Sintx Technologies, Inc	•
Form S-3	
March 25, 2019	

As filed with the Securities and Exchange Commission on March 25, 2019

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

SINTX TECHNOLOGIES, INC.

(Exact name of Registrant as specified in its charter)

Delaware 3841 84-1375299 (State or other jurisdiction of (Primary Standard Industrial (I.R.S. Employer

incorporation or organization) Classification Code Number) Identification Number)

1885 West 2100 South

Salt Lake City, Utah 84119

(801) 839-3500

(Address, including zip code and telephone number, 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, Utah 84119
(801) 839-3500
(Name, address, including zip code and telephone number, including area code, of agent for service)
Copies to:
David Marx
Michael R. Newton
Dorsey & Whitney LLP
111 South Main Street, Suite 2100
Salt Lake City, Utah 84111
(801) 933-7360
Approximate date of commencement of proposed sale to the public: from time to time after the effective date of this registration statement.
If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. []

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, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please 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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. []
If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. []
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 []
Accelerated filer []
Non-accelerated filer [X]
Smaller reporting company [X]
Emerging growth company [X]
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 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 that specifically states that this registration

statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To Be Registered(1)	Amount to be Registered(1) (2)	Proposed Maximum Aggregate Price Per Unit or Share(2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee (6)
Common Stock, par value \$0.01 per share				N/A
Preferred Stock, par value \$0.01 per share				N/A
Debt Securities(3)				N/A
Warrants(4)				N/A
Rights				N/A
Units(5)				N/A
Total			\$50,000,000.00	\$ 6,060.00

There are being registered hereunder such indeterminate (a) number of shares of common stock, (b) number of shares of preferred stock, (c) principal amount of debt securities, (d) number of warrants to purchase common stock, preferred stock or debt securities, (e) number of rights to purchase an indeterminate number of shares of common stock, shares of preferred stock, debt securities or warrants, and (f) number of units, consisting of some or all of these securities, all as will have an aggregate initial offering price not to exceed \$50,000,000.00. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder. The (1) securities registered also include such indeterminate amounts and numbers of shares of common stock and shares of preferred stock and such indeterminate principal amounts of debt securities as may be issued upon exercise of warrants, upon conversion of or exchange for debt securities that provide for conversion or exchange, or pursuant to anti-dilution provisions of any such securities. No separate consideration will be received for any shares of common stock, preferred stock, or principal amounts of debt securities so issued upon conversion or exchange. Pursuant to Rule 416(a), this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or similar transaction.

Pursuant to General Instruction II.D of Form S-3, the amount of securities to be registered for each class of (2) securities, the proposed maximum offering price per unit for each class of securities and the proposed aggregate offering price of each class of securities are not specified.

If any debt securities are issued at an original issue discount, then the offering price of such debt securities shall be (3) in such greater principal amount as shall result in an aggregate initial offering price not to exceed \$50,000,000.00, less the aggregate dollar amount of all securities previously issued hereunder.

(4) Includes warrants to purchase shares of common stock, warrants to purchase shares of preferred stock and warrants to purchase debt securities.

(5)

Consisting of some or all of the securities listed above, in any combination, including shares of common stock, shares of preferred stock, debt securities, warrants and rights.

(6) The registration fee has been calculated in accordance with Rule 457(o) under the Securities Act.

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 it is not soliciting an offer to buy these securities in any state where such offer or sale is not permitted.

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PROSPECTUS

SINTX TECHNOLOGIES, INC.

\$50,000,000

Common Stock, Preferred Stock,

Debt Securities.

Warrants, Rights and Units

From time to time, we may offer and sell up to \$50.0 million of any combination of the securities described in this prospectus, either individually or in combination. We may also offer shares of common stock or shares of preferred stock upon conversion of debt securities, shares of common stock upon conversion of shares of preferred stock, or shares of common stock, shares of preferred stock or debt securities upon the exercise of warrants.

This prospectus provides a general description of the securities we may offer. Each time we sell securities, we will provide specific terms of the securities offered in a supplement to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. A prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference in this prospectus before you invest in any securities. This prospectus may not be used to consummate a sale of securities unless accompanied by an applicable prospectus supplement.

Our common stock is listed on The NASDAQ Capital Market under the symbol "SINT". On March 22, 2019, the last reported sale price for our common stock was \$0.224 per share. The applicable prospectus supplement will contain

information, where applicable, as to any other listing on The NASDAQ Capital Market or any securities market or other exchange of the securities, if any, covered by the prospectus supplement.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" ON PAGE 5 AND CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS AND UNDER SIMILAR HEADINGS IN THE OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS.

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

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2019

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ABOUT THIS PROSPECTUS

Throughout this prospectus, references to "SINTX," the "Company," "we," "us," and "our" refer to SINTX Technologies, Inc.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$50.0 million. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities under this shelf registration, we will provide a prospectus supplement that will contain specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in any documents that we have incorporated by reference into this prospectus. You should read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading "Incorporation by Reference."

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

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which involve risks and uncertainties. Forward-looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to any historical or current fact. Forward-looking 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 of this prospectus entitled "Prospectus Summary" and "Risk Factors."

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. In some cases, you can identify forward-looking statements by terms such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" and similar expression statements involve risks, uncertainties and other factors that may cause our actual results, performance, time frames or achievements to be materially different from any future results, performance, time frames or achievements expressed or implied by the forward-looking statements. Risks, uncertainties and other factors that might cause or contribute to such differences include, but are not limited to, those discussed in the Section entitled "Risk Factors" in our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q. Given these risks, uncertainties and other factors, many of which are beyond our control, you should not place undue reliance on these forward-looking statements.

In addition, past financial and/or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to revise any forward-looking statements to reflect events or developments occurring after the date of this prospectus, even if new information becomes available in the future.

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Prospectus Summary

This summary highlights selected information from this prospectus and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, including the risks of investing discussed under "Risk Factors" beginning on page 5, the information incorporated by reference, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Our Business

We are a biomaterials company focused on providing ceramic based biomaterial solutions in a variety of medical and industrial applications. To date, our primary focus has been the research, development and commercialization of medical implant products manufactured with silicon nitride. We believe that silicon nitride has a superb combination of properties that make it ideally 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.

We also believe that we are the first and only company to commercialize silicon nitride medical implants. Prior to October 1, 2018, we designed, manufactured and commercialized silicon nitride products for our own behalf in the spine implant market. Over 33,000 of our spinal implants manufactured with silicon nitride have been implanted into patients, with an excellent safety record. On October 1, 2018, we sold our spine implant business to CTL Medical and now manufacture spine implants made with silicon nitride for CTL Medical. Prior to selling our spine implant business to CTL Medical, we had received 510(k) regulatory clearance in the United States, a CE mark in Europe, ANVISA approval in Brazil, and ARTG and Prostheses approvals in Australia for a number of silicon nitride spine implant products designed for spinal fusion surgery. Spine implant products manufactured by us from silicon nitride are currently marketed and sold by CTL Medical under the Valeo® brand to surgeons and hospitals in the United States and to selected markets in Europe and South America. These implants are designed for use in cervical (neck) and thoracolumbar (lower back) spine surgery. We are collaborating with CTL Medical to establish a commercial partner in Australia and also working with other partners to obtain regulatory approval for silicon nitride implants in Japan.

