
**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
(State or other jurisdiction of
incorporation or organization)

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

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

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

Copies to:

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111 South Main Street, Suite 2100
Salt Lake City, Utah 84111

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement as determined by the selling stockholders.

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:

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
Non-accelerated filer

Accelerated filer
 Smaller reporting company
 Emerging growth company

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

This registration statement shall hereafter become effective in accordance with the provisions of section 8(a) of the Securities Act of 1933.

The information in this prospectus is not complete and may be changed. The selling stockholders 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 the offer or sale is not permitted.

**SUBJECT TO COMPLETION
PRELIMINARY PROSPECTUS**

DATED OCTOBER 23, 2025

SINTX Technologies, Inc.



1,741,539 Shares of Common Stock Offered by the Selling Stockholders

This prospectus relates to the offer and resale by the selling stockholders identified in this prospectus or their donees, pledgees, assignees, transferees, distributees or other successors-in-interest (the “selling stockholders”) of up to an aggregate of 1,741,539 shares (the “Shares”) of our common stock, par value \$0.01 per share (the “common stock”), issued by us in connection with a private placement on February 20, 2025 consisting of (i) 1,649,147 shares of our common stock (the “Common Warrant Shares”) issuable upon the exercise of common warrants to purchase shares of our common stock held by selling stockholders (the “Common Warrants”), and (ii) placement agent warrants (the “Placement Agent Warrants” and together with the Common Warrants, the “Warrants”) to purchase an aggregate of up to 92,392 shares of common stock (the “Placement Agent Warrant Shares” and together with the Common Warrant Shares, the “Warrant Shares”). The Warrants were issued to the selling stockholders in a private placement (the “Private Placement”) pursuant to an inducement letter dated September 8, 2025.

We are not selling any shares of common stock under this prospectus and will not receive any proceeds from the sale by the selling stockholders of the Shares. We would, however, receive proceeds of up to approximately \$8.3 million upon the exercise for cash of the Warrants held by the selling stockholders. Proceeds, if any, received from the exercise of such Warrants will be used for general corporate purposes and working capital. No assurances can be given that any Warrants will be exercised or that we will receive any cash proceeds upon such exercise if cashless exercise is available.

Sales of the Shares by the selling stockholders may occur at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices. The selling stockholders may sell Shares from time to time to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the selling stockholders, the purchasers of the Shares, or both.

We are paying the cost of registering the shares of common stock covered by this prospectus as well as various related expenses. The selling stockholders are responsible for all broker or similar commissions related to the offer and sale of their Shares. See the section titled “Plan of Distribution” on page 23 for more information about how the selling stockholders may sell or dispose of their Shares.

Our common stock is listed on the Nasdaq Capital Market under the trading symbol “SINT.” On October 22, 2025, the last reported sale price of our common stock was \$3.25 per share.

We are a “smaller reporting company” as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and the documents incorporated by reference herein and may elect to comply with reduced public company reporting requirements in future filings.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the section titled “Risk Factors” on page 6 of this prospectus and any similar section contained in any amendment or supplement to this prospectus or in any filing with the Securities and Exchange Commission that is incorporated by reference into this prospectus.

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

The date of this prospectus is , 2025.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (“SEC”). Under this registration statement, the selling stockholders may sell from time to time in one or more offerings the common stock described in this prospectus. We will not receive any proceeds from the sale of common stock by the selling stockholders pursuant to this prospectus, except for cash received upon any exercise of the Warrants, if any.

This prospectus may be supplemented from time to time by one or more prospectus supplements. Such prospectus supplement may also add, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you must rely on the information in the prospectus supplement. You should carefully read both this prospectus and any applicable prospectus supplement together with additional information described under the heading “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference.” before deciding to invest in the Shares being offered.

We and the selling stockholders have not authorized anyone to provide you with information other than the information that we have provided or incorporated by reference in this prospectus and your reliance on any unauthorized information or representation is at your own risk. This prospectus may be used only in jurisdictions where offers and sales of these securities are permitted. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, this offering of our securities and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

You should assume that the information appearing in this prospectus is accurate only as of the date of this prospectus and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, or any sale of our common stock. Our business, financial condition and results of operations may have changed since those dates.

Unless otherwise mentioned or unless the context indicates otherwise, all references in this prospectus to the “Company,” “we,” “us” and “our” refer to the business of Sintx Technologies, Inc., a Delaware corporation, and its consolidated subsidiaries.

PROSPECTUS SUMMARY

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

Overview

SINTX Technologies is an advanced ceramics company formed in December 1996, that develops and commercializes materials, components, and technologies for medical and agribiotech applications. SINTX provides biomedical solutions for medical devices specializing in silicon nitride (Si_3N_4) for musculoskeletal and antipathogenic applications. SINTX is a global leader in the research, development, and manufacturing of silicon nitride, and its products have been implanted in humans since 2008.

