, and it shall not be liable and shall be indemnified and held harmless for any action taken or suffered to be taken by it in good faith in accordance with instructions of any such officer, provided Warrant Agent carries out such instructions without gross negligence, bad faith or willful misconduct.

(h) The Warrant Agent and any shareholder, director, officer or employee of the Warrant Agent may buy, sell or deal in any of the Warrants or other securities of the Company or become pecuniarily interested in any transaction in which the Company may be interested, or contract with or lend money to the Company or otherwise act as fully and freely as though it were not Warrant Agent under this Agreement. Nothing herein shall preclude the Warrant Agent from acting in any other capacity for the Company or for any other legal entity.

(i) The Warrant Agent may execute and exercise any of the rights or powers hereby vested in it or perform any duty hereunder either itself or by or through its attorney or agents, and the Warrant Agent shall not be answerable or accountable for any act, default, neglect or misconduct of any such attorney or agents or for any loss to the Company resulting from any such act, default, neglect or misconduct, provided reasonable care was exercised in the selection and continued employment thereof.

Section 17. Change of Warrant Agent. The Warrant Agent may resign and be discharged from its duties under this Agreement upon 30 days' notice in writing sent to the Company and to each transfer agent of the Common Stock, and to the Holders of the Warrant Certificates. The Company may remove the Warrant Agent or any successor Warrant Agent upon 30 days' notice in writing, sent to the Warrant Agent or successor Warrant Agent, as the case may be, and to each transfer agent of the Common Stock, and to the Holders of the Warrant Certificates. If the Warrant Agent shall resign or be removed or shall otherwise become incapable of acting, the Company shall appoint a successor to the Warrant Agent. If the Company shall fail to make such appointment within a period of 30 days after such removal or after it has been notified in writing of such resignation or incapacity by the resigning or incapacitated Warrant Agent or by the Holder of a Warrant Certificate (who shall, with such notice, submit his Warrant Certificate for inspection by the Company), then the Holder of any Warrant Certificate may apply to any court of competent jurisdiction for the appointment of a new Warrant Agent. Any successor Warrant Agent, whether appointed by the Company or by such a court, shall be a corporation organized and doing business under the laws of the United States or of a state thereof, in good standing, which is authorized under such laws to exercise corporate trust powers and is subject to supervision or examination by federal or state authority and which has at the time of its appointment as Warrant Agent a combined capital and surplus of at least \$50,000,000. After appointment, the successor Warrant Agent shall be vested with the same powers, rights, duties and responsibilities as if it had been originally named as Warrant Agent without further act or deed; but the predecessor Warrant Agent shall deliver and transfer to the successor Warrant Agent any property at the time held by it hereunder, and execute and deliver any further assurance, conveyance, act or deed necessary for the purpose. Not later than the effective date of any such appointment, the Company shall file notice thereof in writing with the predecessor Warrant Agent and each transfer agent of the Common Stock, and mail a notice thereof in writing to the Holders of the Warrant Certificates. However, failure to give any notice provided for in this Section 17, or any defect therein, shall not affect the legality or validity of the resignation or removal of the Warrant Agent or the appointment of the successor Warrant Agent, as the case may be.

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Section 18. Issuance of New Warrants. Notwithstanding any of the provisions of this Agreement or of the Warrants to the contrary, the Company may, at its option, issue a new Global Warrant or Warrant Certificates, if any, evidencing Warrants in such form as may be approved by its Board of Directors to reflect any adjustment or change in the Exercise Price per share and the number or kind or class of shares of stock or other securities or property purchasable under the Global Warrant or Warrant Certificates, if any, made in accordance with the provisions of this Agreement.

Section 19. Notices. Notices or demands authorized by this Agreement to be given or made (i) by the Warrant Agent or by the Holder of any Warrant Certificate to or on the Company, (ii) subject to the provisions of Section 17, by the Company or by the Holder of any Warrant Certificate to or on the Warrant Agent or (iii) by the Company or the Warrant Agent to the Holder of any Warrant Certificate, shall be deemed given (a) on the date delivered, if delivered personally, (b) on the first Business Day following the deposit thereof with Federal Express or another recognized overnight courier, if sent by Federal Express or another recognized overnight courier, (c) on the fourth Business Day following the mailing thereof with postage prepaid, if mailed by registered or certified mail (return receipt requested), and (d) the date of transmission, if such notice or communication is delivered via facsimile or email attachment at or prior to 5:30 p.m. (New York City time) on a Business Day and (e) the next Business Day after the date of transmission, if such notice or communication is delivered via facsimile or email attachment on a day that is not a Business Day or later than 5:30 p.m. (New York City time) on any Business Day, in each case to the parties at the following addresses (or at such other address for a party as shall be specified by like notice):

(a) If to the Company, to:

SINTX Technologies, Inc.  
1885 West 2100 South  
Salt Lake City, UT, 84119  
Facsimile: 855.839.3500  
Attention: Chief Executive Officer

(b) If to the Warrant Agent, to:

American Stock Transfer & Trust Company, LLC  
6201 15th Avenue  
Brooklyn, New York 11219  
Facsimile: (718) 765-8713  
Attention: General Counsel

(c) If to the Holder of any Warrant Certificate, to the address of such Holder as shown on the registry books of the Company. Any notice required to be delivered by the Company to the Holder of any Warrant may be given by the Warrant Agent on behalf of the Company. Notwithstanding any other provision of this Agreement, where this Agreement provides for notice of any event to a Holder of any Warrant Certificate, for a Global Warrant, such notice shall be sufficiently given if given to the Depository (or its designee) pursuant to the procedures of the Depository or its designee

For any notice delivered by email to be deemed given or made, such notice must be followed by notice sent by overnight courier service to be delivered on the next business day following such email, unless the recipient of such email has acknowledged via return email receipt of such email.

#### Section 20. Supplements and Amendments.

(a) The Company and the Warrant Agent may from time to time supplement or amend this Agreement without the approval of any Holders of Warrant Certificates in order to cure any ambiguity, to correct or supplement any provision contained herein which may be defective or inconsistent with any other provisions herein, or to make any other provisions with regard to matters or questions arising hereunder which the Company and the Warrant Agent may deem necessary or desirable and which shall not adversely affect the interests of the Holders of the Warrants Certificates in any material respect.

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(b) In addition to the foregoing, with the consent of Holders of Warrants entitled, upon exercise thereof, to receive not less than a majority of the shares of Common Stock issuable thereunder, the Company and the Warrant Agent may modify this Agreement for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Warrant Agreement or modifying in any manner the rights of the Holders of the Warrant Certificates; provided, however, that no modification of the terms (including but not limited to the adjustments described in Section 11) upon which the Warrants are exercisable or reducing the percentage required for consent to modification of this Agreement may be made without the consent of the Holder of each outstanding warrant certificate affected thereby. As a condition precedent to the Warrant Agent's execution of any amendment, the Company shall deliver to the Warrant Agent a certificate from a duly authorized officer of the Company that states that the proposed amendment complies with the terms of this Section 20.

Section 21. Successors. All covenants and provisions of this Agreement by or for the benefit of the Company or the Warrant Agent shall bind and inure to the benefit of their respective successors and assigns hereunder.

Section 22. Benefits of this Agreement. Nothing in this Agreement shall be construed to give any Person other than the Company, the Holders of Warrant Certificates and the Warrant Agent any legal or equitable right, remedy or claim under this Agreement; but this Agreement shall be for the sole and exclusive benefit of the Company, the Warrant Agent and the Holders of the Warrant Certificates.

Section 23. Governing Law. This Agreement and each Warrant issued hereunder shall be governed by, and construed in accordance with, the laws of the State of New York without giving effect to the conflicts of law principles thereof.

Section 24. Counterparts. This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.

Section 25. Captions. The captions of the sections of this Agreement have been inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

Section 26. Information. The Company agrees to promptly provide to the Holders of the Warrants any information it provides to all holders of the Common Stock, except to the extent any such information is publicly available on the EDGAR system (or any successor thereof) of the Securities and Exchange Commission.

Section 27. Force Majeure. Notwithstanding anything to the contrary contained herein, Warrant Agent shall not be liable for any delays or failures in performance resulting from acts beyond its reasonable control including, without limitation, acts of God, terrorist acts, shortage of supply, breakdowns or malfunctions, interruptions or malfunction of computer facilities, or loss of data due to power failures or mechanical difficulties with information storage or retrieval systems, labor difficulties, war, or civil unrest, it being understood that the Warrant Agent shall use reasonable best efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

[Signature Page to Follow]

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

SINTX Technologies, Inc.

By: \_\_\_\_\_  
Name: B. Sonny Bal  
Title: CEO

American Stock Transfer & Trust Company, LLC

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**Annex A: Form of Warrant Certificate Request Notice**

WARRANT CERTIFICATE REQUEST NOTICE

To: American Stock Transfer & Trust Company, LLC as Warrant Agent for SINTX Technologies, Inc. (the "Company")

The undersigned Holder of Common Stock Purchase Warrants ("Warrants") in the form of Global Warrants issued by the Company hereby elects to receive a Warrant Certificate evidencing the Warrants held by the Holder as specified below:

1. Name of Holder of Warrants in form of Global Warrants: \_\_\_\_\_
2. Name of Holder in Warrant Certificate (if different from name of Holder of Warrants in form of Global Warrants): \_\_\_\_\_
3. Number of Warrants in name of Holder in form of Global Warrants: \_\_\_\_\_
4. Number of Warrants for which Warrant Certificate shall be issued: \_\_\_\_\_
5. Number of Warrants in name of Holder in form of Global Warrants after issuance of Warrant Certificate, if any: \_\_\_\_\_
6. Warrant Certificate shall be delivered to the following address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The undersigned hereby acknowledges and agrees that, in connection with this Warrant Exchange and the issuance of the Warrant Certificate, the Holder is deemed to have surrendered the number of Warrants in form of Global Warrants in the name of the Holder equal to the number of Warrants evidenced by the Warrant Certificate.

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

*Signature of Authorized Signatory of Investing Entity:* \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

Date: \_\_\_\_\_

**Annex B: Form of Global Warrant Request Notice**

GLOBAL WARRANT REQUEST NOTICE

To: Continental Stock Transfer & Trust Company as Warrant Agent for Titan Pharmaceuticals, Inc. (the "Company")

The undersigned Holder of Common Stock Purchase Warrants ("Warrants") in the form of Warrants Certificates issued by the Company hereby elects to receive a Global Warrant evidencing the Warrants held by the Holder as specified below:

1. Name of Holder of Warrants in form of Warrant Certificates: \_\_\_\_\_
2. Name of Holder in Global Warrant (if different from name of Holder of Warrants in form of Warrant Certificates): \_\_\_\_\_
3. Number of Warrants in name of Holder in form of Warrant Certificates: \_\_\_\_\_
4. Number of Warrants for which Global Warrant shall be issued: \_\_\_\_\_
5. Number of Warrants in name of Holder in form of Warrant Certificates after issuance of Global Warrant, if any: \_\_\_\_\_
6. Global Warrant shall be delivered to the following address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The undersigned hereby acknowledges and agrees that, in connection with this Global Warrant Exchange and the issuance of the Global Warrant, the Holder is deemed to have surrendered the number of Warrants in form of Warrant Certificates in the name of the Holder equal to the number of Warrants evidenced by the Global Warrant.