The sale of our spine implant business to CTL Medical enables us to now focus on our core competencies. These are research and development of silicon nitride and the design and manufacture of medical and nonmedical products manufactured from silicon nitride and other ceramic materials for our own account and in collaboration with other

medical device manufacturers. We are targeting original equipment manufacturers ("OEM") – including CTL Medical and private label partnerships in order to accelerate adoption of silicon nitride in future markets such as coating products with silicon nitride, hip and knee replacements, dental and maxillofacial implants, extremities, trauma, and sports medicine. Existing biomaterials, based on plastics, metals, and bone grafts have well-recognized limitations that we believe are addressed by silicon nitride, and we are uniquely positioned to convert existing, successful implant designs made by other companies into products manufactured with silicon nitride. OEM and private label partnerships allow us to work with a variety of partners, accelerate the adoption of silicon nitride, and realize incremental revenue at improved operating margins, when compared to the cost-intensive direct sales model.

We believe that silicon nitride addresses many of the biomaterial-related limitations in fields such as hip and knee replacements, dental and maxillofacial implants, sports medicine, extremities, and trauma surgery. We further believe that the inherent material properties of silicon nitride, and the ability to formulate the material in a variety of compositions, combined with precise control of the surface properties of the material, opens up a number of commercial opportunities across orthopedic surgery, neurological surgery, maxillofacial surgery, and other medical disciplines.

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.

The Securities We May Offer

We may offer shares of common stock and shares of preferred stock, various series of debt securities, warrants to purchase any of such securities, and rights to purchase shares of common stock, shares of preferred stock or warrants, either individually or in units, , with a total value of up to \$50.0 million from time to time under this prospectus, together with any applicable prospectus supplement and related free writing prospectus, at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

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

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

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

the names of those underwriters or agents;

applicable fees, discounts and commissions to be paid to them;

details regarding over-allotment options, if any; and

the net proceeds to us.

Common Stock

Our board of directors has the authority under our Amended and Restated Articles of Incorporation, without further action by our shareholders, to issue up to 250,000,000 shares of common stock (including shares of common stock outstanding as of the date hereof). We may offer shares of common stock from time to time.

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.

Preferred Stock

Our board of directors has the authority under our Amended and Restated Articles of Incorporation, without further action by our shareholders, 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 preferred stock is described in greater detail in this prospectus under "Description of Capital Stock — Preferred Stock."

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

Debt Securities

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

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

Warrants

We may offer warrants for the purchase of our common stock, preferred stock and/or debt securities in one or more series, from time to time. We may issue warrants independently or together with shares of common stock, shares of preferred stock and/or debt securities, and the warrants may be attached to or separate from those securities.

In this prospectus, we have summarized certain general features of the warrants under "Description of Warrants." We urge you, however, to read the prospectus supplements and any free writing prospectus that we may authorize to be provided to you related to the particular warrants being offered, as well as the complete warrant document or agreement that contain the terms of the warrants. Specific warrant documents or agreements will contain additional important terms and provisions and will be filed as exhibits to the registration statement of which this prospectus is a part, or incorporated by reference from a current report on Form 8-K that we file with the SEC.

Rights

We may distribute rights to the holders of our common stock or other securities to purchase a specified number of our shares of common stock or other securities that the holder owns as of record date set by our board of directors. In a prospectus supplement, we will inform you of the exercise price and other specific terms of the rights.

Units

We may offer units consisting of shares of common stock, shares of preferred stock, debt securities warrants and/or rights to purchase any of such securities in one or more series. In this prospectus, we have summarized certain general features of the units under "Description of Units." We urge you, however, to read the prospectus supplements and any free writing prospectus that we may authorize to be provided to you related to the particular units being offered, as well as the unit agreements that contain the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement and any supplemental agreements that describe the terms of the units we are offering before the issuance of the related units.

THIS PROSPECTUS MAY NOT BE USED TO OFFER OR SELL ANY SECURITIES UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

NASDAQ Capital Market Listing

Our common stock is listed on The NASDAQ Capital Market under the symbol "SINT". The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on The NASDAQ Capital Market or other securities exchange of the securities covered by the applicable prospectus supplement.

RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under Item 1A, "Risk Factors," in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, which is incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the Securities and Exchange Commission in the future. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

USE OF PROCEEDS

Except as described in any applicable prospectus, prospectus supplement and in any free writing prospectuses in connection with a specific offering, we currently intend to use the net proceeds from this offering primarily for general corporate purposes, including capital expenditures, working capital, financing of possible acquisitions and other business opportunities.

DESCRIPTION OF CAPITAL Stock

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

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

Common Stock

As of December 31, 2018 there were 21,793,641 shares of common stock outstanding. In addition, as of December 31, 2018 there were: (i) 11,301 shares of common stock subject to outstanding options; (ii) 75,600 shares of common stock reserved for future issuance under our Amended and Restated 2012 Equity Incentive Plan; (iii) 12,824,657 shares of common stock reserved for future issuance under outstanding common stock warrants; and (iv) 9,336,264 shares of common stock reserved for issuance on conversion of shares of the Series B Preferred Stock. Each outstanding share of common stock entitles the holder thereof to one vote per share on all matters. Our Restated Bylaws provide that any vacancy occurring in the board of directors may be filled by the affirmative vote of a majority of the remaining directors. Stockholders do not have preemptive rights to purchase shares in any future issuance of our common stock. In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to receive, ratably, the net assets available to stockholders after payment of all creditors.

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

dissolution or winding-up of our affairs, holders of our common stock will be entitled to share ratably in our assets that are remaining after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

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

Preferred Stock

Our Board of directors has the authority under our Restated Certificate of Incorporation, without further action by our stockholders, to issue up to 130,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences, privileges and restrictions of the shares of each wholly unissued series, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference and sinking fund terms, and to increase or decrease the number of shares of any such series (but not below the number of shares of such series then outstanding).

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock or otherwise adversely affecting the rights of holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change of control and may adversely affect the market price of our common stock.

Series B Preferred Stock.

Our board of directors designated 15,000 shares of our preferred stock as Series B Preferred Stock. As of December 31, 2018, there were 4,074 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 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 the Company, the holder may increase or decrease 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 \$4.3536 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 \$0.48 (the "Conversion Price"). The Conversion Price is subject to adjustment for stock splits, stock dividends, and distributions of common stock or securities convertible, exercisable or exchangeable for common stock, subdivisions, combinations and reclassifications.

Subject to certain exclusions contained in the Certificate of Designation, if the Company in any manner grants or sells any rights, warrants or options and the lowest price per share for which one share of common stock is at any time issuable upon the exercise of any such option or upon conversion, exercise or exchange of any Common Stock Equivalents (as defined in the Certificate of Designation) issuable upon exercise of any such option, exercise or exchange of any Common Stock Equivalent issuable upon the exercise of such option or otherwise pursuant to the terms thereof is less than the Conversion Price, then such share of common stock will be deemed to be outstanding and to have been issued and sold by the Company 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 the Company with respect to any one share of common stock upon the granting or sale of such option, upon exercise of such option and upon conversion, exercise or exchange of any Common Stock Equivalents issuable upon exercise of such option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such option for which one share of common stock is issuable upon the exercise of any such options or upon conversion, exercise or exchange of any Common Stock Equivalents issuable upon exercise of any such option or otherwise pursuant to the terms thereof. Except as contemplated by the terms of the Certificate of Designation, no further adjustment of the Conversion Price will be made upon the actual issuance of such shares of common stock or of such convertible securities upon the exercise of such options or otherwise pursuant to the terms of or upon the actual issuance of such Common Stock Equivalents.

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

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

If any option and/or convertible security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company (as determined by the holder of Preferred Stock, the "Primary Security", and such option and/or convertible security and/or Adjustment Right (as defined below), the "Secondary Securities" and together with the Primary Security, each a "unit"), together comprising one integrated transaction, the aggregate consideration per share of common stock with respect to such Primary Security will be deemed to be the lower of (x) the purchase price of such unit, (y) if such Primary Security is an option and/or convertible security, the lowest price per share for which one share of common stock is at any time issuable upon the exercise or conversion of the Primary Security in accordance with the paragraphs above and (z) the lowest

volume-weighted average price of the common stock on any trading day during the four trading day period immediately following the public announcement of such dilutive issuance. If any shares of common stock, options or convertible securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount of consideration received by the Company 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 the Company 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 the Company 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 the Company is 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 the Company 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 the Company 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 the Company in connection with, or with respect to, such securities (including, without limitation, any cash settlement rights, cash adjustment or other similar rights).