SINTX Core Business

Biomedical Applications: Since its inception, SINTX has been focused on medical grade silicon nitride. SINTX biomedical products have been shown to be biocompatible, bioactive, antipathogenic, and to have superb bone affinity. Spinal implants made from SINTX silicon nitride have been successfully implanted in humans since 2008 in the U.S., Europe, South America and Asia. This established use, along with its inherent resistance to bacterial adhesion and bone affinity suggests that it may also be suitable in other fusion device applications such as arthroplasty implants, foot wedges, and dental implants. More recently, in July 2025, SINTX submitted a 510(k) premarket notification to the U.S. Food and Drug Administration ("FDA") for its novel silicon nitride osteotomy wedges, marking its official entry into the foot and ankle reconstruction market. These next-generation implants blend cutting-edge biomaterials science with surgical precision and are designed to elevate standards in orthopedic procedures. Bacterial infection of any biomaterial implants is always a concern. SINTX silicon nitride has been shown to be resistant to bacterial colonization and biofilm formation, making it antibacterial. SINTX silicon nitride products can be polished to a smooth and wear-resistant surface for articulating applications, such as bearings for hip and knee replacements.

We believe that silicon nitride has a superb combination of properties that make it suited for long-term human implantation. Other biomaterials are based on bone grafts, metal alloys, and polymers- all of which have well-known practical limitations and disadvantages. In contrast, silicon nitride has a legacy of success in the most demanding and extreme industrial environments. As a human implant material, silicon nitride offers bone ingrowth, resistance to bacterial and viral infection, ease of diagnostic imaging, resistance to corrosion, and superior strength and fracture resistance, 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.

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

We presently manufacture advanced ceramic powders and components in our manufacturing facilities based in Salt Lake City, Utah. The SINTX Salt Lake City facility is registered with the FDA, is cGMP and ANVISA RDC 665 compliant, as well as being ISO 9001:2015, ISO 13485:2016 certified, and ASD9100D certified. The Company's products are primarily sold in the United States.

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.

This prospectus may include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included herein are the property of their respective owners.

Smaller Reporting Company Status

We are a smaller reporting company as defined in the Securities Exchange Act of 1934, as amended (the “Exchange Act”). We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as (i) our voting and non-voting common stock held by nonaffiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter or (ii) our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

The Offering

Shares of common stock offered by the selling stockholders	We are registering the resale by the selling stockholders of an aggregate of 1,741,539 Shares, consisting of (i) 1,649,147 Common Warrant Shares, and (ii) 92,392 Placement Agent Warrant Shares.
Common stock outstanding	3,683,989 shares
Common stock outstanding assuming exercise of all Warrants	5,425,528 shares
Terms of the offering	Each selling stockholder will determine when and how it will sell the common stock offered in this prospectus, as described in the “Plan of Distribution” on page 23.
Use of proceeds	We will not receive any proceeds from the sale of the Shares. In the event the selling stockholders exercise all of the Warrants for cash, we will, receive an aggregate of approximately \$8.3 million of gross proceeds, assuming all of the Warrants, including the Placement Agent Warrants. Any proceeds that we receive from the exercise of such Warrants will be used for working capital and general corporate purposes.
Risk Factors	See “Risk Factors” on page 6 for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Nasdaq Capital Market symbol	Our common stock is listed on the Nasdaq Capital Market under the symbol “SINT.”

The number of shares of common stock to be outstanding after this offering is based on 3,683,989 shares of common stock outstanding as of October 20, 2025 and excludes, in each case as of October 20, 2025:

- 735,334 shares of common stock issuable upon the exercise of outstanding options at a weighted average exercise price of \$8.70 per share and restricted stock units granted under our equity incentive plans;
- 1,405,807 shares of common stock issuable upon the exercise of outstanding warrants, excluding the Warrants;
- 7,385 shares of our common stock issuable upon the conversion of 19 shares of series B convertible preferred stock outstanding;
- 2 shares of our common stock issuable upon the conversion of 50 shares of series C convertible preferred stock outstanding; and
- 60 shares of common stock reserved for issuance upon conversion of 180 shares of the Series D Preferred Stock outstanding.

Unless otherwise indicated, the information in this prospectus, including the number of shares outstanding after this offering, does not reflect (i) any issuance, exercise, vesting, expiration, or forfeiture of any additional equity awards under our incentive plans that occurred after October 20, 2025 or (ii) the effect of the “full-ratchet” anti-dilution adjustment of the conversion price of our outstanding Series B Convertible Preferred Stock by this offering.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents we have filed with the SEC that are incorporated by reference contain “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Exchange Act, which involve risks and uncertainties. These statements relate to future events or to our future operating or financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. 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.”