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

Signature of Authorized Signatory of Investing Entity: \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

Date: \_\_\_\_\_

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**Exhibit 1: Form of Warrant**

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**Exhibit 2: Warrant Agent Compensation**

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RIGHTS CERTIFICATE #:

NUMBER OF RIGHTS

THE TERMS AND CONDITIONS OF THE RIGHTS OFFERING ARE SET FORTH IN THE COMPANY'S PROSPECTUS DATED SEPTEMBER 23, 2022 (THE "PROSPECTUS") AND ARE INCORPORATED HEREIN BY REFERENCE. COPIES OF THE PROSPECTUS ARE AVAILABLE UPON REQUEST FROM D.F. KING & CO., INC., THE INFORMATION AGENT.

**SINTX TECHNOLOGIES, INC.**  
**Incorporated under the laws of the State of Delaware**

**NON-TRANSFERABLE SUBSCRIPTION RIGHTS CERTIFICATE**

Evidencing Non - Transferable Subscription Rights, each to purchase Units of SINTX Technologies, Inc., each unit consisting of one share of Series D Convertible Preferred Stock and warrants to purchase a number of shares of common stock of SINTX Technologies, Inc. equal to \$1,000 divided by a price equal to 90% of the lowest closing price for a share of the Company's common stock as quoted on the Nasdaq Capital Market during the five (5) trading days prior to and including October 10, 2022.

Subscription Price: \$1,000.00 per Unit

**THE SUBSCRIPTION RIGHTS WILL EXPIRE IF NOT EXERCISED ON OR BEFORE 5:00 P.M., NEW YORK CITY TIME, ON OCTOBER 10, 2022, UNLESS EXTENDED BY THE COMPANY**

**REGISTERED OWNER:**

THIS CERTIFIES THAT the registered owner whose name is inscribed hereon is the owner of the number of non-transferable subscription rights ("**Rights**") set forth above. Each whole Right entitles the holder thereof to subscribe for and purchase one share of Series D Convertible Preferred Stock and warrants to purchase a number of shares of common stock of SINTX Technologies, Inc. equal to \$1,000 divided by a price equal to 90% of the lowest closing price for a share of the Company's common stock as quoted on the Nasdaq Capital Market during the five (5) trading days prior to and including October 10, 2022, at a subscription price of \$1,000 per unit (the "**Basic Subscription Right**"), pursuant to a rights offering (the "**Rights Offering**"), on the terms and subject to the conditions set forth in the Prospectus and the "Instructions as to Use of SINTX Technologies Subscription Rights Certificates" accompanying this Subscription Rights Certificate. If any Units available for purchase in the Rights Offering are not purchased by other holders of Rights pursuant to the exercise of their Basic Subscription Right (the "**Excess Units**"), any Rights holder that exercises its Basic Subscription Right in full may subscribe for a number of Excess Units pursuant to the terms and conditions of the Rights Offering, subject to proration, as described in the Prospectus (the "**Over-Subscription Privilege**"). The Rights represented by this Subscription Rights Certificate may be exercised by completing Form 1 and any other appropriate forms on the reverse side hereof and by retuning the full payment of the subscription price for Unit in accordance with the "Instructions as to Use of SINTX Technologies, Inc. Subscription Rights Certificates" that accompany this Subscription Rights Certificate

This Subscription Rights Certificate is not valid unless countersigned by the subscription agent and registered by the registrar. Witness the seal of Sample Corporation and the signatures of its duly authorized officers.

Dated: September 26, 2022

\_\_\_\_\_  
 President, Chief Executive Officer

\_\_\_\_\_  
 Corporate Secretary

**COUNTERSIGNED AND REGISTERED:**

By: \_\_\_\_\_  
 American Stock Transfer & Trust Company, LLC,  
 Subscription Agent and Registrar

**DELIVERY OPTIONS FOR SUBSCRIPTION RIGHTS CERTIFICATE**

Delivery other than in the manner or to the address listed below will not constitute valid delivery.

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

**PLEASE PRINT ALL INFORMATION CLEARLY AND LEGIBLY.**

**FORM 1-EXERCISE OF SUBSCRIPTION RIGHTS**

To subscribe for Units pursuant to your Basic Subscription Right, please complete lines (a) and (c) and sign under Form 4 below. To subscribe for Units pursuant to your Over-Subscription Privilege, please also complete line (b) and sign under Form 4 below. To the extent you subscribe for more Units than you are entitled under either the Basic Subscription Right or the Over-Subscription Privilege, you will be deemed to have elected to purchase the maximum number of Units for which you are entitled to subscribe under the Basic Subscription Right or Over-Subscription Privilege, as applicable.

**(a) EXERCISE OF BASIC SUBSCRIPTION RIGHT:**

I apply for \_\_\_\_\_ Units x \$1,000.00 = \$ \_\_\_\_\_  
 (no. of Units) (subscription price) (amount enclosed)

**(b) EXERCISE OF OVER-SUBSCRIPTION PRIVILEGE**

If you have exercised your Basic Subscription Right in full and wish to subscribe for additional Units that, when aggregated with your existing ownership, together with any related persons or entities, would not be in excess of 19.99% of our issued and outstanding shares of common stock following the closing of the transactions contemplated by the Rights Offering:

I apply for \_\_\_\_\_ Units x \$1,000.00 = \$ \_\_\_\_\_  
(no. of new Units) (subscription price) (amount enclosed)

(c) Total Amount of Payment Enclosed = \$ \_\_\_\_\_

**METHOD OF PAYMENT (CHECK ONE)**

- Personal Check or bank draft payable to "American Stock Transfer & Trust Company, LLC as Subscription Agent."
- Certified Check drawn on a U.S. Bank, payable to "American Stock Transfer & Trust Company, LLC, as Subscription Agent."
- U.S. Postal Money Order, payable to "American Stock Transfer & Trust Company, LLC, as Subscription Agent."
- Wire transfer of immediately available funds directly to the account maintained by American Stock Transfer & Trust Company, LLC, as Subscription Agent, for purposes of accepting subscriptions in this Rights Offering at JPMorgan Chase Bank, 55 Water Street, New York, New York 10005, ABA #021000021, Account # 530-354616 American Stock Transfer FBO SINTX Technologies, Inc., with reference to the rights holder's name.

**FORM 2-SUBSCRIPTION RIGHTS ARE NON-TRANSFERABLE**

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**FORM 3-DELIVERY TO DIFFERENT ADDRESS**

If you wish for the Series D Preferred Stock underlying your subscription rights or a certificate representing unexercised subscription rights to be delivered to an address different from that shown on the face of this Subscription Rights Certificate, please enter the alternate address below, sign under Form 4 and have your signature guaranteed under Form 5.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**FORM 4-SIGNATURE**

TO SUBSCRIBE: I acknowledge that I have received the Prospectus for this Rights Offering and I hereby irrevocably subscribe for the number of Units indicated above on the terms and conditions specified in the Prospectus. I agree to cooperate with the Company and provide to the Company any and all information requested by the Company in connection with the exercise of the rights granted in the previous sentence.

Signature(s) of Subscriber(s): \_\_\_\_\_ Signature(s) of Subscriber(s): \_\_\_\_\_  
Address: \_\_\_\_\_ Address: \_\_\_\_\_

**IMPORTANT:** The signature(s) must correspond with the name(s) as printed on the reverse of this Subscription Rights Certificate in every particular, without alteration or enlargement, or any other change whatsoever.

**FORM 5-SIGNATURE GUARANTEE**

This form must be completed if you have completed any portion of Forms 2 or 3.

Signature Guaranteed: \_\_\_\_\_  
(Name of Bank or Firm)

By: \_\_\_\_\_  
(Signature of Officer)

**IMPORTANT:** The signature(s) should be guaranteed by an eligible guarantor institution (bank, stock broker, savings & loan association or credit union) with membership in an approved signature guarantee medallion program pursuant to Securities and Exchange Commission Rule 17Ad-15

**FOR INSTRUCTIONS ON THE USE OF SAMPLE CORPORATION SUBSCRIPTION RIGHTS CERTIFICATES, CONSULT D.F. KING & CO., INC., THE INFORMATION AGENT, AT (866) 620-2536.**

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NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

THIS WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF 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 SUCH SECURITIES BY ANY PERSON FOR A PERIOD OF ONE HUNDRED AND EIGHTY (180) DAYS IMMEDIATELY FOLLOWING THE DATE OF EFFECTIVENESS OF THE PUBLIC OFFERING OF THE COMPANY'S SECURITIES PURSUANT TO REGISTRATION STATEMENT NO.: 333-266070 AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION, EXCEPT IN ACCORDANCE WITH FINRA RULE 5110(g)(2).

## COMMON STOCK PURCHASE WARRANT

### SINTX TECHNOLOGIES, INC.

Warrant Shares: \_\_\_\_<sup>1</sup>

Original Issue Date: \_\_\_, 2022

Initial Exercise Date: \_\_\_, 2022

THIS COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, \_\_\_\_\_ or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the six month anniversary of the Original Issue Date (the "Initial Exercise Date") and on or prior to 5:00 p.m. (New York City time) on \_\_\_, 202~~7~~<sup>2</sup> (the "Termination Date") but not thereafter, to subscribe for and purchase from SINTX Technologies, Inc., a Delaware corporation (the "Company"), up to \_\_\_\_ shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

<sup>1</sup> 4% of the shares of common stock issuable upon conversion of the Series D Preferred Stock sold in the offering.

<sup>2</sup> The date that is 5 years from the Effective Date of the Registration Statement.

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Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Dealer Manager Agreement (the "Dealer Manager Agreement"), dated, 2022, among the Company and the purchasers' signatory thereto.

#### Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company of a duly executed facsimile copy or PDF copy submitted by email (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the "Notice of Exercise"). Within the earlier of (i) two (2) Trading Days (as hereinafter defined) and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer or cashier's check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Trading Day of receipt of such notice. For purposes of this Warrant, "Trading Day" means a day on which the Trading Market is open for trading and "Trading Market" means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange, OTCQX or OTCQB (or any successors to any of the foregoing). **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of Common Stock under this Warrant shall be \$\_\_\_\_<sup>3</sup>, subject to adjustment hereunder (the "Exercise Price").

<sup>3</sup> 110% of conversion price of Series D Preferred Stock

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c) Cashless Exercise. If at any time after the Initial Exercise Date there is no effective registration statement registering, or the prospectus contained therein is not available for the resale of, the Warrant Shares to the Holder, then this Warrant may also be exercised, in whole or in part, at such time by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

(A) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b)(64) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise or (z) the Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. as of the time of the Holder's execution of the applicable Notice of Exercise if such Notice of Exercise is executed during "regular trading hours" on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of "regular trading hours" on a Trading Day) pursuant to Section 2(a) hereof or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and

such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of “regular trading hours” on such Trading Day;

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the characteristics of the Warrants being exercised. The Company agrees not to take any position contrary to this Section 2(c).