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

Liquidation; Dividends; Repurchases.

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

Redemption Right.

The Company holds 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 the Company for cash.

Fundamental Transactions.

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

B Preferred Stock is convertible immediately prior to such event.

Voting Rights.

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

Jurisdiction and Waiver of Trial by Jury

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

Future Preferred Stock.

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

the title and stated value;

the number of shares we are offering;

the liquidation preference per share;

the purchase price per share;

the dividend rate per share, dividend period and payment dates and method of calculation for dividends;

whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;

our right, if any, to defer payment of dividends and the maximum length of any such deferral period;

the procedures for any auction and remarketing, if any;

the provisions for a sinking fund, if any;

the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;

any listing of the preferred stock on any securities exchange or market;

whether the preferred stock will be convertible into our common stock or other securities of ours, including warrants, and, if applicable, the conversion period, the conversion price, or how it will be calculated, and under what circumstances it may be adjusted;

voting rights, if any, of the preferred stock;

preemption rights, if any;

restrictions on transfer, sale or other assignment, if any;

a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;

the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;

any limitations on issuances of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and

any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preferred stock.

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

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

Description of Other Outstanding Securities of the Company

Warrants

As of December 31, 2018, there were 12,824,657 common stock purchase warrants outstanding, which expire between June 2019 and May 2023. Each of these warrants entitles the holder to purchase one share of common stock at prices ranging between \$0.48 and \$9,279, as converted, per share, with a weighted average exercise price of \$1.40 per share. Certain of these warrants has a net exercise provision under which its holder may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on the fair market value of our common stock at the time of exercise of the warrant after deduction of the aggregate exercise price. 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."

May 2018 Public Offering Warrants

On May 14, 2018, we issued 11,370,000 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 \$0.48 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). 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 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 May 2018 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.

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 the Company, the holder may increase or decrease the May 2018 Warrant Beneficial Ownership Limitation exceed 9.99% and any increase in 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, the Company 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 the Company and Series E Investors dated July 8, 2016, (the "Series E Warrant Agreement") the Company issued to the Series E Investors warrants to purchase up to 832,000 shares of common stock (the "Warrant Shares") at an exercise price of \$12.00 per share, (the "Series E Investor Warrants"). Under the terms of the Amendment Agreement, in consideration of the Series E Investors exercising 668,335 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 \$2.125 per share. In addition, and as further consideration, the Company 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 \$2.00 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 163,665 Series E Investor Warrants at their discretion. In connection with the execution of the Amendment Agreement and issuance of the New Warrants, we issued to the underwriter a warrant to purchase 10,025 shares of common stock at an exercise price of \$2.00 per share. This warrant is in the same form as the New Warrants and is exercisable for five years after issuance.

The Amendment Agreement incorporated portions of the Series E Warrant Agreement, which contained customary representations, warranties and covenants by each of the Company 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.

Securities Issued to North Stadium Investments, LLC

On July 28, 2017, the Company closed on a \$2.5 million term loan (the "North Stadium Loan") with North Stadium Investments, LLC ("North Stadium"), a company owned and controlled by the Company's Chief Executive Officer and Chairman of the Board, Dr. Sonny Bal. In connection with the North Stadium Loan, the Company issued to North Stadium a Secured Promissory Note in the amount of \$2.5 million (the "North Stadium Note"). The North Stadium Note bears interest at the rate of 10% per annum, requires the Company to make monthly interest only payments for a period of 12 months, and principal and any unpaid accrued interest are due and payable 12 months from the effective date of the North Stadium Note, July 28, 2017. The North Stadium Note is secured by substantially all of the assets of the Company pursuant to a security agreement between the Company and North Stadium dated July 28, 2017, and is junior to other previously existing security interests in such assets. The North Stadium Note is attached as an exhibit to the registration statement of which this prospectus forms a part and is incorporated herein by reference.

In connection with the North Stadium Loan and as additional consideration for the North Stadium Loan, the Company issued to North Stadium a warrant to acquire shares of common stock with a five-year term (the "North Stadium Warrant"). As a result of the Company's reverse stock split since the North Stadium Warrant was issued, the North Stadium Warrant is exercisable for 55,000 shares of common stock as of the date of this prospectus, at an exercise price of \$5.04 per share. The North Stadium Warrant also has a net exercise provision under which the holder may, in lieu of payment of the exercise price in cash, surrender the North Stadium 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 North Stadium Warrant after deduction of the aggregate exercise price. The North Stadium Warrant 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 North Stadium Warrant in the event of dividends, share splits, reorganizations, reclassifications and consolidations. The North Stadium Warrant is attached as an exhibit to the registration statement of which this prospectus forms a part and is incorporated herein by reference.

January 2017 Public Offering Warrants

On January 19, 2017, the Company issued common stock and warrants in a public offering, with each warrant exercisable for one share of common stock. The warrants expire on the five-year anniversary of the closing date. The exercise price is subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting the Company's common stock. As a result of the Company's reverse stock split since the warrants were issued, the warrants are exercisable for 363,750 shares of common stock as of the date of this prospectus, at an exercise price of \$6.60 per share. The warrants are callable by the Company in certain circumstances.

Subject to limited exceptions, a holder of these warrants will not have the right to exercise any portion of its warrants if 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 our 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 (the "2017 Warrant Beneficial Ownership Limitation"); provided, however, that upon notice to the Company, the holder may increase or decrease the 2017 Warrant Beneficial Ownership Limitation, provided that in no event shall the 2017 Warrant Beneficial Ownership Limitation exceed 9.99% and any increase in the Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us.

The holders of these warrants must pay the exercise price in cash upon exercise of the warrants, unless such holders are utilizing the cashless exercise provision of the 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. We intend to use commercially reasonable efforts to have the registration statement of which this prospectus forms a part, effective when the warrants are exercised.

In addition, in the event the Company consummates a merger or consolidation with or into another person or other reorganization event in which our common stock is converted or exchanged for securities, cash or other property, or the Company sells, leases, licenses, assigns, transfers, conveys or otherwise disposes of all or substantially all of our assets or the Company or another person acquires 50% or more of the outstanding shares of our common stock, then following such event, the holders of the warrants will be entitled to receive upon exercise of the warrants the same kind and amount of securities, cash or property which the holders would have received had they exercised the warrants immediately prior to such fundamental transaction. Any successor to us or surviving entity shall assume the obligations under the warrants.

In the event of a fundamental transaction other than one in which a successor entity that is a publicly traded corporation whose stock is quoted or listed on a trading market assumes the warrant such that the warrant shall be exercisable for the publicly traded common stock of such successor entity, then the Company or any successor entity will pay at the holder's option, exercisable at any time concurrently with or within 30 days after the consummation of the fundamental transaction, an amount of cash equal to the value of the remaining unexercised portion of the warrants on the date of consummation of the fundamental transaction as determined in accordance with the Black Scholes option pricing model.

Upon the holder's exercise of a warrant, the Company will issue the shares of common stock issuable upon exercise of the warrant within three trading days following the Company's 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 a warrant, holders of the warrants will not have any of the rights of holders of our common stock purchasable upon exercise, including the right to vote, except as set forth therein.

The form of this warrant is attached as an exhibit to the registration statement of which this prospectus forms a part and is incorporated herein by reference.