In some cases, you can identify forward-looking statements by terms such as “anticipates,” “believes,” “could,” “estimates,” “expects,” “may,” “plans,” “potential” “predicts,” “projects,” “should,” “will,” “would,” and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and are subject to risks and uncertainties. Given these assumptions, risks and uncertainties, you should not place undue reliance on these forward-looking statements. We discuss in greater detail many of these risks under the heading “Risk Factors” contained in the this prospectus, in any applicable prospectus supplement, in any free writing prospectuses we may authorize for use in connection with a specific offering, and in our most recent Annual Report on Form 10-K and in our most recent Quarterly Report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement. 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. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

You should read this prospectus, any applicable prospectus supplement, together with the documents we have filed with the SEC that are incorporated by reference and any free writing prospectuses that we may authorize for use in connection with a specific offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties discussed in this section and under the sections titled Risk Factors contained in our most recent Annual Report on Form 10-K and in our subsequent Quarterly Reports on Form 10-Q for the quarterly periods ended subsequent to our filing of such Annual Report on Form 10-K, as well as any amendments or updates to our risk factors reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus, together with other information in this prospectus, the documents incorporated by reference, any prospectus supplement and any free writing prospectus that we may authorize. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any additional risks and uncertainties actually occur, our business, financial condition, results of operations and cash flow could be materially and adversely affected. In that case, the trading price of our common stock could decline and you might lose all or part of your investment. Please also read carefully the section titled "Special Note Regarding Forward-Looking Statements."

Risks Related to Our Business

You should read and consider risk factors specific to our business before making an investment decision. Those risks are described in the sections entitled "Risk Factors" in our annual report on Form 10-K for the fiscal year ended December 31, 2024, and in other documents incorporated by reference into this prospectus. Please be aware that additional risks and uncertainties not currently known to us or that we currently deem to be immaterial could also materially and adversely affect our business, results of operations, financial condition, cash flows or prospects.

Risks Related to this Offering

The sale or availability for sale of shares issuable upon exercise of the Warrants may depress the price of our common stock and encourage short sales by third parties, which could further depress the price of our common stock.

To the extent that the selling stockholders sell shares of our common stock issued upon exercise of the Warrants, the market price of such shares may decrease due to the additional selling pressure in the market. In addition, the dilution from issuances of such shares may cause stockholders to sell their shares of our common stock, which could further contribute to any decline in the price of our common stock. Any downward pressure on the price of our common stock caused by the sale or potential sale of such shares could encourage short sales by third parties. Such sales could place downward pressure on the price of our common stock by increasing the number of shares of our common stock being sold, which could further contribute to any decline in the market price of our common stock.

Future sales and issuances of our common stock or other securities might result in significant dilution and could cause the price of our common stock to decline.

To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions, at prices and in a manner we determine from time to time. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

We cannot predict what effect, if any, sales of shares of our common stock in the public market or the availability of shares for sale will have on the market price of our common stock. However, future sales of substantial amounts of our common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock.

Management will have broad discretion as to the use of the proceeds from the offering and uses may not improve our financial condition or market value.

We will not receive any proceeds from the sale of the Shares by the selling stockholders. In the event the selling stockholders exercise all of the Warrants in cash, we may receive an aggregate of approximately \$8.3 million of gross proceeds. Any proceeds that we receive from the exercise of such Warrants will be used for working capital and general corporate purposes.

Because we have not designated the amount of proceeds from the offering to be used for any particular purpose, our management will have broad discretion as to the application of such proceeds and could use them for purposes other than those contemplated hereby. Our management may use the proceeds for corporate purposes that may not improve our financial condition or market value.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale or other disposition of the Shares offered pursuant to this prospectus. Upon any exercise of the Warrants for cash, the applicable selling stockholder would pay us the exercise price set forth in the applicable Warrants, totaling approximately \$8.3 million.

Each Common Warrant has an exercise price equal to \$4.79 per share, and if all 1,649,147 Common Warrants registered hereunder are exercised on a cash basis, we will receive proceeds of approximately \$7.9 million. The Placement Agent Warrants are comprised of (i) 82,457 warrants with an exercise price equal to \$4.3844 per share and (ii) 9,935 warrants with an exercise price equal to \$4.3125 per share, and if all 92,392 Placement Agent Warrants registered hereunder are exercised on a cash basis, we will receive proceeds of approximately \$0.4 million.

We intend to use any proceeds from the exercise of any Warrants for working capital and general corporate purposes. The Warrants are exercisable on a cashless basis. If any of the Warrants are exercised on a cashless basis, we would not receive any cash payment from the applicable selling stockholder upon any such exercise.

We will bear the out-of-pocket costs, expenses and fees incurred in connection with the registration of shares of our common stock to be sold by the selling stockholders pursuant to this prospectus. Other than registration expenses, the selling stockholders will bear their own broker or similar commissions payable with respect to sales of the Shares.

of up to an aggregate of 1,741,539 shares (the “Shares”) of our common stock, par value \$0.01 per share (the “common stock”), issued by us in connection with a private placement on February 20, 2025 consisting of (i) 1,649,147 shares of our common stock (the “Common Warrant Shares”) issuable upon the exercise of common warrants to purchase shares of our common stock held by selling stockholders (the “Common Warrants”), and (ii) placement agent warrants (the “Placement Agent Warrants” and together with the Common Warrants, the “Warrants”) to purchase an aggregate of up to 92,392 shares of common stock (the “Placement Agent Warrant Shares” and together with the Common Warrant Shares, the “Warrant Shares”)