Notwithstanding anything herein to the contrary, on the Termination Date, this Warrant shall be automatically exercised via cashless exercise pursuant to this Section 2(c).

“Bid Price” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the bid price of the Common Stock for the time in question (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

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“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder’s or its designee’s balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“DWAC”) if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by Holder or (B) this Warrant is being exercised via cashless exercise, and otherwise by physical delivery of a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) two (2) Trading Days after the delivery to the Company by the Holder of the Notice of Exercise, (ii) one (1) Trading Day after delivery of the aggregate Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise (such date, the “Warrant Share Delivery Date”). Upon delivery of the Notice of Exercise, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, “Standard Settlement Period” means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise.

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ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d) (i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder’s brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a “Buy-In”), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder’s total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a

Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

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vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within two Trading Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

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### Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification. For the purposes of clarification, the Exercise Price of this Warrant will not be adjusted in the event that the Company or any subsidiary thereof, as applicable, sells or grants any option to purchase, or sell or any grant any right to repurchase, or otherwise dispose of or issue (or announce any offer, sale, grant or any option to purchase or other disposition) any Common Stock or Common Stock Equivalents, at an effective price per share less than the Exercise Price then in effect.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such

Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise, other than cash (including, without limitation, any distribution of stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation). To the extent that this Warrant has not been partially or completely exercised at the time of such Distribution, such portion of the Distribution shall be held in abeyance for the benefit of the Holder until the Holder has exercised this Warrant.

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d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person (other than a transaction solely to change the domicile of the Company), (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant and the Dealer Manager Agreement in accordance with the provisions of this Section 3(d) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant and the Dealer Manager Agreement referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the Dealer Manager Agreement with the same effect as if such Successor Entity had been named as the Company herein.

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e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

f) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by facsimile or email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party (other than a transaction solely to change the domicile of the Company), any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is

expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

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#### Section 4. Transfer of Warrant.

a) Transferability. Pursuant to FINRA Rule 5110(g)(1) and the Dealer Manager Agreement, neither this Warrant nor any Warrant Shares issued upon exercise of this Warrant shall 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 by any person for a period of six (6) months immediately following the date of effectiveness or commencement of sales of the offering pursuant to which this Warrant is being issued, except the transfer of any security:

- (i) by operation of law or by reason of reorganization of the Company;
- (ii) to any FINRA member firm participating in the offering and the officers and partners thereof, if all securities so transferred remain subject to the lock-up restriction in this Section 4(a) for the remainder of the time period;
- (iii) that is beneficially owned on a pro-rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund, and participating members in the aggregate do not own more than 10% of the equity in the fund; or
- (iv) the exercise or conversion of any security, if all securities received remain subject to the lock-up restriction in this Section 4(a) for the remainder of the time period.

Subject to the foregoing restrictions, compliance with any applicable securities laws, and the conditions set forth in Section 4(d) hereof, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date on which the Holder delivers an assignment form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Original Issue Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

d) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

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#### Section 5. Piggy-Back Registration Rights.

(a) If, at any time on or after the Closing through the Termination Date, the Company proposes to file any Registration Statement under the Securities Act (a "Registration Statement") with respect to any offering of equity securities, or securities or other obligations exercisable or exchangeable for, or convertible into, equity securities, by the Company for its own account or for shareholders of the Company for their account (or by the Company and by shareholders of the Company), other than a Registration Statement in connection with a merger or acquisition or a Registration Statement on Form S-8 relating solely to the sale of securities of participants in a Company stock plan, then the Company shall (x) give written notice of such proposed filing to the Holder as soon as practicable but in no event less than ten (10) days before the anticipated filing date of the Registration Statement, which notice shall describe the amount and type of securities to be included in such Registration Statement, the intended method(s) of distribution, and the name of the proposed managing underwriter or underwriters, if any, of the offering, and offer to the Holder in such notice the opportunity to register the sale of up to such number of shares of Common Stock equal to the number of shares of Common Stock issuable upon exercise of this Warrant as such Holder may request in writing within five (5) days following receipt of such notice (a "Piggy-Back Registration" and such shares of Common Stock, the "Registrable Securities"). The Company shall cause the Registrable Securities to be included in such registration and shall cause the managing underwriter or underwriters of a proposed underwritten offering to permit the Registrable Securities requested to be included in a Piggy-Back Registration on the same terms and conditions as any similar securities of the Company and to permit the sale or other disposition of such Registrable Securities in accordance with the intended method(s) of distribution thereof. A Holder proposing to distribute its securities through a Piggy-Back Registration that involves an underwriter or underwriters shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such Piggy-Back Registration. Notwithstanding anything to the contrary in this Section 5(a), the Company shall not be required to register such Registrable Securities pursuant to this Section 5(a) that are eligible for resale pursuant to Rule 144 promulgated under the Securities Act, that may be resold by constructively applying Rule 144 or that are the subject of a then effective Registration Statement.

(b) Any Holder may elect to withdraw its request for inclusion of Registrable Securities in any Piggy-Back Registration by giving written notice to the Company of such request to withdraw prior to the effectiveness of the Registration Statement. The Company (whether on its own determination or as the result of a withdrawal by persons making a demand pursuant to written contractual obligations) may withdraw a Registration Statement at any time prior to the effectiveness of such Registration Statement. Notwithstanding any such withdrawal, the Company shall pay all expenses incurred by the Holder in connection with such Piggy-Back Registration (including but not limited to any legal fees).

(c) The Company shall notify the Holder at any time when a prospectus relating to its Registrable Securities is required to be delivered under the Securities Act,

upon discovery that, or upon the happening of any event as a result of which, the prospectus included in such Registration Statement, as then in effect, includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing. At the request of Holder, the Company shall also prepare, file and furnish to Holder a reasonable number of copies of a supplement to or an amendment of such prospectus as may be necessary so that, as thereafter delivered to the purchasers of the Registrable Securities, such prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing. The Holder shall not offer or sell any Registrable Securities covered by the Registration Statement after receipt of such notification until the receipt of such supplement or amendment.

(d) The Company may request Holder to furnish the Company such information with respect to such Holder and such Holder's proposed distribution of the Registrable Securities pursuant to the Registration Statement as the Company may from time to time reasonably request in writing or as shall be required by law or by the Commission in connection therewith, and such Holders shall furnish the Company with such information.

(e) All fees and expenses incident to the performance of or compliance with this Section 5 by the Company shall be borne by the Company whether or not any Registrable Securities are sold pursuant to a Registration Statement. The fees and expenses referred to in the foregoing sentence shall include, without limitation, (i) all registration and filing fees (including, without limitation, fees and expenses of the Company's counsel and independent registered public accountants) (A) with respect to filings made with the Commission, (B) with respect to filings required to be made with any trading market on which the Common Stock are then listed for trading, (C) in compliance with applicable state securities or Blue Sky laws reasonably agreed to by the Company in writing (including, without limitation, fees and disbursements of counsel for the Company in connection with Blue Sky qualifications or exemptions of the Registrable Securities) and (D) with respect to any filing that may be required to be made by any broker through which Holder intends to make sales of Registrable Securities with FINRA, (ii) printing expenses, (iii) messenger, telephone and delivery expenses, (iv) fees and disbursements of counsel for the Company, (v) Securities Act liability insurance, if the Company so desires such insurance, and (vi) fees and expenses of all other persons or entities retained by the Company in connection with the actions contemplated by this Section 5.

(f) The Company and its successors and assigns shall indemnify and hold harmless Holder, the officers, directors, members, partners, agents and employees (and any other individuals or entities with a functionally equivalent role of a person holding such titles, notwithstanding a lack of such title or any other title) of each of them, each individual or entity who controls Holder (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) and the officers, directors, members, stockholders, partners, agents and employees (and any other individuals or entities with a functionally equivalent role of a person holding such titles, notwithstanding a lack of such title or any other title) of each such controlling individual or entity (each, an "Indemnified Party"), to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, reasonable attorneys' fees) and expenses (collectively, "Losses"), as incurred, arising out of or relating to (1) any untrue or alleged untrue statement of a material fact contained in a Registration Statement, any related prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any such prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading or (2) any violation or alleged violation by the Company of the Securities Act, the Exchange Act or any state securities law, or any rule or regulation thereunder, in connection with the performance of its obligations under this Section 5, except to the extent, but only to the extent, that such untrue statements or omissions are based upon information regarding Holder furnished to the Company by such party for use therein. The Company shall notify Holder promptly of the institution, threat or assertion of any proceeding arising from or in connection with the transactions contemplated by this Section 5 of which the Company is aware. If the indemnification hereunder is unavailable to an Indemnified Party or insufficient to hold an Indemnified Party harmless for any Losses, then the Company shall contribute to the amount paid or payable by such Indemnified Party, in such proportion as is appropriate to reflect the relative fault of the Company and Indemnified Party in connection with the actions, statements or omissions that resulted in such Losses as well as any other relevant equitable considerations. The relative fault of the Company and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission of a material fact, has been taken or made by, or relates to information supplied by, the Company or the Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action, statement or omission. The amount paid or payable by a party as a result of any Losses shall be deemed to include any reasonable attorneys' or other fees or expenses incurred by such party in connection with any proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for herein was available to such party in accordance with its terms. It is agreed that it would not be just and equitable if contribution pursuant to this Section 5(f) were determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to in the immediately preceding sentence. Notwithstanding the provisions of this Section 5(f), Holder shall not be required to contribute, in the aggregate, any amount in excess of the amount by which the net proceeds actually received by such party from the sale of all of their Registrable Securities pursuant to such Registration Statement or related prospectus exceeds the amount of any damages that such party has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission.

#### Section 6. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a business day, then, such action may be taken or such right may be exercised on the next succeeding business day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its

certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

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Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be determined in accordance with the provisions of the Dealer Manager Agreement.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, and the Holder does not utilize cashless exercise, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant or the Dealer Manager Agreement, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be delivered in accordance with the notice provisions of the Dealer Manager Agreement.

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

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*(Signature Page Follows)*

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IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

**SINTX TECHNOLOGIES, INC.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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**NOTICE OF EXERCISE**

TO: SINTX TECHNOLOGIES, INC.