June 2016 Public Offering and Underwriter Warrants

In July 2016, the Company sold Class A and Class B Units that consisted of common stock and Series E Warrants. The Series E Warrants are exercisable for up to five years after the date of issuance. As of the date of this prospectus, there were 348,623 Series E Warrants outstanding, exercisable for 348,623 shares of our common stock, at an exercise price of \$12 per share. The Series E warrants are callable by us in certain circumstances.

Subject to limited exceptions, a holder of Series E Warrants does not have the right to exercise any portion of its Series E Warrants if 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 (the "Series E Beneficial Ownership Limitation"); provided, however, that upon notice to the Company, the holder may increase or decrease the Series E Beneficial Ownership Limitation, provided that in no event shall the Series E Beneficial Ownership Limitation exceed 9.99% and any increase in the Series E Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us.

The exercise price and the number of shares issuable upon exercise of the Series E Warrants is subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common stock. The Series E Warrant holders must pay the exercise price in cash upon exercise of the Series E Warrants, unless such Series E Warrant holders are utilizing the cashless exercise provision of the Series E 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. We intend to use commercially reasonable efforts to have the registration statement of which this prospectus forms a part, effective when the Series E Warrants are exercised.

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 acquire 50% or more of our outstanding shares of common stock, then following such event, the holders of the Series E Warrants will be entitled to receive upon exercise of the warrants the same kind and amount of securities, cash or property which the holders would have received had they exercised the warrants immediately prior to such fundamental transaction. Any successor to us or surviving entity shall assume the obligations under the Series E Warrants.

In the event of a fundamental transaction approved by our board of directors and other than one in which a successor entity that is a publicly traded corporation whose stock is quoted or listed on a trading market assumes the Series E Warrant such that the Series E Warrant shall be exercisable for the publicly traded common stock of such successor entity, then the Company or any successor entity will pay at the holder's option, exercisable at any time concurrently with or within 30 days after the consummation of the fundamental transaction, an amount of cash equal to the value of the remaining unexercised portion of the Series E Warrants on the date of consummation of the fundamental transaction as determined in accordance with the Black Scholes option pricing model.

Upon the holder's exercise of a Series E Warrant, we will issue the shares of common stock issuable upon exercise of the Series E Warrant within three 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 Series E Warrants to purchase common stock, holders of the Series E 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.

The form of Series E Warrant and form of underwriters warrant are attached as exhibits to the registration statement of which this prospectus forms a part and is incorporated herein by reference.

2016 Debt Exchange Warrants

On April 4, 2016, the Company entered into an exchange agreement (the "Riverside Exchange Agreement") with Riverside Merchant Partners, LLC ("Riverside"), pursuant to which the Company agreed to exchange \$1,000,000 of the principal amount outstanding under the term loan held by Riverside for a subordinated convertible promissory note in the principal amount of \$1,000,000 and a warrant (the "First Riverside Warrant") (the "Riverside Exchange"). In addition, pursuant to the terms and conditions of the Riverside Exchange Agreement, the Company and Riverside exchanged an additional \$2,000,000 of the principal amount of the term loan for an additional subordinated convertible promissory note in the principal amount of up to \$2,000,000 and an additional warrant (the "Second Riverside Warrant" and, together with the First Exchange Warrant, the "Riverside Warrants"). As a result of the Company's reverse stock split since the Riverside Warrants were issued, the First Riverside Warrant is exercisable for 8,333 shares of common stock as of the date of this prospectus, at an exercise price of \$19.56 per share, and the Second Riverside Warrant is exercisable for 8,333 shares of common stock as of the date of this prospectus, at an exercise price of \$19.92 per share.

The Riverside Warrants are exercisable until the five-year anniversary of six months after the date of issuance of the Riverside Warrants. The Riverside 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 Riverside Warrants after deduction of the aggregate exercise price. The Riverside Warrants also contain provisions for the adjustment of the exercise price and the aggregate number of shares of common stock issuable upon the exercise of the Riverside Warrants in the event of dividends, share splits, reorganizations, reclassifications and consolidations.

In the event of a fundamental transaction approved by our board of directors, including but not limited to a transaction in which 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 our 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), other than one in which a successor entity that is a publicly traded corporation whose stock is quoted or listed on a trading market assumes the warrant such that the warrant shall be exercisable for the publicly traded common stock of such successor entity, then the Company or any successor entity will pay at the holder's option, exercisable at any time concurrently with or within 30 days after the consummation of the fundamental transaction, an amount of cash equal to the value of the remaining unexercised portion of the warrants on the date of consummation of the fundamental transaction as determined in accordance with the Black Scholes option pricing model.

The form of Riverside Warrant is attached as an exhibit to the registration statement of which this prospectus forms a part and is incorporated herein by reference.

Westlake Securities Warrants – 2016

As compensation paid in connection with the consummation of a private placement in 2016, the Company issued a warrant to Westlake Securities LLC on January 28, 2016 (the "2016 Westlake Warrant"). The 2016 Westlake Warrant is exercisable for five years after the date of issuance. As a result of the Company's reverse stock splits the 2016 Westlake Warrant is exercisable for 6,250 shares of common stock as of the date of this prospectus at an exercise price of \$23.40 per share. The 2016 Westlake Warrant has 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. The 2016 Westlake Warrant 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. The 2016 Westlake Warrant is attached as an exhibit to the registration statement of which this prospectus is a part and are incorporated herein by reference.

2015 Series A Warrants

On September 11, 2015, the Company closed a concurrent public and private offering (the "2015 Offerings") of common stock and Series A, Series B and Series C Warrants. The Series B and Series C Warrants have since been either fully exercised or expired in accordance with their terms, and only 8,333 Series A Warrants remain outstanding as of the date of this prospectus. On December 11, 2015, the Company entered into an Amended and Restated Series A Warrant (the "Series A Warrant Amendment") with each of the holders of the Series A Warrants (each an "Investor"). The Series A Warrants are exercisable on a cashless basis, subject to certain conditions. As a result of the Company's reverse stock splits since this warrant was issued, the outstanding Series A Warrants are exercisable for 8,333 shares of common stock as of the date of this prospectus, at an exercise price of \$18.00 per share. The Series A Warrant 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. The Series A Warrant prohibits the Company from entering into variable rate transactions without the holder's consent.

In the event of a fundamental transaction approved by our board of directors, including but not limited to a transaction in which 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 our 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), other than one in which a successor entity that is a publicly traded corporation whose stock is quoted or listed on a trading market assumes the warrant such that the warrant shall be exercisable for the publicly traded common stock of such successor entity, then the Company or any successor entity will pay at the holder's option, exercisable at any time concurrently with or within 30 days after the consummation of the fundamental transaction, an amount of cash equal to the value of the

remaining unexercised portion of the warrants on the date of consummation of the fundamental transaction as determined in accordance with the Black Scholes option pricing model.

As compensation paid in connection with the consummation of the 2015 Offerings, the Company issued a warrant to Ladenburg Thalmann & Co. Inc. on September 11, 2015 (the "Ladenburg Warrant"), who acted as placement agent for the 2015 Offerings. As a result of the Company's reverse stock split since the Ladenburg Warrant was issued, the Ladenburg Warrant is exercisable for 3,645 shares of common stock as of the date of this prospectus, at an exercise price of \$84.60 per share. The Ladenburg Warrant is exercisable from March 12, 2016 until September 8, 2020. The Ladenburg Warrant has 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 Ladenburg Warrant after deduction of the aggregate exercise price. The Ladenburg Warrant also contains provisions for the adjustment of the exercise price and the aggregate number of shares of common stock issuable upon exercise of the Ladenburg Warrant in the event of dividends, share splits, reorganizations, reclassifications and consolidations.