DESCRIPTION OF THE SECURITIES

The selling stockholders are offering up to an aggregate of 1,741,539 Shares of our common stock, issued by us in connection with the Private Placement consisting of (i) 1,649,147 Common Warrant Shares, and (ii) 92,392 Placement Agent Warrant Shares. The following description summarizes the material terms and provisions of our capital stock, including the common stock the selling stockholders may offer under this prospectus. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our amended restated certificate of incorporation (the “Amended and Restated Certificate of Incorporation”) and amended and restated bylaws (the “Amended and Restated Bylaws”), which are exhibits to the registration statement of which this prospectus forms a part, and by applicable law. The terms of our capital stock may also be affected by Delaware law.

General

Our authorized capital stock consists of two hundred and fifty million (250,000,000) shares of common stock, \$0.01 par value per share, and one hundred thirty million (130,000,000) shares of preferred stock, \$0.01 par value per share.

Common Stock

As of October 20, 2025, there were 3,683,989 shares of common stock outstanding. Each outstanding share of common stock entitles the holder thereof to one vote per share on all matters. Our Amended and Restated Bylaws provide that any vacancy occurring in the Board of Directors may be filled by the affirmative vote of a majority of the remaining directors. Stockholders do not have preemptive rights to purchase shares in any future issuance of our common stock. In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to receive, ratably, the net assets available to stockholders after payment of all creditors.

Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, and do not have cumulative voting rights. Accordingly, the holders of a majority of the shares of our common stock entitled to vote can elect all 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 Equinity Trust Company, LLC. The transfer agent and the registrar’s address is 48 Wall St., Floor 23, New York, NY 10005. 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 Amended and 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. There are currently 19 shares of Series B Preferred stock outstanding which are convertible into 7,385 shares of our common stock.

Conversion

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

Subject to certain ownership limitations as described below and certain equity conditions being met, if during any 30 consecutive trading days, the volume weighted average price of our common stock exceeds \$13,060.80 and the daily dollar trading volume during such period exceeds \$500,000 per trading day, we have the right to force the conversion of the Series B Preferred Stock into common stock.

Conversion Price.

The Series B Preferred Stock is convertible into shares of common stock by dividing the stated value of the Series B Preferred Stock (\$1,100) by \$2.83 (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 Amended and Restated Certificate of Incorporation or other charter documents in any manner that adversely affects any rights of holders of Series B Preferred Stock disproportionately to the rights of holders of our other capital stock, or (d) enter into any agreement with respect to any of the foregoing.

Jurisdiction and Waiver of Trial by Jury

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

Series C Preferred Stock.

Our Board of Directors designated 9,440 shares of our preferred stock as Series C Preferred Stock. As of October 20, 2025, there were 50 shares of Series C Preferred stock outstanding which are convertible into 2 shares of our common stock.

Conversion. Each share of Series C Preferred Stock will be convertible at our option at any time on or after the first anniversary of the expiration of the Rights Offering or at the option of the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Series C Preferred Stock by a conversion price of \$ 29,628.00 per share. In addition, the conversion price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations or reclassifications. Subject to limited exceptions, a holder of the Series C Preferred Stock will not have the right to convert any portion of the Series C Preferred Stock to the extent that, after giving effect to the conversion, the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion. A holder of the Series C Preferred Stock, upon notice to the Company, may increase or decrease the beneficial ownership limitation provisions of such holder's Series C Preferred Stock, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion. In the event that a conversion is effected at our option, we will exercise such option to convert shares of Series C Preferred Stock on a pro rata basis among all of the holders based on such holders' shares of Series C Preferred Stock.

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

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

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

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

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

Series D Preferred Stock

Our Board of Directors designated 4,656 shares of our preferred stock as Series D Preferred Stock. As of October 20, 2025, there were 180 shares of Series D Preferred stock outstanding which are convertible into 60 shares of our common stock.

Conversion. Each share of Series D Preferred Stock is convertible at the option of the holder at any time, into the number of shares of our common stock determined by dividing the \$1,000 stated value per share of the Series D Preferred Stock by a conversion price of \$ 3,020.40 per share. In addition, the conversion price per share is subject to adjustment for stock dividends, distributions, subdivisions, combinations or reclassifications. Subject to limited exceptions, a holder of the Series D Preferred Stock will not have the right to convert any portion of the Series D Preferred Stock to the extent that, after giving effect to the conversion, the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion. A holder of the Series D Preferred Stock, upon notice to us, may increase or decrease the beneficial ownership limitation provisions of such holder's Series D Preferred Stock, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion.

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

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

Voting Rights. Except as otherwise provided in the certificate of designation or as otherwise required by law, the Series D Preferred Stock has no voting rights.

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

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

Future Preferred Stock.