(1) The undersigned hereby elects to purchase \_\_\_\_\_ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

in lawful money of the United States; or

[ ] if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

\_\_\_\_\_

The Warrant Shares shall be delivered to the following DWAC Account Number:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

Signature of Authorized Signatory of Investing Entity: \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

Date: \_\_\_\_\_

**EXHIBIT B**

ASSIGNMENT FORM

*(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)*

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: \_\_\_\_\_  
(Please Print)

Address: \_\_\_\_\_  
(Please Print)

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Dated: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature: \_\_\_\_\_

Holder's Address: \_\_\_\_\_

September 12, 2022

SINTX Technologies, Inc.  
1885 West 2100 South  
Salt Lake City, UT 84119

Re: Registration Statement on Form S-1 (File No. 333-266070)

Ladies and Gentlemen:

We have acted as counsel to SINTX Technologies, Inc., a Delaware corporation (the “Company”), in connection with a Registration Statement on Form S-1 (the “Registration Statement”) filed by the Company with the Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended (the “Securities Act”), relating to the registration by the Company of (i) 10,000 non-transferable subscription rights (the “Rights”) to be distributed by the Company without consideration in connection with a rights offering (the “Rights Offering”) to holders of record of the Company’s Common Stock, par value \$0.01 per share (the “Common Stock”), the Company’s Series B Preferred Stock, the Company’s Series C Preferred Stock, and certain warrants to purchase shares of Common Stock, and (ii) 10,000 units (the “Units”) at a price of \$1,000 per Unit, with each Unit consisting of (A) one share of the Company’s Series D Convertible Preferred Stock, par value \$0.01 per share (the “Preferred Stock”), with each share of Preferred Stock convertible into shares of Common Stock at a price equal to 90% of the lowest closing price for a share of Common Stock as quoted on the Nasdaq Capital Market, during the five (5) trading days prior to and including October 10, 2022 (the “Conversion Shares”) and (B) a number of warrants equal to \$1,000 divided by a price equal to 90% of the lowest closing price for a share of Common Stock as quoted on the Nasdaq Capital Market, during the five (5) trading days prior to and including October 10, 2022, (the “Warrants”), with each Warrant to purchase one share of Common Stock (the shares of Common Stock issuable upon exercise of the Warrants, the “Warrant Shares”).

We have examined such documents and have reviewed such questions of law as we have considered necessary or appropriate for the purposes of our opinions set forth below. In rendering our opinions set forth below, we have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures and the conformity to authentic originals of all documents submitted to us as copies. We have also assumed the legal capacity for all purposes relevant hereto of all natural persons. As to questions of fact material to our opinions, we have relied upon certificates or comparable documents of officers and other representatives of the Company and of public officials.

Based on the foregoing, we are of the opinion that:

1. The Rights, when issued and delivered as described in the Registration Statement, will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.
2. The Units, when issued, delivered and paid for as described in the Registration Statement, will be validly issued, fully paid and non-assessable.
3. The Warrants, when duly executed by the Company and duly delivered to the purchasers thereof against payment therefor as described in the Registration Statement, will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.
4. The Warrant Shares have been duly authorized and if, as, and when the Warrant Shares are issued and delivered by the Company upon exercise of the Warrants in accordance with the terms thereof, including, without limitation, the payment in full of applicable consideration, the Warrant Shares will be validly issued, fully paid and non-assessable.
5. The shares of Preferred Stock, when issued, delivered and paid for as described in the Registration Statement, will be validly issued, fully paid and non-assessable.
6. The Conversion Shares have been duly authorized and, upon issuance and delivery as described in accordance with the Certificate of Designation of the Series D Convertible Preferred Stock to be filed in connection with the offering contemplated by the Registration Statement and the Company’s Restated Certificate of Incorporation, will be validly issued, fully paid and non-assessable.

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- (a) Our opinions set forth in paragraphs 1 and 3 above are subject to the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or similar law relating to or affecting creditors’ rights generally (including, without limitation, fraudulent conveyance laws).
  - (b) Our opinions set forth in paragraphs 1 and 3 above are subject to the effect of general principles of equity, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing and the possible unavailability of specific performance or injunctive relief, regardless of whether considered in a proceeding in equity or at law.
  - (c) Our opinions set forth in paragraphs 1 and 3 above are subject to limitations regarding the availability of indemnification and contribution where such indemnification or contribution may be limited by applicable law or the application of principles of public policy.
  - (d) We express no opinion as to the enforceability of (i) provisions that relate to choice of law, forum selection or submission to jurisdiction (including, without limitation, any express or implied waiver of any objection to venue in any court or of any objection that a court is an inconvenient forum) to the extent that the validity, binding effect or enforceability of any such provision is to be determined by any court other than a state court of the State of New York, (ii) waivers by the Company of any statutory or constitutional rights or remedies, (iii) terms which excuse any person or entity from liability for, or require the Company to indemnify such person or entity against, such person’s or entity’s negligence or willful misconduct or (iv) obligations to pay any prepayment premium, default interest rate, early termination fee or other form of liquidated damages, if the payment of such premium, interest rate, fee or damages may be construed as unreasonable in relation to actual damages or disproportionate to actual damages suffered as a result of such prepayment, default or termination.
  - (e) We draw your attention to the fact that, under certain circumstances, the enforceability of terms to the effect that provisions may not be waived or modified except in writing may be limited.

Our opinions expressed above are limited to the laws of the State of New York and the Delaware General Corporation Law.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement, and to the reference to our firm under the heading “Legal Matters” in the prospectus constituting part of the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Dorsey & Whitney LLP



September 12, 2022  
SINTX Technologies, Inc.  
1885 West 2100 South  
Salt Lake City, Utah 84119

Ladies and Gentlemen:

We have acted as counsel to SINTX Technologies, Inc., a Delaware corporation (the “Company”), in connection with the filing of the Registration Statement on Form S-1, File No. 333-266070, as amended (the “Registration Statement”), with the Securities and Exchange Commission (the “Commission”) pursuant to the Securities Act of 1933, as amended (the “Securities Act”). The Registration Statement relates to the distribution of non-transferable subscription rights (the “Rights”) to be distributed by the Company without consideration in connection with a rights offering (the “Rights Offering”) to holders of record of Common Stock, par value \$0.01 per share, of the Company (the “Common Stock”), holders of record of Series B Preferred Stock, par value \$0.01 per share, of the Company (the “Series B Preferred Stock”), holders of record of Series C Preferred Stock, par value \$0.01 per share, of the Company (the “Series C Preferred Stock”), and holders of record of warrants issued by the Company on May 14, 2018 (the “Participating Warrants”), to purchase units (the “Units”) issuable upon exercise of the Rights, each Unit consisting of one share of Series D Convertible Preferred Stock, par value \$0.01 per share (the “Preferred Stock”), and warrants to purchase a number of shares of Common Stock equal to \$1,000 divided by the exercise price equal to 90% of the lowest closing price for a share of Common Stock as quoted on the NASDAQ Capital Market during the five (5) trading days prior to and including October 10, 2022 (the “Warrants”), and such exercise price, the “Exercise Price”). Each Warrant will be exercisable for one share of Common Stock at the Exercise Price.

For purposes of this opinion, we have reviewed originals, or copies certified or otherwise identified to our satisfaction, of the Registration Statement and the exhibit thereto and such other documents and matters of law and fact as we have considered necessary or appropriate. In addition, we have not made an independent investigation or audit of the facts set forth in the above referenced documents or otherwise provided to us. We have assumed (i) the authenticity of all documents submitted to us as originals and the conformity to original documents of all documents submitted to us as copies, (ii) that the Rights Offering will be consummated as described in the Registration Statement; (iii) that the statements concerning the terms of the Rights Offering set forth in the Registration Statement are true, complete and correct and will remain true, complete and correct at all relevant times; and (iv) that any such statements made in the Registration Statement qualified by knowledge, intention, belief or any other similar qualification are true, complete and correct, and will remain true, complete and correct at all relevant times, in each case as if made without such qualification. We also have relied on certain written representations of the Company contained in an Officer’s Certificate dated on or about the date hereof. If any of the above described assumptions are untrue for any reason or if the Rights Offering is consummated in a manner that is different from the manner described in the Registration Statement, our opinion as expressed below may be adversely affected.

Based upon and subject to the foregoing, and our consideration of such other matters of fact and law as we have considered necessary or appropriate, we hereby confirm to you that the statements set forth under the caption “MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES” in the Registration Statement, to the extent such statements summarize U.S. federal income tax law, and subject to the limitations, qualifications, exceptions, and assumptions set forth herein and therein, constitute our opinion as to the material United States federal income tax consequences of the Rights Offering to holders of Common Stock, holders of Series B Preferred Stock, holders of Series C Preferred Stock, and holders of Participating Warrants. We express no opinion on any issue relating to the tax consequences of the transactions contemplated by the Registration Statement other than the opinion set forth above. Our opinion set forth above is based on the Internal Revenue Code of 1986, as amended, Treasury Regulations promulgated thereunder, administrative pronouncements and judicial precedents, all as of the date hereof. The foregoing authorities may be repealed, revoked or modified, and any such change may have retroactive effect. Any change in applicable laws or facts and circumstances surrounding the Rights Offering, or any inaccuracy in the statements, facts, assumptions and representations on which we have relied may affect the validity of the opinion set forth herein. We assume no responsibility to inform the Company of any such change or inaccuracy that may occur or come to our attention.

Our opinion is not binding on the Internal Revenue Service or a court. There can be no assurance that the Internal Revenue Service will not take a contrary position or that a court would agree with our opinion if litigated.

We are furnishing this opinion in connection with the filing of the Registration Statement and this opinion is not to be relied upon for any other purpose without our prior written consent. We hereby consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

Dorsey & Whitney LLP

By: /s/ Kendall R. Fisher  
Kendall R. Fisher

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**FORM OF  
INSTRUCTIONS AS TO USE OF SUBSCRIPTION RIGHTS CERTIFICATES SINTX TECHNOLOGIES, INC.**

Please consult D.F. King & Co., Inc., American Stock Transfer & Trust Company, LLC, your bank or broker as to any questions.

The following instructions relate to a rights offering (the “Rights Offering”) by SINTX Technologies, Inc., a Delaware corporation (“SINTX”), to the holders of record of its common stock, \$0.01 par value (the “Common Stock”), Series B Preferred Stock, \$0.01 par value (the “Series B Preferred”), Series C Preferred Stock, \$0.01 par value (the “Series C Preferred”), and certain outstanding warrants (which we refer to as the “Participating Warrants”), as described in SINTX’s prospectus dated September 23, 2022 (the “Prospectus”). Each holder of record of Common Stock, Series B Preferred, Series C Preferred, or Participating Warrants at the close of business on September 23, 2022, the record date, will receive, at no charge, a non-transferable subscription right for every share of Common Stock held or deemed to be held by them at the record date.

Subscription rights exercisable into an aggregate of 10,000 units are being distributed in connection with the Rights Offering. Each unit is comprised of one share of Series D Convertible Preferred Stock and warrants to purchase a number of shares of common stock equal to \$1,000 divided by a price equal to 90% of the lowest closing price for a share of the Company’s common stock as quoted on the Nasdaq Capital Market during the five (5) trading days prior to and including October 10, 2022. Each warrant will be exercisable for one share of Common Stock. Each whole subscription right is exercisable, upon payment of the subscription price of \$1,000 in cash to purchase one unit, which we refer to as the basic subscription right. In addition, each subscription right also carries the right to subscribe at the subscription price for additional units that are not purchased by other holders pursuant to their basic subscription right (to the extent available, and subject to proration and ownership limitations), which we refer to as the over-subscription privilege. A holder is entitled to exercise an over-subscription privilege only if the holder fully exercises the basic subscription right. Unless we otherwise agree in writing, a person or entity, together with related persons or entities, may not exercise subscription rights (including over-subscription privileges) to purchase units that, when aggregated with their existing ownership, would result in such person or entity, together with any related persons or entities, owning in excess of 19.99% of our issued and outstanding shares of common stock following the closing of the transactions contemplated by this Rights Offering. See “The Rights Offering” in the Prospectus.