In the event of a fundamental transaction approved by our board of directors, including but not limited to a transaction in which 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 our 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), other than one in which a successor entity that is a publicly traded corporation whose stock is quoted or listed on a trading market assumes the warrant such that the warrant shall be exercisable for the publicly traded common stock of such successor entity, then the Company or any successor entity will pay at the holder's option, exercisable at any time concurrently with or within 30 days after the consummation of the fundamental transaction, an amount of cash equal to the value of the remaining unexercised portion of the warrants on the date of consummation of the fundamental transaction as determined in accordance with the Black Scholes option pricing model.

The Series A Warrant and the Ladenburg Warrant are attached as exhibits to the registration statement of which this prospectus forms a part and is incorporated herein by reference.

2014 Warrant Issued to Hercules Technology III, L.P.

On June 30, 2014, the Company and its subsidiary entered into a Loan and Security Agreement with Hercules Technology Growth Capital, Inc. and Hercules Technology III, L.P. In connection with this agreement, the Company issued a warrant to Hercules Technology III, L.P. to purchase shares of common stock. As a result of the Company's reverse stock splits since this warrant was issued and certain subsequent issuances of other securities below the original exercise price of this warrant, this warrant is exercisable for 8,602 shares of common stock as of the date of this prospectus, at an exercise price of \$18.00 per share. This warrant contains 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. This warrant also has 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. The warrant 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. This warrant is attached as an exhibit to the registration statement of which this prospectus forms a part and is incorporated herein by reference.

2014 Unit Purchase Option and Related Warrants

In connection with a public offering of units, with each unit consisting of one share of common stock and one warrant to purchase multiple shares of common stock in December 2014 we issued to Dawson James Securities, Inc. a Unit Purchase Option (the "Unit Purchase Option") to purchase units. The Unit Purchase Option is exercisable until five years from the date of issuance. As a result of the Company's reverse stock splits since these units were issued, this Unit Purchase Option is exercisable for 3,178 units as of the date of this prospectus, at an exercise price of \$256.56 per unit. The Unit Purchase Option also has a net exercise provision under which the holder may, in lieu of payment of the exercise price in cash, surrender the Unit Purchase Option and receive a net number of units based on the fair market value of the units at the time of exercise of the Unit Purchase Option after deduction of the aggregate exercise price. The Unit Purchase Option also contains provisions for the adjustment of the exercise price and the aggregate number of units issuable upon the exercise of the Unit Purchase Option in the event of dividends, share splits, reorganizations, reclassifications and consolidations. The form of the Unit Purchase Option is attached as an exhibit to the registration statement of which this prospectus forms a part and is incorporated herein by reference.

The warrants issuable upon exercise of the Unit Purchase Option terminate on the fifth anniversary of the date of issuance. As a result of the Company's reverse stock splits, these warrants now have an exercise price of \$256.56 per share. The number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event

of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. This warrant contains 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.

Cashless Exercise Provision. Holders may exercise warrants by paying the exercise price in cash or, in lieu of payment of the exercise price in cash, at any time 120 days after issuance, by electing to receive a cash payment from us equal to the Black Scholes Value (as defined below) of the number of shares the holder elects to exercise (the "Black Scholes Payment"); provided that we have discretion as to whether to deliver the Black Scholes Payment or, subject to meeting certain conditions, to deliver a number of shares of our common stock determined according to the following formula:

Total Shares = $(A \times B) / C$

Where:

Total Shares is the number of shares of common stock to be issued upon a cashless exercise A is the total number of shares with respect to which the warrant is then being exercised.

B is the Black Scholes Value (as defined below).

C is the closing bid price of our common stock as of two trading days prior to the time of such exercise.

As defined in the warrants, "Black Scholes Value" means the Black Scholes value of an option for one share of our common stock at the date of the applicable Black Scholes Payment or cashless exercise, as such Black Scholes value is determined, calculated using the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg utilizing (i) an underlying price per share equal to the closing bid price of the common stock as of trading day immediately preceding the date of issuance of the warrant, (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of the warrant as of the applicable Black Scholes Payment or cashless exercise, (iii) a strike price equal to the exercise price in effect at the time of the applicable Black Scholes Payment or cashless exercise, (iv) an expected volatility equal to 135% and (v) a remaining term of such option equal to five (5) years (regardless of the actual remaining term of the warrant).

If, at any time a warrant is outstanding, the Company consummates any fundamental transaction, as described in the warrants and generally including any consolidation or merger into another corporation, or the sale of all or substantially all of our assets, or other transaction in which our common stock is converted into or exchanged for other securities or other consideration, the holder of any warrants will thereafter receive, the securities or other consideration to which a holder of the number of shares of common stock then deliverable upon the exercise or exchange of such warrants would have been entitled upon such consolidation or merger or other transaction. Notwithstanding the foregoing, in connection with a fundamental transaction, at the request of a holder of warrants we will be required to purchase the warrant from the holder by paying to the holder cash in an amount equal to the Black Scholes value of the warrant, as described in such warrant. The form of this warrant is attached as an exhibit to the registration statement of which this prospectus is a part and is incorporated herein by reference.

Kipke Warrant

As compensation paid in connection with the consummation of a bridge financing in 2014, the Company issued a warrant to purchase shares of common stock to Karl Kipke, who acted as a financial advisor in the bridge financing. As a result of the Company's reverse stock splits this warrant is exercisable for 139 shares of common stock as of the date of this prospectus, at an exercise price of \$205.20 per share. The warrant has 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. The form of this warrant is attached as an exhibit to the registration statement of which this prospectus is a part and is incorporated herein by reference.

Westlake Securities Warrants - 2014

As compensation paid in connection with the consummation of two private placements in 2014, the Company issued two warrants to Westlake Securities LLC (the "2014 Westlake Warrants"). The first 2014 Westlake Warrant was issued September 17, 2014, and the second 2014 Westlake Warrant was issued November 12, 2014. The 2014 Westlake Warrants are each exercisable for five years after the date of issuance. As a result of the Company's reverse stock splits

the first 2014 Westlake Warrant is exercisable for 278 shares of common stock as of the date of this prospectus at an exercise price of \$154.80 per share, and the second 2014 Westlake Warrant is exercisable for 833 shares of common stock as of the date of this prospectus at an exercise price of \$225.00 per share. The 2014 Westlake 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 the 2014 Westlake Warrants 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 2014 Westlake Warrants are attached as exhibits to the registration statement of which this prospectus is a part and are 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 the Company's reverse stock splits since these warrants were issued and other corporate changes, these warrants are exercisable for 375 shares of common stock as of the date of this prospectus, at an exercise price of \$9,279.00 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.

Registration Rights

We have entered into various agreements with holders of shares of our common stock and warrants to acquire shares of our common stock that under certain circumstances require us to register with the SEC such shares of common stock and the shares of common stock issuable upon exercise of the warrants. These registration rights are generally subject to certain conditions and limitations, including our right to limit the number of shares included in any such registration under certain circumstances. We are generally required to pay all expenses incurred in connection with registrations effected in connection with the registration rights, excluding selling expenses such as broker commissions and underwriting discounts. The registration rights may be transferred to any transferee or assignee of the holder of such registrations rights who agrees to be bound by the terms of the registration rights agreement.

Furthermore, the terms of the agreements generally provide that we will not be required to maintain the effectiveness of any registration statement, or file another registration statement, with respect to any registrable securities that are not subject to the current public information requirement under Rule 144 and that are eligible for resale without volume or manner-of-sale restrictions.