Our Board of Directors will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we may sell. 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 October 20, 2025, including the Warrants, there were 3,147,346 common stock purchase warrants outstanding, which expire between September 2027 and March 2031. Each of these warrants entitles the holder to purchase one share of common stock at prices ranging between \$2.83 and \$3,322.40 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. Additionally, certain of these warrants entitle a holder to also effect an “alternative cashless exercise” wherein the holder may surrender a certain number of warrants in return for a lesser number of shares of our common stock on a cashless basis. Each of these warrants also contains provisions for the adjustment of the exercise price and the aggregate number of shares issuable upon the exercise of the warrant in the event of dividends, share splits, reorganizations and reclassifications and consolidations. Certain of these warrants contain a provision requiring a reduction to the exercise price in the event we issue common stock, or securities convertible into or exercisable for common stock, at a price per share lower than the warrant exercise price.

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

The Common Warrants, and Placement Agent Warrants

The Common Warrants are exercisable immediately upon issuance and have a term of exercise equal to five and one-half years from the date of issuance. If a registration statement registering the resale of the shares of common stock underlying the Common Warrants under the Securities Act, is not effective or available, the holder may, in its sole discretion, elect to exercise the Common Warrants through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the Common Warrants. No fractional shares of common stock will be issued upon the exercise of any Common Warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

The Placement Agent Warrants will be exercisable immediately upon issuance and have a term of exercise equal to five and one-half years from the date of issuance. If a registration statement registering the resale of the shares of common stock underlying the Placement Agent Warrants under the Securities Act, is not effective or available, the holder may, in its sole discretion, elect to exercise the Placement Agent Warrants through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the Placement Agent Warrants. No fractional shares of common stock will be issued upon the exercise of any Placement Agent Warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

Fundamental Transaction. If a Fundamental Transaction (as defined in the respective Warrants) occurs, then the successor entity will succeed to, and be substituted for the Company, and may exercise every right and power that the Company may exercise and will assume all of the Company’s obligations under the Warrants with the same effect as if such successor entity had been named in the Warrants itself. If holders of shares of common stock are given a choice as to the securities, cash or property to be received in such a Fundamental Transaction, then the holder shall be given the same choice as to the consideration it would receive upon any exercise of the Warrants following such a Fundamental Transaction. Additionally, as more fully described in the Common Warrants and Placement Agent Warrants, in the event of certain Fundamental Transactions, the holders of the Common Warrants and Placement Agent Warrants will be entitled to receive consideration in an amount equal to the Black Scholes Value (as defined in the respective Warrants), on the date of consummation of such Fundamental Transaction.

Stock Dividends and Splits. If at any time on or after the date of issuance there occurs any share split, share dividend, share combination recapitalization or other similar transaction involving our common stock then in each case the exercise price shall be multiplied by a fraction of which the numerator shall be the number of shares of common stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of common stock outstanding immediately after such event, and the number of shares issuable upon exercise of the Warrant shall be proportionately adjusted such that the aggregate exercise price of the Warrant shall remain unchanged.

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

The foregoing description of the Pre-Funded Warrants, Common Warrants, and Placement Agent Warrants is not complete. For the complete terms of the Pre-Funded Warrants, Common Warrants, and Placement Agent Warrants, please refer to the forms of the Pre-Funded Warrants, Common Warrants, and Placement Agent Warrants filed as exhibits to the registration statement of which this prospectus forms a part.

We do not intend to list the Pre-Funded Warrants, the Common Warrants, or the Placement Agent Warrants on any securities exchange or other trading market. Without an active trading market, the liquidity of these securities will be limited.

The February 2025 Offering Pre-Funded Warrants, Placement Agent Warrants and Common Warrants

As of October 20, 2025, there are 257,170 pre-funded warrants outstanding that are immediately exercisable and may be exercised at any time until all of the pre-funded warrants are exercised in full (the "February 2025 Pre-Funded Warrants"). The February 2025 Pre-Funded Warrants may be exercised on a cashless basis at any time, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the February 2025 Pre-Funded Warrants. No fractional shares of common stock will be issued in connection with the exercise of a February 2025 Pre-Funded Warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

The placement agent warrants issued in February 2025 were exercisable immediately upon issuance and have a term of exercise equal to five and one-half years from the date of issuance (the "February 2025 Placement Agent Warrants"). If a registration statement registering the resale of the shares of common stock underlying the February 2025 Placement Agent Warrants under the Securities Act, is not effective or available, the holder may, in its sole discretion, elect to exercise the February 2025 Placement Agent Warrants through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the February 2025 Placement Agent Warrants. No fractional shares of common stock will be issued upon the exercise of any February 2025 Placement Agent Warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

The common warrants are exercisable immediately upon issuance and have a term of exercise equal to five and one-half years from the date of issuance (the "February 2025 Common Warrants"). If a registration statement registering the resale of the shares of common stock underlying the February 2025 Common Warrants under the Securities Act, is not effective or available, the holder may, in its sole discretion, elect to exercise the February 2025 Common Warrants through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the February 2025 Common Warrants. No fractional shares of common stock will be issued upon the exercise of any February 2025 Common Warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