No fractional subscription rights or cash in lieu thereof will be issued or paid. Fractional subscription rights will be rounded down to the nearest whole number.

The subscription rights will expire at 5:00 p.m., Eastern Time, on October 10, 2022, the expiration date, unless extended (the “Expiration Date”). If you do not exercise your subscription rights before that time, your subscription rights will expire and will no longer be exercisable. SINTX will not be required to issue shares to you if the subscription agent receives your subscription rights certificate or your subscription payment after that time. SINTX has the option to extend the Rights Offering in its sole discretion for up to an additional 45 days, although it does not presently intend to do so. SINTX may extend the Rights Offering by giving oral or written notice to the subscription agent before the Expiration Date. If SINTX elects to extend the Rights Offering, SINTX will issue a press release announcing the extension no later than 9:00 a.m., Eastern Time, on the next business day after the most recently announced Expiration Date of the Rights Offering.

The number of subscription rights to which you are entitled is printed on the face of your subscription rights certificate. You should indicate your wishes with regard to the exercise of your subscription rights by completing the appropriate section on the back of your subscription rights certificate and returning the subscription rights certificate with your payment to the subscription agent in the envelope provided.

Warrants that are issued as a component of the unit pursuant to the exercise of the basic subscription rights and over-subscription privilege entitle the holder to purchase one share of Common Stock at an exercise price (subject to adjustment) equal to 90% of the lowest closing price for a share of the Company’s common stock as quoted on the Nasdaq Capital Market during the five (5) trading days prior to and including October 10, 2022. The warrants are exercisable for cash, or solely during any period when a registration statement for the exercise of the warrants is not in effect, on a cashless basis. See “The Rights Offering” in the prospectus.

**YOUR SUBSCRIPTION RIGHTS CERTIFICATE MUST BE RECEIVED BY THE SUBSCRIPTION AGENT ON OR BEFORE THE EXPIRATION DATE. PAYMENT OF THE SUBSCRIPTION PRICE OF ALL SUBSCRIPTION RIGHTS EXERCISED, INCLUDING SUBSCRIPTION RIGHTS PURSUANT TO THE OVER-SUBSCRIPTION PRIVILEGE, INCLUDING FINAL CLEARANCE OF ANY CHECKS, MUST BE RECEIVED BY THE SUBSCRIPTION AGENT ON OR BEFORE THE EXPIRATION DATE.**

**ONCE YOU EXERCISE YOUR SUBSCRIPTION RIGHTS, YOU CANNOT REVOKE THE EXERCISE OF SUCH SUBSCRIPTION RIGHTS. SUBSCRIPTION RIGHTS NOT VALIDLY EXERCISED PRIOR TO THE EXPIRATION DATE OF THE RIGHTS OFFERING WILL EXPIRE. IN CASE YOU HOLD SUBSCRIPTION RIGHTS THROUGH A BROKER OR OTHER NOMINEE, YOU SHOULD VERIFY WITH YOUR BROKER OR NOMINEE BY WHEN YOU MUST DELIVER YOUR INSTRUCTION.**

**1. Subscription Rights.** To exercise subscription rights, complete your subscription rights certificate and send your properly completed and executed subscription rights certificate, together with payment in full of the subscription price for each unit subscribed for pursuant to the basic subscription right and the over-subscription privilege, to the subscription agent. **PLEASE DO NOT SEND RIGHTS CERTIFICATES OR PAYMENTS TO SINTX.** The method of delivery of the subscription rights certificate and the payment of the subscription price to the subscription agent is at your election and risk. Subscription rights certificates and payments must be received by the subscription agent prior to the Expiration Date. If you send your subscription rights certificate and payment by mail, then they should be sent by registered mail, properly insured, to arrive before the Expiration Date. If more units are subscribed for pursuant to the basic subscription right or the over-subscription privilege than are available for sale, additional units will be allocated pro rata among holders and subject to ownership limitations, as described in the prospectus. The subscription rights are non-transferable, and may not be sold, transferred, assigned or given away to anyone.

**2. Acceptance of Payments.** Payments will be deemed to have been received by the subscription agent only upon the (i) clearance of an uncertified personal check drawn payable to “American Stock Transfer & Trust Company, LLC, as subscription agent for SINTX Technologies, Inc.,” (ii) receipt of a certified check to “American Stock Transfer & Trust Company, LLC, as subscription agent for SINTX Technologies, Inc.,” (iii) receipt of a U.S. Postal money order payable to “American Stock Transfer & Trust Company, LLC, as subscription agent for SINTX Technologies, Inc.”; or (iv) receipt of a wire transfer of immediately available funds directly to the account maintained by American Stock Transfer & Trust Company, LLC, as Subscription Agent, for purposes of accepting subscriptions in this Rights Offering at JPMorgan Chase Bank, 55 Water Street, New York, New York 10005, ABA #021000021, Account # 530-354616 American Stock Transfer FBO SINTX Technologies, Inc., with reference to the rights holder’s name. Funds paid by uncertified personal check may take several business days to clear. Accordingly, if you wish to pay the subscription price by uncertified personal check, then you should make payment sufficiently in advance of the Expiration Date to ensure its receipt and clearance by that time. To avoid disappointment caused by a failure of your subscription due to your payment not clearing prior to the Expiration Date, SINTX urges you to consider payment by means of certified or cashier’s check, money order or wire transfer. It is highly recommended that if you intend to pay the subscription price by personal check, then your subscription payment should be received by the subscription agent well before the Expiration Date. If your personal check does not clear before the Expiration Date, then you will not receive any units, and SINTX’s only obligation will be to return your subscription payment, without interest or deduction.

**3. Contacting the Subscription Agent.** The address and telephone number of the subscription agent are shown below. Delivery to an address other than shown below does not constitute valid delivery.

*If delivering by mail, hand or overnight courier:*  
American Stock Transfer & Trust Company, LLC  
Operations Center

**4. Partial Exercises; Effect of Over- and Under-Payments** If you exercise less than all of the subscription rights evidenced by your subscription rights certificate, the subscription agent will issue to you a new subscription rights certificate evidencing the unexercised subscription rights. However, if you choose to have a new subscription rights certificate sent to you, you may not receive any such new subscription rights certificate in sufficient time to permit exercise of the subscription rights evidenced thereby. If you do not indicate the number of units to be subscribed for on your subscription rights certificate, or if you indicate a number of units that does not correspond with the aggregate subscription price payment you delivered, you will be deemed to have subscribed for the maximum number of units that may be subscribed for, under both the basic subscription right and the over-subscription privilege, for the aggregate subscription price you delivered. If the subscription agent does not apply your full subscription price payment to your purchase of units, then the subscription agent will return the excess amount to you by mail, without interest or deduction, within 10 business days after the Expiration Date. If you subscribe for fewer than all of the units represented by your subscription rights certificate, then the unexercised subscription rights will become null and void on the Expiration Date.

**5. Deliveries to holders.** The following deliveries and payments to you will be made to the address shown on the face of your subscription rights certificate:

**(a) Basic Subscription Right.** The shares of Series D Convertible Preferred Stock and warrants that are purchased pursuant to the valid exercise of basic subscription rights to purchase units will be issued in book-entry, or uncertificated, form meaning that you will receive a direct registration (DRS) account statement from our transfer agent reflecting ownership of these securities if you are a holder of record of Common Stock, Series B Preferred, Series C Preferred, or of Participating Warrants. Based on 24,727,495 shares of common stock outstanding as of August 31, 2022, 19,306 shares of common stock issuable upon conversion of 26 shares of Series B Preferred Stock, 33,753 shares of common stock issuable upon conversion of 50 shares of Series C Preferred Stock, and 1,11,729 shares of common stock issuable upon exercise of Participating Warrants, we would grant subscription rights to acquire 25,896,283 units but will only accept subscriptions for 10,000 units. Accordingly, sufficient units may not be available to honor your subscription in full. If exercises of basic subscription rights exceed the number of units available in the Rights Offering, we will allocate the available units pro-rata among the record holders exercising the basic subscription rights in proportion to the number of shares of Common Stock each of those record holders owned or are deemed to hold on the record date, relative to the number of shares owned or deemed to be held on the record date by all record holders exercising the basic subscription right. If this pro-rata allocation results in any record holders receiving a greater number of units than the record holder subscribed for pursuant to the exercise of the basic subscription rights, then such record holder will be allocated only that number of units for which the record holder subscribed, and the remaining units will be allocated among all other record holders exercising their basic subscription rights on the same pro rata basis described above. The proration process will be repeated until all units have been allocated. If for any reason the amount of units allocated to you is less than you have subscribed for, then the excess funds held by the subscription agent on your behalf will be returned to you, without interest, as soon as practicable after the Rights Offering has expired and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected, and we will have no further obligations to you. The subscription agent will arrange for the issuance of the Series D Convertible Preferred Stock and warrants as soon as practicable after the expiration of the Rights Offering, payment for the units subscribed for has cleared, and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected. If you hold your shares of Common Stock, Series B Preferred, Series C Preferred, or participating warrants in the name of a custodian bank, broker, dealer, or other nominee, The Depository Trust Company (“DTC”) will credit your account with your nominee with the securities you purchased in the Rights Offering.

**(b) Over-Subscription Privilege.** The shares of Series D Convertible Preferred Stock and warrants that are purchased pursuant to the valid exercise of over-subscription privileges to purchase additional units will also be issued in book- entry, or uncertificated, form meaning that you will receive a DRS account statement from our transfer agent reflecting ownership of these securities if you are a holder of record of Common Stock, Series B Preferred, Series C Preferred, or of Participating Warrants. If over-subscription privilege requests for units exceed the remaining units available, the remaining units will be allocated pro-rata among holders who over-subscribe based on the number of shares of Common Stock held as of the record date by all holders exercising the over-subscription privilege. If this pro rata allocation results in any holder receiving a greater number of units than the holder subscribed for, then such holder will be allocated only the number of units for which the holder oversubscribed, and the remaining units will be allocated among all holders exercising the over-subscription privilege on the same pro rata basis described above. The proration process will be repeated until all units have been allocated. The subscription agent will arrange for the issuance of the Series D Convertible Preferred Stock and warrants as soon as practicable after the expiration of the Rights Offering, payment for the units subscribed for has cleared, and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected. If you hold your shares of Common Stock, Series B Preferred, Series C Preferred, or participating warrants in the name of a custodian bank, broker, dealer, or other nominee, DTC will credit your account with your nominee with the securities you purchased in the Rights Offering.

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**(c) Excess Payments.** If you exercised your over-subscription privilege and are allocated less than all of the units for which you wished to oversubscribe, then your excess subscription price payment for units that were not allocated to you will be returned by the subscription agent to you by mail, without interest or deduction, within 10 business days after the Expiration Date.

## **6. Execution.**

**(a) Execution by Registered Holder.** The signature on the subscription rights certificate must correspond with the name of the registered holder exactly as it appears on the face of the subscription rights certificate without any alteration or change whatsoever. Persons who sign the subscription rights certificate in a representative or other fiduciary capacity must indicate their capacity when signing and, unless waived by the subscription agent in its sole and absolute discretion, must present to the subscription agent satisfactory evidence of their authority so to act.