Piggyback Rights. Pursuant to the terms of the warrant issued to Hercules Technology III, L.P. ("Hercules Technology") on June 30, 2014 (the "Hercules Warrant"), if at any time while the Hercules Warrant is outstanding we file a registration statement under the Securities Act to register the sale of any of our securities, we will be required to include in such registration statement the shares of common stock underlying the Hercules Warrant. We intend to seek a waiver of these piggyback registration rights from Hercules Technology in connection with this registration statement.

Pursuant to the terms of the Unit Purchase Option, if at any time while the Unit Purchase Option is outstanding, we file a registration statement under the Securities Act to register the sale of any of our securities, we will be required to include in such registration statement the shares of common stock underlying the Unit Purchase Option. We intend to seek a waiver of these registration rights in connection with this registration statement.

Generally, the foregoing piggyback registration rights do not apply to registrations of our securities that we initiate that are (i) issuable in connection with our acquisition of another entity or business or (ii) incidental to any of our equity compensation, employee stock purchase or other employee benefit plans or any sales agent/distributor equity incentive program that we may implement.

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

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

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

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

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

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

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

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

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

Transfer Agent and Registrar

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

Stock Market Listing

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

DESCRIPTION OF DEBT SECURITIES

This section describes the general terms and provisions of the debt securities that we may offer using this prospectus and the related indenture. This section is only a summary and does not purport to be complete. You must look to the relevant form of debt security and the related indenture for a full understanding of all terms of any series of debt securities. The form of debt security and the related indenture have been or will be filed or incorporated by reference as exhibits to the registration statement of which this prospectus is a part. See "Where You Can Find More Information" for information on how to obtain copies.

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

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

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

General

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

give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us.

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

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

the title of the series of debt securities;

any limit upon the aggregate principal amount that may be issued;

the maturity date or dates;

the form of the debt securities of the series;

the applicability of any guarantees;

whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;

whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;

if the price (expressed as a percentage of the aggregate principal amount thereof) at which such debt securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such debt securities that is convertible into another security or the method by which any such portion shall be determined;

the interest rate or rates, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

our right, if any, to defer payment of interest and the maximum length of any such deferral period;

if applicable, the date or dates after which, or the period or periods during which, and the price or prices at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;

the date or dates, if any, on which, and the price or prices at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;

any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;

whether the debt securities of the series shall be issued in whole or in part in the form of a global security or securities; the terms and conditions, if any, upon which such global security or securities may be exchanged in whole or in part for other individual securities; and the depositary for such global security or securities;

if applicable, the provisions relating to conversion or exchange of any debt securities of the series and the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange;

if other than the full principal amount thereof, the portion of the principal amount of debt securities of the series which shall be payable upon declaration of acceleration of the maturity thereof;

additions to or changes in the covenants applicable to the particular debt securities being issued, including, among others, the consolidation, merger or sale covenant;

additions to or changes in the events of default with respect to the securities and any change in the right of the trustee or the holders to declare the principal, premium, if any, and interest, if any, with respect to such securities to be due and payable;

additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;

additions to or changes in the provisions relating to satisfaction and discharge of the indenture;

additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of holders of debt securities issued under the indenture;

the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;

whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;

the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any, and principal amounts of the debt securities of the series to any holder that is not a "United States person" for federal tax purposes;

any restrictions on transfer, sale or assignment of the debt securities of the series; and

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

Conversion or Exchange Rights

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

Consolidation, Merger or Sale

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

Events of Default under the Indenture

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

if we fail to pay any installment of interest on any series of debt securities, as and when the same shall become due and payable, and such default continues for a period of 90 days; provided, however, that a valid extension of an interest payment period by us in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of interest for this purpose;

if we fail to pay the principal of, or premium, if any, on any series of debt securities as and when the same shall become due and payable whether at maturity, upon redemption, by declaration or otherwise, or in any payment required by any sinking or analogous fund established with respect to such series; provided, however, that a valid extension of the maturity of such debt securities in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of principal or premium, if any;

if we fail to observe or perform any other covenant or agreement contained in the debt securities or the indenture, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive written notice of such failure, requiring the same to be remedied and stating that such is a notice of default thereunder, from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and

if specified events of bankruptcy, insolvency or reorganization occur.

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

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

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

the direction so given by the holder is not in conflict with any law or the applicable indenture; and

subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

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

the holder has given written notice to the trustee of a continuing event of default with respect to that series;

the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request;

such holders have offered to the trustee indemnity satisfactory to it against the costs, expenses and liabilities to be incurred by the trustee in compliance with the request; and

the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

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

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

Modification of Indenture; Waiver

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

to cure any ambiguity, defect or inconsistency in the indenture or in the debt securities of any series;

to comply with the provisions described above under "Description of Debt Securities—Consolidation, Merger or Sale;

to provide for uncertificated debt securities in addition to or in place of certificated debt securities;

to add to our covenants, restrictions, conditions or provisions such new covenants, restrictions, conditions or provisions for the benefit of the holders of all or any series of debt securities, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred upon us in the indenture;

to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;

to make any change that does not adversely affect the interests of any holder of debt securities of any series in any material respect;

to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided above under "Description of Debt Securities—General" to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;

to evidence and provide for the acceptance of appointment under any indenture by a successor trustee; or

to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act.

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

extending the fixed maturity of any debt securities of any series;

reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any series of any debt securities; or

reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

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

provide for payment;

register the transfer or exchange of debt securities of the series;

replace stolen, lost or mutilated debt securities of the series;

pay principal of and premium and interest on any debt securities of the series;

maintain paying agencies;

hold monies for payment in trust;

recover excess money held by the trustee;

compensate and indemnify the trustee; and

appoint any successor trustee.

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

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

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

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

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

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

issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange of any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

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

Payment and Paying Agents

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

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

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

payment thereof.

Governing Law

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

DESCRIPTION OF WARRANTS

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

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of warrant document or agreement that describes the terms of the particular warrants we are offering before the issuance of the related warrants. The following summaries of material provisions of the warrants are subject to, and qualified in their entirety by reference to, all the provisions of the warrant document or agreement applicable to particular warrants. We urge you to read the applicable prospectus supplement and any applicable free writing prospectus related to the particular warrants that we sell under this prospectus, as well as the complete warrant document or agreement that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms relating to the warrants, including, if applicable:

the offering price and aggregate number of warrants offered;

the currency for which the warrants may be purchased;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

if applicable, the date on and after which the warrants and the related securities will be separately transferable;

in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased

upon such exercise;

in the case of warrants to purchase shares of common stock or shares of preferred stock, the number of shares of common stock or shares of preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

the dates on which the right to exercise the warrants will commence and expire;

the manner in which the warrant agreements and warrants may be modified;

material United States federal income tax consequences of holding or exercising the warrants;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

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

in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or

in the case of warrants to purchase shares of common stock or shares of preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

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

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth in the warrant agreement or documents and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

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

DESCRIPTION OF RIGHTS

We may issue rights to purchase our common stock, preferred stock, or warrants in one or more series. Rights may be issued independently or together with any other offered security and may or may not be transferable by the person purchasing or receiving the subscription rights. In connection with any rights offering to our shareholders, we may enter into a standby underwriting arrangement with one or more underwriters pursuant to which the underwriters will purchase any of the offered securities remaining unsubscribed after the expiration of the rights offering. In connection with a rights offering to our shareholders, we will distribute certificates evidencing the rights and an applicable prospectus supplement to our shareholders on the record date that we set for receiving rights in the rights offering. An applicable prospectus supplement will describe the following terms of rights in respect of which this prospectus is being delivered:

the title of the rights;

the securities for which the rights are exercisable;

the exercise price for the rights;

the date of determining the security holders entitled to the rights distribution;

the number of the rights issued to each security holder;

the extent to which the rights are transferable;

if applicable, a discussion of the material United States federal income tax considerations applicable to the issuance or exercise of the rights;

the date on which the right to exercise the rights shall commence, and the date on which the rights shall expire (subject to any extension);

the conditions to completion of the rights offering;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the rights;

the extent to which the rights include an over-subscription privilege with respect to unsubscribed securities;

if applicable, the material terms of any standby underwriting or other purchase arrangement that we may enter into in connection with the rights offering; and

any other terms of the rights, including terms, procedures and limitations relating to the exchange and exercise of the rights.