Fundamental Transaction. If a Fundamental Transaction (as defined in the respective February 2025 Common Warrants) occurs, then the successor entity will succeed to, and be substituted for the Company, and may exercise every right and power that the Company may exercise and will assume all of the Company's obligations under the February 2025 Common Warrants with the same effect as if such successor entity had been named in the February 2025 Common Warrants itself. If holders of shares of common stock are given a choice as to the securities, cash or property to be received in such a Fundamental Transaction, then the holder shall be given the same choice as to the consideration it would receive upon any exercise of the February 2025 Common Warrants following such a Fundamental Transaction. Additionally, as more fully described in the February 2025 Common Warrants and February 2025 Placement Agent Warrants, in the event of certain Fundamental Transactions, the holders of the February 2025 Common Warrants and February 2025 Placement Agent Warrants will be entitled to receive consideration in an amount equal to the Black Scholes Value (as defined in the respective Warrants), on the date of consummation of such Fundamental Transaction.

Stock Dividends and Splits. If at any time on or after the date of issuance there occurs any share split, share dividend, share combination recapitalization or other similar transaction involving our common stock then in each case the exercise price shall be multiplied by a fraction of which the numerator shall be the number of shares of common stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of common stock outstanding immediately after such event, and the number of shares issuable upon exercise of the February 2025 Common Warrant shall be proportionately adjusted such that the aggregate exercise price of the February 2025 Common Warrant shall remain unchanged.

Beneficial Ownership Limitations. A holder will not have the right to exercise any portion of the February 2025 Common Warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election by a holder prior to the issuance of any warrants, 9.99%) of the number of shares of common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the February 2025 Common Warrants and February 2025 Pre-Funded Warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99%, upon at least 61 days' prior notice from the holder to us with respect to any increase in such percentage.

The foregoing description of the February 2025 Pre-Funded Warrants, February 2025 Common Warrants, and February 2025 Placement Agent Warrants is not complete. For the complete terms of the February 2025 Pre-Funded Warrants, February 2025 Common Warrants, and February 2025 Placement Agent Warrants, please refer to the forms of the February 2025 Pre-Funded Warrants, February 2025 Common Warrants, and February 2025 Placement Agent Warrants filed as exhibits to the registration statement of which this prospectus forms a part.

We do not intend to list the February 2025 Pre-Funded Warrants, the February 2025 Common Warrants, or the February 2025 Placement Agent Warrants on any securities exchange or other trading market. Without an active trading market, the liquidity of these securities will be limited.

February 2023 Offering Warrants

On February 7, 2023, we issued a Class C common stock purchase warrant to purchase up to 10,750 shares of common stock (the "Class C Warrants") and a Class D common stock purchase warrant to purchase up to 5,375 shares of common stock (the "Class D Warrants"). The Class C and Class D Warrants are exercisable at a price of \$1,120 per share. The Class C Warrants will expire five years from the date of issuance and the Class D Warrants will expire three years from the date of issuance. In addition, a holder may also effect an "alternative cashless exercise" wherein the aggregate number of shares of common stock issuable in such alternative cashless exercise shall equal the product of (x) the aggregate number of shares of common stock that would be issuable upon exercise of the Class C Warrant or Class D Warrant in accordance with the terms of such warrant if such exercise were by means of a cash exercise rather than a cashless exercise and (y) 0.40 with respect to the Class C Warrant or 0.80 with respect to the Class D Warrant.

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

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

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

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

Exercise Price. The exercise price per whole share of common stock purchasable upon exercise of the Class C Warrants and the Class D Warrants is \$1,120 per share. The exercise price and number of shares of common stock issuable on exercise are subject to appropriate adjustments in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock.

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

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

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

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

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

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

Maxim and Ascendant February 2023 Warrants

In connection with the February 2023 Offering, the Company issued (i) to Maxim Group LLC (“Maxim”), as the Company’s sole placement agent for the February 2023 Offering, 366 warrants to purchase shares of the Company’s common stock and (ii) to Ascendant Capital Markets, LLC (“Ascendant”), as a financial advisor to the Company in the February 2023 Offering, 65 warrants to purchase shares of the Company’s common stock (collectively, the “February 2023 Placement Agent Warrants”). The February 2023 Placement Agent Warrants will expire on February 7, 2028. The February 2023 Placement Agent Warrants are exercisable at a price of \$1,232 per share, subject to adjustment for stock dividends, distributions, subdivisions, combinations, or reclassifications, and for certain dilutive issuances. Subject to limited exceptions, a holder of the February 2023 Placement Agent Warrants will not have the right to exercise any portion of the Placement Agent Warrants to the extent that, after giving effect to the exercise, the holder, together with its affiliates, and any other person acting as a group together with the holder or any of its affiliates, would beneficially own in excess of 4.99% of the number of shares of the Company’s common stock outstanding immediately after giving effect to its exercise. The holder, upon notice to the Company, may increase or decrease the beneficial ownership limitation provisions of the February 2023 Placement Agent Warrants, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise of the February 2023 Placement Agent Warrants. The February 2023 Placement Agent Warrants may be exercised as to all or a lesser number of shares of the Company’s common stock and contain certain demand registration rights and unlimited “piggyback” registration rights for a period of five years after February 7, 2023, at the Company’s expense. The Company relied on the exemption from registration available under Section 4(a)(2) of the Securities Act in connection with the issuance of the February 2023 Placement Agent Warrants to Maxim and Ascendant.