**(b) Execution by Person Other Than Registered Holder.** If the subscription rights certificate is executed by a person other than the holder named on the face of the subscription rights certificate, proper evidence of authority of the person executing the subscription rights certificate must accompany the same unless the subscription agent, in its discretion, dispenses with proof of authority.

**7. Method of Delivery.** The method of delivery of subscription rights certificates and payment of the subscription price to the subscription agent will be at the election and risk of the subscription rights holder. If sent by mail, it is recommended that they be sent by registered mail, properly insured, with return receipt requested, and that a sufficient number of days be allowed to ensure delivery to and receipt by the subscription agent prior to the Expiration Date.

**8. No Revocation.** If you exercise any of your basic subscription rights or over-subscription privilege, you will not be permitted to revoke or change the exercise or request a refund of monies paid. You should not exercise your subscription rights unless you are sure that you wish to purchase units at the subscription price. Once you exercise your subscription rights, you cannot revoke the exercise of such subscription rights even if you later learn information that you consider to be unfavorable.

**9. Special Provisions Relating to the Exercise of subscription rights through the Depository Trust Company.** In the case of subscription rights that are held of record through DTC, exercises of the subscription rights may be effected by instructing DTC to transfer subscription rights from the DTC account of such holder to the DTC account of the subscription agent, together with certification as to the aggregate number of subscription rights exercised pursuant to the subscription right by each beneficial owner of subscription rights on whose behalf such nominee is acting, and payment of the subscription price for each unit subscribed for. Banks, brokers and other nominee holders of subscription rights who exercise the basic subscription right and the over-subscription privilege on behalf of beneficial owners of subscription rights will be required to certify to the subscription agent and SINTX as to the aggregate number of subscription rights that have been exercised, and the number of units that are being subscribed for pursuant

to the over-subscription privilege, by each beneficial owner of subscription rights (including such nominee itself) on whose behalf such nominee holder is acting. In the event such certification is not delivered in respect of a subscription rights certificate, the subscription agent shall for all purposes (including for purposes of any allocation in connection with the over-subscription privilege) be entitled to assume that such certificate is exercised on behalf of a single beneficial owner.

10. **Questions and Request for Additional Materials.** For questions regarding the Rights Offering, assistance regarding the method of exercising subscription rights or for additional copies of relevant documents, please contact the Information Agent as follows:

**D.F. King & Co., Inc.**  
**(866) 620-2536**

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**FORM OF  
LETTER TO STOCKHOLDERS AND PARTICIPATING  
WARRANTS HOLDERS WHO ARE RECORD HOLDERS OF  
SINTX TECHNOLOGIES, INC.**

Subscription Rights to Purchase Units  
Offered Pursuant to Subscription Rights Distributed to Stockholders and Holders of Participating Warrants of  
SINTX Technologies, Inc.

September 26, 2022

Dear Stockholder or Participating Warrant Holder:

This letter is being distributed by SINTX Technologies, Inc. (the “Company”) to all holders of record of shares of its common stock, \$0.01 par value per share (the “Common Stock”), Series B Preferred Stock, \$0.01 par value per share (“Series B Preferred”), Series C Preferred Stock, \$0.01 par value per share (“Series C Preferred”), or of holders of certain outstanding common stock warrants (the “Participating Warrants”) as of 5:00 p.m., Eastern Time, on September 23, 2022, the record date (the “Rights Offering”), in connection with a distribution in a rights offering of non-transferable subscription rights to subscribe for and purchase units. Each unit entitles the holder to one share of the Company’s Series D Convertible Preferred Stock and warrants to purchase a number of shares of common stock equal to \$1,000 divided by a price equal to 90% of the lowest closing price for a share of the Company’s common stock as quoted on the Nasdaq Capital Market during the five (5) trading days prior to and including October 10, 2022. Each warrant will be exercisable for one share of Common Stock. The subscription rights and units are described in the prospectus dated September 23, 2022 (a copy of which accompanies this notice) (the “Prospectus”).

Pursuant to the Rights Offering, the Company is issuing subscription rights to subscribe for up to 10,000 units on the terms and subject to the conditions described in the Prospectus, at a subscription price of \$1,000 per unit.

The subscription rights may be exercised at any time during the subscription period, which commences on September 26, 2022 and ends at 5:00 p.m., Eastern Time, on October 10, 2022, the expiration date, unless extended in the sole discretion of the Company for up to an additional 45 days (the “Expiration Date”). Unless we otherwise agree in writing, a person or entity, together with related persons or entities, may not exercise subscription rights (including over-subscription privileges) to purchase units that, when aggregated with their existing ownership, would result in such person or entity, together with any related persons or entities, owning in excess of 19.99% of our issued and outstanding shares of common stock following the closing of the transactions contemplated by this Rights Offering.

As described in the Prospectus, holders will receive one subscription right for every share of Common Stock owned or deemed owned or underlying the Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants held on the record date, evidenced by non-transferable subscription rights certificates. Each subscription right entitles the holder to purchase one unit at the subscription price, which we refer to as the basic subscription right.

Based on 24,727,495 shares of common stock outstanding as of August 31, 2022, 19,306 shares of common stock issuable upon conversion of 26 shares of Series B Preferred Stock, 33,753 shares of common stock issuable upon conversion of 50 shares of Series C Preferred Stock, and 1,115,729 shares of common stock issuable upon exercise of Participating Warrants, the Company would grant subscription rights to acquire 25,896,283 units but will only accept subscriptions for 10,000 units. Accordingly, sufficient units may not be available to honor your subscription in full. If exercises of basic subscription rights exceed the number of units available in the Rights Offering, we will allocate the available units pro-rata among the record holders exercising the basic subscription rights in proportion to the number of shares of Common Stock each of those record holders owned or are deemed to hold on the record date, relative to the number of shares owned or deemed to be held on the record date by all record holders exercising the basic subscription right. If this pro-rata allocation results in any record holders receiving a greater number of units than the record holder subscribed for pursuant to the exercise of the basic subscription rights, then such record holder will be allocated only that number of units for which the record holder subscribed, and the remaining units will be allocated among all other record holders exercising their basic subscription rights on the same pro rata basis described above. The proration process will be repeated until all units have been allocated. If for any reason the amount of units allocated to you is less than you have subscribed for, then the excess funds held by the subscription agent on your behalf will be returned to you, without interest, as soon as practicable after the Rights Offering has expired and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected, and we will have no further obligations to you.

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Holders who fully exercise their basic subscription right will be entitled to subscribe for additional units that remain unsubscribed as a result of any unexercised basic subscription right (the “Over-Subscription Privilege”). Subject to stock ownership limitations described in the Prospectus, if sufficient units are available, all Over-Subscription Privilege requests will be honored in full. If Over-Subscription Privilege requests for units exceed the remaining units available, the remaining units will be allocated pro-rata among holders who over-subscribe based on the number of shares of Common Stock owned or deemed to be owned or underlying the Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants held as of the record date by all holders exercising the Over-Subscription Privilege. If this pro rata allocation results in any holder receiving a greater number of units than the holder subscribed for, then such holder will be allocated only the number of units for which the holder oversubscribed, and the remaining units will be allocated among all holders exercising the Over-Subscription Privilege on the same pro rata basis described above. The proration process will be repeated until all units have been allocated.

The Company will not issue fractional shares or warrants. Fractional shares or warrants resulting from the exercise of the basic subscription rights and the Over-Subscription Privileges will be eliminated by rounding down to the nearest whole unit. Any excess subscription payment received by the subscription agent will be returned, without interest or penalty, within 10 business days following the expiration of the Rights Offering.

Enclosed are copies of the following documents:

1. Prospectus;
2. Subscription Rights Certificate;
3. Instructions As to Use of Subscription Rights Certificates;
4. Notice of Important Tax Information; and
5. A return envelope, addressed to American Stock Transfer & Trust Company, LLC, our Subscription Agent for the Rights Offering.

Your prompt attention is requested. To exercise your subscription rights, you should deliver the properly completed and signed subscription rights certificate, with payment of the subscription price in full for each unit subscribed for pursuant to the basic subscription right and Over-Subscription Privilege, if applicable, to the subscription agent, as indicated in the prospectus. The subscription agent must receive the properly completed and duly executed subscription certificate and full payment of the subscription price, including final clearance of any checks, prior to the Expiration Date.

You cannot revoke the exercise of your subscription right. Subscription rights not exercised at or prior to 5:00 p.m., Eastern Time, on the Expiration Date will expire.

**ANY QUESTIONS OR REQUESTS FOR ASSISTANCE CONCERNING THE RIGHTS OFFERING SHOULD BE DIRECTED TO THE INFORMATION AGENT, D.F. KING & CO., INC., TOLL FREE AT (866) 620-2536.**

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**FORM OF  
LETTER TO BROKERS, DEALERS, BANKS AND OTHER NOMINEES  
SINTX TECHNOLOGIES, INC.**

Subscription Rights to Purchase Units  
Offered Pursuant to Subscription Rights Distributed to Stockholders and Holders of Participating Warrants of  
SINTX Technologies, Inc.

September 26, 2022

To Brokers, Dealers, Banks and Other Nominees:

This letter is being distributed by SINTX Technologies, Inc. (the “Company”) to brokers, dealers, banks and other nominees in connection with the rights offering (the “Rights Offering”) by the Company to subscribe for and purchase units, pursuant to non-transferable subscription rights distributed to all holders of record of the Company’s common stock, \$0.01 par value per share (the “Common Stock”), Series B Preferred Stock, \$0.01 par value per share (“Series B Preferred”), Series C Preferred Stock, \$0.01 par value per share (“Series C Preferred”), or to holders of certain outstanding common stock warrants (the “Participating Warrants”) as of 5:00 p.m., Eastern Time, on September 23, 2022, the record date. Each unit entitles the holder to one share of the Company’s Series D Convertible Preferred Stock, \$0.01 par value per share, and common stock warrants to purchase a number of shares of common stock equal to \$1,000 divided by a price equal to 90% of the lowest closing price for a share of the Company’s common stock as quoted on the Nasdaq Capital Market during the five (5) trading days prior to and including October 10, 2022. Each warrant will be exercisable for one share of Common Stock. The subscription rights and units are described in the prospectus dated September 23, 2022 (a copy of which accompanies this notice) (the “Prospectus”).

Pursuant to the Rights Offering, the Company is issuing subscription rights to subscribe for up to 10,000 units on the terms and subject to the conditions described in the Prospectus, at a subscription price of \$1,000 per unit.

The subscription rights may be exercised at any time during the subscription period, which commences on September 26, 2022 and ends at 5:00 p.m., Eastern Time, on October 10, 2022, the expiration date, unless extended in the sole discretion of the Company for up to an additional 45 days (the “Expiration Date”).