Each right will entitle the holder to purchase for cash the amount of securities, at the exercise price. Rights may be exercised at any time up to the close of business on the expiration date of the rights. After the close of business on the expiration date, all unexercised rights will become void. The manner in which rights may be exercised will be described in an applicable prospectus supplement. We may, but we will not be required to, permit the exercise of rights through the delivery of a notice of guaranteed delivery from a bank, a trust company, or a New York Stock Exchange member guaranteeing delivery of (1) payment of the exercise price for the securities for which the rights are being exercised, and (2) a properly completed and executed rights certificate. The notice of guaranteed delivery must be received by the rights agent before the expiration of the rights, and the rights agent will not honor a notice of guaranteed delivery unless a properly completed and executed rights certificate and full payment for the securities being purchased are received by the rights agent by the close of business on the third business day after the expiration time of the rights. Upon receipt of payment and the proper completion and due execution of the rights certificate at the designated office of the rights agent or any other office indicated in an applicable prospectus supplement, we or the transfer agent will forward, as soon as practicable, the securities purchased through the exercise of the rights. We may determine to offer any unsubscribed offered securities directly to persons other than shareholders, to or through agents, underwriters or dealers or through a combination of the methods, including pursuant to standby underwriting arrangements, as set forth in an applicable prospectus supplement.

DESCRIPTION OF UNITS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the units we are offering, and any supplemental agreements, before the issuance of the related units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to particular units. We urge you to read the applicable prospectus supplements related to the particular units that we sell under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units comprised of one or more debt securities, shares of common stock, shares of preferred stock, warrants and rights, in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the units, including:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

any provisions of the governing unit agreement that differ from those described below; and

any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under "Description of Capital Stock," "Description of Debt Securities," "Description of Warrants" and "Description of Rights" will apply to each unit and to any shares of common, shares of preferred stock, debt security or warrant included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

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

We, the unit agents, and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, direct sales to the public, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, directly to one or more purchasers, or through any combination of these methods. The distribution of the securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to the prevailing market prices or at negotiated prices.

We may issue securities to other companies or their security holders to acquire those companies or equity interests in those companies, or to acquire assets of those companies, through mergers or consolidations with us or any of our subsidiaries, or through the exchange of our securities for securities of the other companies, or through the exchange of assets of other companies for our securities, or through similar transactions. We may also issue securities to third parties to acquire patents or other intellectual property or licenses or similar rights to use patents or other intellectual property.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

the name or names of any underwriters or dealers, if any;

the purchase price of the securities and the proceeds we will receive from the sale;

any over-allotment options under which underwriters may purchase additional securities from us;

any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;

any public offering price;

any discounts or concessions allowed or reallowed or paid to dealers; and

any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

By Underwriters

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement. Any public offering price and any discounts or concessions allowed or reallowed may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

By Dealers

If a dealer is utilized in the sale of any securities offered by this prospectus, we will sell those securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. We will set forth the names of the dealers and the terms of the transaction in the applicable prospectus supplement.

By Agents

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

By Direct Sales

We may also directly sell securities offered by this prospectus. In this case, no underwriters or agents would be involved. We will describe the terms of those sales in the applicable prospectus supplement.

Electronic Auctions

We also may make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of the securities, you will want to pay particular attention to the description of that system we will provide in an applicable prospectus supplement.

The electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which the securities are sold. These bidding or ordering systems may present to each bidder, on a so-called "real-time" basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder's individual bids would be accepted, prorated or rejected. Of course, many pricing methods can and may also be used.

Upon completion of the electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

General Information

Underwriters, dealers and agents that participate in the distribution of the securities offered by this prospectus may be deemed underwriters under the Securities Act, and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act.

We may authorize agents, dealers or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities related to this offering, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

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

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third parties may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of shares, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of shares. The third parties in such sale transactions will be identified in the applicable prospectus supplement.

One or more firms, referred to as "remarketing firms," may also offer or sell the securities, if the prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as agents for us. These remarketing firms will offer or sell the securities in accordance with the terms of the securities. The prospectus supplement will identify any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm's compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. This short sales position may involve either "covered" short sales or "naked" short sales. Covered short sales are short sales made in an amount not greater than the underwriters' over-allotment option to purchase additional securities in this offering described above. The underwriters may close out any covered short position either by exercising their over-allotment option or by purchasing securities in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of securities available for purchase in the open market, as compared to the price at which they may purchase securities through the over-allotment option. Naked short sales are short sales in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the securities that could adversely affect investors who purchase securities in this offering. Stabilizing transactions permit bids to purchase the underlying security for the purpose of fixing the price of the security so long as the stabilizing bids do not exceed a specified maximum. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions.

Any underwriters who are qualified market makers on The NASDAQ Capital Market may engage in passive market making transactions in our common stock, preferred stock, warrants, units and debt securities, as applicable, on The NASDAQ Capital Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

Similar to other purchase transactions, an underwriter's purchase to cover the syndicate short sales or to stabilize the market price of our securities may have the effect of raising or maintaining the market price of our securities or preventing or mitigating a decline in the market price of our securities. As a result, the price of our securities may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of the securities if it discourages resales of the securities.

Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of the securities. If such transactions are commenced, they may be discontinued without notice at any time.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

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

LEGAL MATTERS

Dorsey & Whitney LLP, Salt Lake City, Utah will pass for us upon the validity of the securities being offered by this prospectus and applicable prospectus supplement, and counsel named in the applicable prospectus supplement will pass upon legal matters for any underwriters, dealers or agents.

EXPERTS

The consolidated financial statements of SINTX Technologies, Inc., as of December 31, 2018 and 2017, and for each of the years in the two-year period ended December 31, 2018, 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.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities we are offering under this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, where our SEC filings are also available. The address of the SEC's web site is "http://www.sec.gov." We maintain a website at www.sintx.com. Information contained in or accessible through our website does not constitute a part of this prospectus.

INCORPORATION BY REFERENCE

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

our Annual Report on Form 10-K for the year ended December 31, 2018;

our Current Report on Form 8-K filed on February 19, 2019;

our definitive proxy statement filed on Schedule 14A on March 25, 2019; and

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, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, excluding, in each case, information deemed furnished and not filed until we sell all of the securities we are offering or the termination of the offering. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the information that has been incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents. Requests should be directed to: SINTX Technologies, Inc., Attention: Investor Relations, 1885 West 2100 South, Salt Lake City, Utah 84119 and our telephone number is (801) 839-3500.

\$50,000,000	
SINTX Technologies, Inc.	
Common Stock,	
Preferred Stock,	
Debt Securities,	
Warrants,	
Rights and Units	

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the estimated costs and expenses, other than underwriting discounts and commissions, payable by the registrant in connection with the offering of the securities being registered. All the amounts shown are estimates, except for the SEC registration fee and the FINRA filing fee.

SEC registration fee	\$6,060.00
FINRA Filing Fee	8,000.00
Accounting fees and expenses	*
Legal fees and expenses	*
Transfer Agent and Registrar Fees and Expenses	*
Miscellaneous expenses	*
Total	*

^{*}These fees are calculated based on the number of issuances and amount of securities offered and accordingly cannot be estimated at this time. An estimate of the aggregate amount of these expenses will be reflected in the applicable prospectus supplement.