The foregoing description of the February 2023 Placement Agent Warrants is not complete. For the complete terms of the Placement Agent Warrants, you should refer to the form of February 2023 Placement Agent Warrant filed as an exhibit to this registration statement.

Maxim and Ascendant October 2022 Warrants

In connection with the October 2022 Rights Offering, the Company issued (i) to Maxim, as the dealer-manager in the October 2022 Rights Offering, 53 warrants to purchase shares of the Company’s common stock and (ii) to Ascendant, as a financial advisor to the Company in the October 2022 Rights Offering, 10 warrants to purchase shares of the Company’s common stock (collectively, the “Dealer Manager Warrants”). The Dealer Manager Warrants are non-exercisable for 6 months from October 17, 2022 and will expire on September 23, 2027. The Dealer Manager Warrants will be exercisable at a price of \$3,322.40 per share, subject to adjustment for stock dividends, distributions, subdivisions, combinations, or reclassifications, and for certain dilutive issuances. Subject to limited exceptions, a holder of the Dealer Manager Warrants will not have the right to exercise any portion of the Dealer Manager Warrants to the extent that, after giving effect to the exercise, the holder, together with its affiliates, and any other person acting as a group together with the holder or any of its affiliates, would beneficially own in excess of 4.99% of the number of shares of the Company’s common stock outstanding immediately after giving effect to its exercise. The holder, upon notice to the Company, may increase or decrease the beneficial ownership limitation provisions of the Dealer Manager Warrants, provided that in no event shall the limitation exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise of the Dealer Manager Warrants. In addition, the Dealer Manager Warrants shall not be redeemable and may not be sold, transferred, assigned, pledged or hypothecated or be the subject of any hedging, short sale, derivative, put, or call transaction for a period of 180 days following September 23, 2022, except that they may be assigned, in whole or in part, to any officer or partner of Maxim (or to Ascendant). The Dealer Manager Warrants may be exercised as to all or a lesser number of shares of the Company’s common stock and contain unlimited “piggyback” registration rights for a period of five years after September 23, 2022, at the Company’s expense. The Company relied on the exemption from registration available under Section 4(a)(2) of the Securities Act in connection with the issuance of the Dealer Manager Warrants to Maxim and Ascendant.

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

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

The provisions of (1) Delaware law, (2) our Amended and Restated Certificate of Incorporation and (3) our Amended and 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 Amended and 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 Amended and 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 Amended and 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 Amended and Restated Bylaws. If it is determined that business was not properly brought before a meeting in accordance with our Amended and Restated Bylaws 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 Amended and 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 Amended and 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 Amended and Restated Certificate of Incorporation, Our Amended and 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 Amended and Restated Bylaws by the stockholders. Our Amended and Restated Bylaws may be amended or repealed by a simple majority vote of the Board of Directors.

Potential Effects of Authorized but Unissued Stock

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

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

SELLING STOCKHOLDERS

The shares of common stock being offered by the selling stockholders consist of the Warrant Shares. We are registering the resale of the Warrant Shares issuable upon exercise of the Warrants in order to permit such selling stockholders to offer the Shares for resale from time to time.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our common stock. Generally, a person “beneficially owns” shares of our common stock if the person has or shares with others the right to vote those shares or to dispose of them, or if the person has the right to acquire voting or disposition rights within 60 days.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock held by the selling stockholders. The second column lists the number of shares of common stock beneficially owned by such selling stockholder as of October 20, 2025, assuming exercise of the Warrants held by such selling stockholder on that date.

The third column lists the shares of common stock being offered by this prospectus by the selling stockholder and does not take into account any limitations on exercise of the Warrants set forth therein.

Under the terms of the Warrants, the selling stockholder may not exercise the Warrants to the extent (but only to the extent) such selling stockholder or any of its affiliates would beneficially own a number of shares of our common stock which would exceed 4.99% or 9.99%, as applicable, of the outstanding shares of the Company (the “Beneficial Ownership Limitation”). The Beneficial Ownership Limitation may be increased or decreased, provided that in no event shall it exceed 9.99%, upon notice to us, provided that any increase in the Beneficial Ownership Limitation shall not be effective until 61 days following the receipt of such notice by us. The number of shares included in the table below do not reflect this limitation. The selling stockholder may sell all, some or none of their shares in this offering. See “Plan of Distribution” below.

The ownership percentage indicated in the following table is based on 3,683,989 total outstanding shares of our common stock as of October 20, 2025.