As described in the Prospectus, each beneficial owner of shares of Common Stock, Series B Preferred Stock, Series C Preferred Stock, or of Participating Warrants is entitled to one subscription right for every share of Common Stock owned or deemed owned by such beneficial owner on the record date, evidenced by non-transferable subscription rights certificates registered in the record holder’s name or its nominee. Each subscription right entitles holder to purchase one unit at the subscription price, which we refer to as the basic subscription right. Unless we otherwise agree in writing, a person or entity, together with related persons or entities, may not exercise subscription rights (including over-subscription privileges) to purchase units that, when aggregated with their existing ownership, would result in such person or entity, together with any related persons or entities, owning in excess of 19.99% of our issued and outstanding shares of common stock following the closing of the transactions contemplated by this Rights Offering.

Based on 24,727,495 shares of common stock outstanding as of August 31, 2022, 19,306 shares of common stock issuable upon conversion of 26 shares of Series B Preferred Stock, 33,753 shares of common stock issuable upon conversion of 50 shares of Series C Preferred Stock, and 1,115,729 shares of common stock issuable upon exercise of Participating Warrants, the Company would grant subscription rights to acquire 25,896,283 units but will only accept subscriptions for 10,000 units. Accordingly, sufficient units may not be available to honor your subscription in full. If exercises of basic subscription rights exceed the number of units available in the rights offering, we will allocate the available units pro-rata among the record holders exercising the basic subscription rights in proportion to the number of shares of Common Stock each of those record holders owned or are deemed to hold on the record date, relative to the number of shares owned or deemed to be held on the record date by all record holders exercising the basic subscription right. If this pro-rata allocation results in any record holders receiving a greater number of units than the record holder subscribed for pursuant to the exercise of the basic subscription rights, then such record holder will be allocated only that number of units for which the record holder subscribed, and the remaining units will be allocated among all other record holders exercising their basic subscription rights on the same pro rata basis described above. The proration process will be repeated until all units have been allocated. If for any reason the amount of units allocated to you is less than you have subscribed for, then the excess funds held by the subscription agent on your behalf will be returned to you, without interest, as soon as practicable after the rights offering has expired and all prorating calculations and reductions contemplated by the terms of the rights offering have been effected, and we will have no further obligations to you.

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Holders who fully exercise their basic subscription right will be entitled to subscribe for additional units that remain unsubscribed as a result of any unexercised basic subscription right (the “Over-Subscription Privilege”). Subject to stock ownership limitations described in the prospectus, if sufficient units are available, all Over-Subscription Privilege requests will be honored in full. If Over-Subscription Privilege requests for units exceed the remaining units available, the remaining units will be allocated pro-rata among holders who over-subscribe based on the number of shares of Common Stock held or underlying the Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants held as of the record date by all holders exercising the Over-Subscription Privilege. If this pro rata allocation results in any holder receiving a greater number of units than the holder subscribed for, then such holder will be allocated only the number of units for which the holder oversubscribed, and the remaining units will be allocated among all holders exercising the Over-Subscription Privilege on the same pro rata basis described above. The proration process will be repeated until all units have been allocated.

The Company will not issue fractional shares or warrants. Fractional shares or warrants resulting from the exercise of the basic subscription rights and the Over-Subscription Privileges will be eliminated by rounding down to the nearest whole unit. Any excess subscription payment received by the subscription agent will be returned, without interest or penalty, within 10 business days following the expiration of the Rights Offering.

The Company is asking persons who hold shares of the Company’s Common Stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants beneficially, and who have received the subscription rights distributable with respect to those securities through a broker, dealer, bank, or other nominee, to contact the appropriate institution or nominee and request it to effect the transactions for them.

If you exercise subscription rights on behalf of beneficial owners, you will be required to certify to the subscription agent and the Company, in connection with such exercise, as to the aggregate number of subscription rights that have been exercised pursuant to the basic subscription right, whether the basic subscription rights of each beneficial owner of subscription rights on whose behalf you are acting has been exercised in full, and the number of units being subscribed for pursuant to the Over-Subscription Privilege by each beneficial owner of subscription rights on whose behalf you are acting.

The Company is asking you to contact your clients for whom you hold shares of Common Stock, Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants registered in your name or the name of your nominee to obtain instruction with respect to the subscription rights.

Enclosed are copies of the following documents:

1. Prospectus;
2. Subscription Rights Certificate;
3. Instructions as to Use of Subscription Rights Certificates;
4. Form of Letter to Shareholders Who are Beneficial Holders;
5. Form of Beneficial Owner Election Form; and
6. Form of Nominee Holder Certification.

All commissions, fees and other expenses (including brokerage commissions and transfer taxes), other than fees and expenses of the subscription agent, incurred in connection with the exercise of the subscription rights will be for the account of the holder, and none of such commissions, fees or expenses will be paid by the Company or the subscription agent.

Your prompt action is requested. To exercise the subscription rights, you should deliver the properly completed and signed subscription rights certificate, with payment of the subscription price in full for each unit subscribed for pursuant to the basic subscription right and Over-Subscription Privilege, if applicable, to the subscription agent, as indicated in the Prospectus. The subscription agent must receive the properly completed and duly executed subscription rights certificate and full payment of the subscription price, including final clearance of any checks, prior to the Expiration Date.

A holder cannot revoke the exercise of a subscription right. Subscription rights not exercised at or prior to 5:00 p.m., Eastern Time, on the Expiration Date will expire.

**ANY QUESTIONS OR REQUESTS FOR ASSISTANCE CONCERNING THE RIGHTS OFFERING SHOULD BE DIRECTED TO THE INFORMATION AGENT, D.F. KING & CO., INC., TOLL FREE AT (866) 620-2536.**

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**FORM OF  
BROKER LETTER TO CLIENTS WHO ARE BENEFICIAL  
HOLDERS SINTX TECHNOLOGIES, INC.**

Subscription Rights to Purchase Units  
Offered Pursuant to Subscription Rights Distributed to Stockholders and Holders of Participating Warrants of  
SINTX Technologies, Inc.

September 26, 2022

To Our Clients:

This letter is being distributed to our clients who are holders of SINTX Technologies, Inc. (the “Company”) common stock, \$0.01 par value per share (the “Common Stock”), Series B Preferred Stock, \$0.01 par value per share (“Series B Preferred”), Series C Preferred Stock, \$0.01 par value (“Series C Preferred Stock”), or are holders of certain outstanding common stock warrants (the “Participating Warrants”) as of 5:00 p.m., Eastern Time, on September 23, 2022, the record date, in connection with a distribution in a rights offering (the “Rights Offering”) of non-transferable subscription rights to subscribe for and purchase units. Each unit entitles the holder to one share of the Company’s Series D Convertible Preferred Stock and common stock warrants to purchase a number of shares of common stock equal to \$1,000 divided by a price equal to 90% of the lowest closing price for a share of the Company’s common stock as quoted on the Nasdaq Capital Market during the five (5) trading days prior to and including October 10, 2022. Each warrant will be exercisable for one share of Common Stock. The subscription rights and units are described in the prospectus dated September 23, 2022 (a copy of which accompanies this notice) (the “Prospectus”).

Pursuant to the Rights Offering, the Company is issuing subscription rights to subscribe for up to 10,000 units on the terms and subject to the conditions described in the prospectus, at a subscription price of \$1,000 per unit.

The subscription rights may be exercised at any time during the subscription period, which commences on September 26, 2022 and ends at 5:00 p.m., Eastern Time, on October 10, 2022, the expiration date, unless extended by the Company in its sole discretion for up to an additional 45 days (the “Expiration Date”).

As described in the Prospectus, holders will receive one subscription right for every share of Common Stock owned or deemed owned or underlying the Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants held on the record date, evidenced by non-transferable subscription rights certificates. Each subscription right entitles the holder to purchase one unit at the subscription price, which we refer to as the basic subscription right. Unless we otherwise agree in writing, a person or entity, together with related persons or entities, may not exercise subscription rights (including over-subscription privileges) to purchase units that, when aggregated with their existing ownership, would result in such person or entity, together with any related persons or entities, owning in excess of 19.99% of our issued and outstanding shares of common stock following the closing of the transactions contemplated by this Rights Offering.

Based on 24,727,495 shares of common stock outstanding as of August 31, 2022, 19,306 shares of common stock issuable upon conversion of 26 shares of Series B Preferred Stock, 33,753 shares of common stock issuable upon conversion of 50 shares of Series C Preferred Stock, and 1,115,729 shares of common stock issuable upon exercise of Participating Warrants, the Company would grant subscription rights to acquire 25,896,283 units but will only accept subscriptions for 10,000 units. Accordingly, sufficient units may not be available to honor your subscription in full. If exercises of basic subscription rights exceed the number of units available in the Rights Offering, the Company will allocate the available units pro-rata among the record holders exercising the basic subscription rights in proportion to the number of shares of Common Stock each of those record holders owned or are deemed to hold on the record date, relative to the number of shares owned or deemed to be held on the record date by all record holders exercising the basic subscription right. If this pro-rata allocation results in any record holders receiving a greater number of units than the record holder subscribed for pursuant to the exercise of the basic subscription rights, then such record holder will be allocated only that number of units for which the record holder subscribed, and the remaining units will be allocated among all other record holders exercising their basic subscription rights on the same pro rata basis described above. The proration process will be repeated until all units have been allocated. If for any reason the amount of units allocated to you is less than you have subscribed for, then the excess funds held by the subscription agent on your behalf will be returned to you, without interest, as soon as practicable after the Rights Offering has expired and all prorating calculations and reductions contemplated by the terms of the Rights Offering have been effected, and the Company will have no further obligations to you.

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Holders who fully exercise their basic subscription right will be entitled to subscribe for additional units that remain unsubscribed as a result of any unexercised basic subscription right (the “Over-Subscription Privilege”). Subject to stock ownership limitations described in the prospectus, if sufficient units are available, all Over-Subscription Privilege requests will be honored in full. If Over-Subscription Privilege requests for units exceed the remaining units available, the remaining units will be allocated pro-rata among holders who over-subscribe based on the number of shares of Common Stock owned or deemed to be owned or underlying the Series B Preferred Stock, Series C Preferred Stock, or Participating Warrants held as of the record date by all holders exercising the Over-Subscription Privilege. If this pro rata allocation results in any holder receiving a greater number of units than the holder subscribed for, then such holder will be allocated only the number of units for which the holder oversubscribed, and the remaining units will be allocated among all holders exercising the Over-Subscription Privilege on the same pro rata basis described above. The proration process will be repeated until all units have been allocated.

The Company will not issue fractional shares or warrants. Fractional shares or warrants resulting from the exercise of the basic subscription rights and the Over-Subscription Privileges will be eliminated by rounding down to the nearest whole unit. Any excess subscription payment received by the subscription agent will be returned, without interest or penalty, within 10 business days following the expiration of the Rights Offering.

Enclosed are copies of the following documents:

1. Prospectus;
1. Form of Beneficial Owner Election Form; and
2. Instructions As to Use of subscription rights certificates.

THE MATERIALS ENCLOSED ARE BEING FORWARDED TO YOU AS THE BENEFICIAL OWNER OF COMMON STOCK, SERIES B PREFERRED STOCK, SERIES C PREFERRED STOCK, OR PARTICIPATING WARRANTS HELD BY US IN YOUR ACCOUNT BUT NOT REGISTERED IN YOUR NAME. EXERCISES OF SUBSCRIPTION RIGHTS MAY BE MADE ONLY BY US AS THE RECORD OWNER AND PURSUANT TO YOUR INSTRUCTIONS.