Item 15. Indemnification of Officers and Directors

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

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

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

from any breach of the director's duty of loyalty to us or our stockholders;

from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

under Section 174 of the Delaware General Corporation Law; or

from any transaction from which the director derived an improper personal benefit.

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

At the present time, there is no pending litigation or proceeding involving a director, officer, employee or other agent of ours in which indemnification would be required or permitted. We are not aware of any threatened litigation or proceeding, which may result in a claim for such indemnification.

Item 16. Exhibits

The exhibits listed on the accompanying Exhibit Index are filed or incorporated by reference as part of this registration statement and such Exhibit Index is incorporated by reference.

Item 17. Undertakings

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 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(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 the undertakings set forth in paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if 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 the registration statement or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the 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 under the Securities Act of 1933 to any purchaser:
- (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser: (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424; (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant; (iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) 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.

(7) 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 Securities 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 Securities Act of 1933 and will be governed by the final adjudication of such issue.

(8) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Trust Indenture Act.

EXHIBIT INDEX

E 1914			Incorporated by		SEC
Exhibit	Exhibit Description	Filed	Reference herein	Filing Date	File/Reg.
Number	<u>=</u>	herewith	from	Date	Number
1.1*	Form of Underwriting Agreement		Form or Schedule		
2.1	Asset Purchase Agreement		Form 8-K (Exhibit 2.1)	10/5/18	001-33624
3.1	Restated Certificate of Incorporation of the Registrant		Form 8-K (Exhibit 3.1)	2/20/14	001-33624
3.2	Certificate of Amendment to the Restated Certificate of Incorporation of SINTX Technologies, Inc. (fka Amedica Corporation)		Form 8-K (Exhibit 3.1)	1/22/16	001-33624
3.3	Certificate of Amendment to the Restated Certificate of Incorporation of SINTX Technologies, Inc. (fka Amedica Corporation)		Form 8-K (Exhibit 3.1)	11/16/17	001-33624
3.4	Certificate of Amendment to the Restated Certificate of Incorporation of SINTX Technologies, Inc. (fka Amedica Corporation)		Form 8-K (Exhibit 3.1)	11/2/18	001-33624
3.5	Restated Bylaws of the Registrant		Form 8-K (Exhibit 3.2)	2/20/14	001-33624
3.6	Amendment to Bylaws of SINTX Technologies, Inc. (fka Amedica Corporation)		Form 8-K (Exhibit 3.1)	11/2/18	001-33624
3.7	Certificate of Designation of Series B Preferred Stock		Form 8-K (Exhibit 3.1)	5/15/18	001-33624
4.1	Form of Common Stock Certificate of the Registrant		Amendment No. 3 to Form S-1 (Exhibit 4.1)	1/29/14	333-192232
4.2	Form of Indenture	X			
4.3*	Form of Note				
4.4*	Form of Certificate of Designation				
4.5*	Form of Preferred Stock Certificate				
4.6*	Form of Warrant Agreement				
4.7*	Form of Warrant Certificate				
4.8*	Form of Unit Agreement				
4.9*	Form of Unit Certificate				
4.10*	Form of Rights Certificate				
4.11	Warrant by and between the Registrant and GE Capital Equity Investments, Inc., dated as of December 17, 2012		Form S-1 (Exhibit 4.10)	11/8/13	333-192232
4.12	Warrant by and between the Registrant and Zions First National Bank, dated as of December 17, 2012		Form S-1 (Exhibit 4.11)	11/8/13	333-192232
4.13	Hercules Warrant to Purchase Common Stock			7/1/2014	001-33624

		Form 8-K (Exhibit 4.3)	
4.14	Form of Warrant to be Issued to Investors in the Offering	Form S-1 (Exhibit 4.24)	11/20/14 333-199753
4.15	Form of Unit Purchase Option to be Issued to the Underwriters in the Offering	Form S-1 (Exhibit 4.25)	11/20/14 333-199753

4.16	Form of Warrant Agent Agreement by and between the Registrant and American Stock Transfer and Trust Company	Form S-1 (Exhibit 4.26)	11/20/14	333-199753
4.17	Form of Warrant to Purchase Shares of Common Stock of the Registrant issued on September 17, 2014.	Form 10-K (Exhibit 4.27)	3/24/15	001-33624
4.18	Form of Warrant to Purchase Shares of Common Stock of the Registrant issued on November 12, 2014.	Form 10-K (Exhibit 4.28)	3/24/15	001-33624
4.19	Form of Amended and Restated Series A Warrant	Form 8-K (Exhibit 4.1)	12/14/15	001-33624
4.20	Form of Common Stock Purchase Warrant issued on April 4, 2016.	Form 8-K (Exhibit 4.1)	4/05/16	001-33624
4.21	Form of Series E Warrant	Form S-1 (Exhibit 4.25)	6/30/16	333-211520
4.22	Form of Underwriters Warrant Issued in July 2016 Offering	Form S-1 (Exhibit 4.26)	6/30/16	333-211520
4.23	Form of Warrant	Form 8-K (Exhibit 4.1)	1/20/17	001-33624
4.24	Secured Promissory Note with North Stadium Investments, LLC	Form 8-K (Exhibit 4.1)	8/3/17	001-33624
4.25	North Stadium Investments, LLC Warrant to Purchase Common Stock	Form 8-K (Exhibit 4.2)	8/3/17	001-33624
4.26	Form of Warrant Issued to Karl Kipke	Form S-1 (Exhibit 4.25)	4/26/18	333-223032
4.27	Form of Series F Common Stock Purchase Warrant	Form S-1 (Exhibit 4.26)	4/26/18	333-223032
4.28	Form of Common Stock Warrant	Form S-1 (Exhibit 4.27)	5/9/18	333-223032
4.29	Form of Warrant Agency Agreement between Amedica Corporation and American Stock Transfer and Trust Company, LLC	Form S-1 (Exhibit 4.28)	4/26/18	333-223032
4.30	Form of Warrant to be Issued to the Underwriters	Form S-1 (Exhibit 4.29)	5/1/18	333-223032
4.31	Westlake Securities LLC Common Stock Purchase Warrant	Form S-1 (Exhibit 4.30)	4/26/18	333-223032
4.32	Form of Common Stock Purchase Warrant Issued on September 11, 2015	Form 8-K (Exhibit 4.1)	9/18/15	001-33624
4.33	Common Stock Warrant	Form 8-K (Exhibit 4.1)	5/15/1	8 001-33624
5.1	Opinion of Dorsey & Whitney LLP	X		
23.1	Consent of Tanner LLC, Independent Registered Public Accounting Firm	X		
23.2	Consent of Dorsey & Whitney LLP (included in Exhibit 5.1)			
24.1	Power of Attorney (included on the signature page of this Registration Statement)			
25.1*	Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939, as amended, of Trustee under the Indenture			

*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.

**To be filed separately under the electronic form type 305B2, if applicable.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Salt Lake City, State of Utah, on March 25, 2019.

SINTX TECHNOLOGIES, INC.

BY:/s/B. Sonny Bal
B. Sonny Bal
President and Chief Executive Officer

Each person whose signature appears below constitutes and appoints B. Sonny Bal and David W. Truetzel, his or her true and lawful attorney-in-fact and agent with full powers of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and all additional registration statements pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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.

NAME AND SIGNATURE	TITLE	DATE
/s/ B. Sonny Bal B. Sonny Bal	Chief Executive Officer and Director (Principal Executive Officer and Principal Financial Officer)	March 25, 2019
/s/ David W. Truetzel David W. Truetzel	Director	March 25, 2019
/s/ Jeffrey S. White Jeffrey S. White	Director	March 25, 2019

/s/ Eric A. Stookey Eric A. Stookey

Director

March 25, 2019