Accordingly, we request instructions as to whether you wish us to elect to subscribe for any units to which you are entitled pursuant to the terms and subject to the conditions set forth in the enclosed prospectus and other materials. However, we urge you to read the prospectus and other enclosed materials carefully before instructing us to exercise your subscription rights.

Your instructions to us should be forwarded as promptly as possible in order to permit us to exercise subscription rights on your behalf in accordance with the provisions of the Rights Offering. The Rights Offering will expire at 5:00 p.m., Eastern Time, on the Expiration Date. You are encouraged to forward your instructions to us before the Expiration Date to allow us ample time to act upon your instructions. A holder cannot revoke the exercise of a subscription right.

If you wish to have us, on your behalf, exercise the subscription rights for any units to which you are entitled, please so instruct us by timely completing, executing, and

returning to us the Beneficial Owner Election Form enclosed with this notice.

**ANY QUESTIONS OR REQUESTS FOR ASSISTANCE CONCERNING THE RIGHTS OFFERING SHOULD BE DIRECTED TO THE INFORMATION AGENT, D.F. KING & CO., INC., TOLL FREE AT (866) 620-2536.**

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**FORM OF  
BENEFICIAL OWNER ELECTION FORM  
SINTX TECHNOLOGIES, INC.**

The undersigned acknowledge(s) receipt of your letter and the enclosed materials referred to therein relating to the rights offering by SINTX Technologies, Inc., a Delaware corporation (the "Company"), of non-transferable subscription rights to purchase units, each such unit comprised of one share of the Company's Series D Convertible Preferred Stock, \$0.01 par value, and common stock warrants to purchase a number of shares of common stock equal to \$1,000 divided by a price equal to 90% of the lowest closing price for a share of the Company's common stock as quoted on the Nasdaq Capital Market during the five (5) trading days prior to and including October 10, 2022. Each warrant will be exercisable for one share of the Company's common stock, \$0.01 par value ("Common Stock").

This will instruct you whether to exercise subscription rights to purchase units distributed with respect to the shares of the Common Stock owned by you or underlying the Series B Convertible Preferred Stock, Series C Preferred Stock, or participating warrants held by you for the account of the undersigned, pursuant to the terms and subject to the conditions set forth in the prospectus, dated September 23, 2022 (the "Prospectus"). (Check the applicable boxes and provide all required information.)

- Please DO NOT EXERCISE SUBSCRIPTION RIGHTS for units.
- Please EXERCISE SUBSCRIPTION RIGHTS for units as set forth below:

	<u>No. of Units</u>		<u>Per Unit Subscription Price</u>		<u>Payment</u>
Basic Subscription Right	X		\$ 1,000	=	\$
Over-Subscription Privilege	X		\$ 1,000	=	\$
<b>Total Payment Required</b>					<b>\$</b>

If you spoke with a broker who solicited such exercise, please indicate the name of the person you spoke with: .

- Payment in the following amount is enclosed \$ (must match Total Payment Required above)
- Please deduct payment from the following account maintained by you as follows:

Type of Account:  
Account No.:  
Amount to be deducted: \$

I (we) on my (our) own behalf, or on behalf of any person(s) on whose behalf, or under whose directions, I am (we are) signing this form:

- irrevocably elect to purchase the number of units indicated above upon the terms and conditions specified in the Prospectus; and
- agree that if I (we) fail to pay for the shares I (we) have elected to purchase, the exercise will be invalid.

Signature: \_\_\_\_\_  
Name:  
Title:  
Address:  
Telephone:  
Date: , 2022

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**FORM OF  
NOMINEE HOLDER CERTIFICATION  
SINTX TECHNOLOGIES, INC.**

The undersigned, a bank, broker, dealer, trustee, depository, or other nominee of non-transferable subscription rights to purchase units of SINTX Technologies, Inc. (the "Company"), said units each comprised of one share of Series D Convertible Preferred Stock and warrants to purchase a number of shares of common stock equal to \$1,000 divided by a price equal to 90% of the lowest closing price for a share of the Company's common stock as quoted on the Nasdaq Capital Market during the five (5) trading days prior to and including October 10, 2022, pursuant to the subscription rights offering described and provided for in the Company's prospectus dated September 23, 2022, hereby certifies to the Company and American Stock Transfer & Trust Company, LLC., as subscription agent for such rights offering, that (1) the undersigned has exercised, on behalf of the beneficial owners thereof (which may include the undersigned), the number of subscription rights on the terms and subject to the conditions set forth in the prospectus specified below pursuant to the basic subscription right (as defined in the prospectus) and, on behalf of beneficial owners of subscription rights who have subscribed for the purchase of additional units pursuant to the over-subscription privilege (as defined in the prospectus), the number of units specified below, listing separately below each such exercised basic subscription right and the corresponding over-subscription privilege (without identifying any such beneficial owner), and (2) to the extent a beneficial owner has elected to subscribe for units pursuant to the over-subscription privilege, each such beneficial owner's basic subscription right has been exercised in full:

Number of Shares Owned on the Record Date	Individual Soliciting Broker (if any)	Number of Units Subscribed for Pursuant to the Basic Subscription Right	Number of Units Subscribed for Pursuant to the Over-Subscription Privilege
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Name of Nominee Holder

By:

Name:

Title:

Phone Number:

Fax Number:

Dated:

Provide the following information, if applicable:

DTC Participant Number

DTC Participant By:

Name:

Title:

DTC Basic Subscription

Confirmation Number(s)

Dated:

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**FORM OF  
NOTICE OF IMPORTANT TAX INFORMATION  
SINTX TECHNOLOGIES, INC.**

This notice is provided in connection with the prospectus of SINTX Technologies, Inc. (“SINTX”) dated September 23, 2022.

Under U.S. federal income tax law, distributions (including constructive distributions) that may be made by SINTX in respect of shares of its Series D Convertible Preferred Stock or warrants acquired through the exercise of the subscription rights or shares of its common stock acquired through conversion of its Series D Convertible Preferred Stock or exercise of the warrants, themselves issued through the exercise of the subscription rights, may be subject to backup withholding. Generally such payments will be subject to backup withholding unless the holder (i) is exempt from backup withholding and timely and properly establishes an exemption from backup withholding or (ii) furnishes the payer with its correct taxpayer identification number (“TIN”) and certifies, under penalties of perjury, that the number provided is correct and provides certain other certifications. Each holder that exercises subscription rights and wants to avoid backup withholding must, unless an exemption applies, provide the subscription agent, as SINTX’s agent in respect of the exercised subscription rights, with such holder’s correct TIN and certain other certifications by completing the enclosed Form W-9 (Request for Taxpayer Identification Number and Certification). The TIN that must be provided is the TIN of the record owner of the subscription rights. If such record owner is an individual, the TIN is generally the taxpayer’s social security number. For most entities, the TIN is the employer identification number. If the subscription rights are held in more than one name or are not held in the name of the actual owner, consult the enclosed Form W-9 (Request for Taxpayer Identification Number and Certification) and your own U.S. tax advisors for additional guidance on which number to report. If the subscription agent is not provided with the correct TIN in connection with such payments, the holder may be subject to a penalty imposed by the IRS.

Certain holders (including, among others, certain corporations and foreign persons) are not subject to these backup withholding rules. In general, in order for a holder that is a “U.S. person” for U.S. federal income tax purposes to qualify as an exempt recipient, that holder must timely submit a properly completed Form W-9 attesting to such holder’s exempt status. See the enclosed Form W-9 (Request for Taxpayer Identification Number and Certification) for additional instructions. In general, in order for a holder that is not a “U.S. person” for U.S. federal income tax purposes to qualify as an exempt recipient, that holder must timely submit a properly completed Form W-8BEN, Certificate of Foreign Status of Beneficial Owner for United States Tax Withholding and Reporting (Individuals), Form W-8BEN-E, Certificate of Status of Beneficial Owner for United States Tax Withholding and Reporting (Entities) or other appropriate Form W-8, signed under the penalties of perjury, attesting to such holder’s foreign status. Such Form W-8BEN or Form W-8BEN-E may be obtained from the subscription agent and are available at [www.irs.gov](http://www.irs.gov). Holders are urged to consult their own tax advisors to determine whether they are exempt from backup withholding and reporting requirements. If backup withholding applies, SINTX or the subscription agent, as the case may be, will be required to withhold (currently at a 24% rate) on any reportable payments made to a holder that exercises subscription rights. Backup withholding is not an additional tax. Rather, the amount of backup withholding can be credited against the U.S. federal income tax liability of the holder subject to backup withholding, provided that the required information is timely provided to the Internal Revenue Service (“IRS”). If backup withholding results in an overpayment of taxes, a refund may generally be obtained, provided that the required information is timely provided to the IRS.

**THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE BACKUP WITHHOLDING RULES TO THEM IN LIGHT OF THEIR OWN PERSONAL CIRCUMSTANCES.**

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September 14, 2022

Dear Shareholder,

Thank you for being a valued shareholder and supporter of SINTX Technologies Inc. In order to create a closer and more transparent relationship with our shareholders, we have engaged Maxim Group LLC (“Maxim”), a registered broker-dealer with the United States Securities and Exchange Commission to assist us in collecting additional contact information. This data will be used to share information relating to our upcoming events, press releases, and additional content that may be of value to our shareholders, including with respect to our current rights offering.

To submit your information, please scan the QR code below or visit <https://bit.ly/mxm-sint>.



Maxim is the Dealer-Manager for the proposed rights offering (“Rights Offering,” described hereunder) to be undertaken by SINTX. Submission of any information is voluntary. By submitting this information, you are disclosing contact information to Maxim and SINTX in connection with the proposed Rights Offering, and consenting to receive communications from SINTX or Maxim in connection with the Rights Offering. Except for disclosure to SINTX in connection with the Rights Offering, the information disclosed to Maxim shall be maintained privately in accordance with Maxim’s Client Privacy Policy Disclosure ([www.maximgrp.com/client-privacy/](http://www.maximgrp.com/client-privacy/)).

Pursuant to the Rights Offering, it is contemplated that SINTX will distribute to holders of record of common stock, Series B Preferred Stock, Series C Preferred Stock, and Participating Warrants, the subscription rights to subscribe to additional securities of SINTX. For complete terms associated with the Rights Offering, please review the Prospectus filed with the Securities and Exchange Commission, which can be accessed at [www.sec.gov](http://www.sec.gov).

Thank you,

B. Sonny Bal  
Chairman and CEO

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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 a part of this Registration Statement of our report dated March 25, 2022, relating to the consolidated financial statements of SINTX Technologies, Inc., and subsidiaries (collectively, the Company), appearing in the Annual Report on Form 10-K of the Company as of December 31, 2021 and 2020 and for each of the years then ended.

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

*/s/ TANNER LLC*

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Lehi, UT  
September 9, 2022

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**Subsidiary**

SINTX Armor, Inc.  
Technical Assessment and Transfer, Inc.

**Jurisdiction**

Utah  
Maryland

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