In computing the number of shares of common stock beneficially owned by the selling stockholder and the percentage ownership, we included outstanding shares of common stock issuable upon exercise of the Warrants that are currently exercisable or exercisable within 60 days of October 20, 2025.

Shares of common stock

Name	Shares	Maximum	Shares Beneficially	
	Beneficially	Number of	Owned	
	Owned Prior to	Shares Being	After the Offering	
	the Offering	Registered	Number of	Percentage
	Number of	for Resale	Shares	
	Shares			
3i, LP ⁽¹⁾	127,392	127,392	-	-%
Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B ⁽²⁾	108,696	108,696	-	-%
CVI Investments, Inc. ⁽³⁾	108,696	108,696	-	-%
Intracoastal Capital LLC ⁽⁴⁾	110,003	108,696	1,307	*%
Kevin Patrick Murphy ⁽⁵⁾	332,523	130,436	202,087	5.3%
John Edwards ⁽⁶⁾	264,419	108,696	155,723	4.1%
MedTech Ceramics, LP ⁽⁷⁾	1,767,689	760,881	1,006,808	19.8%
The Paul and Jennifer Walker Revocable Management Trust ⁽⁸⁾	188,624	108,696	79,928	2.1%
Kevin McAdams ⁽⁹⁾	101,451	43,479	57,972	1.6%
Ethos Management, LLC ⁽¹⁰⁾	101,451	43,479	57,972	1.6%
Michael Vasinkevich ⁽¹¹⁾	128,949	59,247	69,702	1.8%
Craig Schwabe ⁽¹¹⁾	6,785	3,117	3,668	*%
Noam Rubinstein ⁽¹¹⁾	63,344	29,104	34,240	*%
Charles Worthman ⁽¹¹⁾	2,011	924	1,087	*%

* less than 1%.

(1) Consists of 127,392 Common Warrant Shares. 3i Management LLC is the general partner of 3i, LP, and Maier Joshua Tarlow is the manager of 3i Management LLC. As such, Mr. Tarlow exercises sole voting and investment discretion over securities beneficially owned directly or indirectly by 3i, LP and 3i Management LLC. Mr. Tarlow disclaims beneficial ownership of the securities beneficially owned directly by 3i, LP and indirectly by 3i Management LLC. The business address of each of the aforementioned parties is 2 Wooster Street, 2nd Floor, New York, NY 10013. We have been advised that none of Mr. Tarlow, 3i Management LLC, or 3i, LP is a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer, or an affiliate or associated person of a FINRA member or independent broker-dealer.

- (2) Consists of 108,696 Common Warrant Shares. Ayrton Capital LLC, the investment manager to Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B, has discretionary authority to vote and dispose of the shares held by Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and may be deemed to be the beneficial owner of these shares. Mr. Waqas Khatri, in his capacity as Managing Member of Ayrton Capital LLC, may also be deemed to have investment discretion and voting power over the shares held by Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B. Ayrton Capital LLC and Mr. Khatri each disclaim any beneficial ownership of these shares. The business address of Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B is 55 Post Rd West, 2nd floor, Westport, CT 06880.
- (3) Consists of 108,696 Common Warrant Shares. Heights Capital Management, Inc., the authorized agent of CVI Investments, Inc. ("CVI"), has discretionary authority to vote and dispose of the shares held by CVI and may be deemed to be the beneficial owner of these shares. Mr. Martin Kobinger, in his capacity as President of Heights Capital Management, Inc., may also be deemed to have investment discretion and voting power over the shares held by CVI. Mr. Kobinger disclaims any such beneficial ownership of the shares. CVI is affiliated with one or more FINRA member, none of them are currently expected to participate in the sale pursuant to this prospectus. The business address of CVI I is c/o Heights Capital Management, Inc., 101 California Street, Suite 3250, San Francisco, CA 94111.
- (4) Consists of (i) 108,696 Common Warrant Shares, and (ii) 1,307 warrants previously owned by Intracoastal Capital LLC. Mitchell P. Kopin ("Mr. Kopin") and Daniel B. Asher ("Mr. Asher"), each of whom are managers of Intracoastal Capital LLC ("Intracoastal"), have shared voting control and investment discretion over the securities reported herein that are held by Intracoastal. As a result, each of Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership of the securities reported herein that are held by Intracoastal. The business address of Intracoastal is 245 Palm Trail, Delray Beach, FL 33483.
- (5) Consists of (i) 202,087 shares of common stock and (ii) 130,436 Common Warrant Shares. The business address of Kevin Patrick Murphy is 18303 Windspring Falls Ln. Cypress, TX, 77433.
- (6) Consists of (i) 155,723 shares of common stock and (ii) 108,696 Common Warrant Shares. The business address of John Edwards is 1953 North 1640 West, Provo, UT 84604.
- (7) Consists of (i) 370,384 shares of common stock, (ii) 129,170 pre-funded warrants previously owned, (iii) 507,254 shares of common stock underlying previously owned warrants and (iii) 760,881 Common Warrant Shares. The Common Warrants, pre-funded warrants, and other warrants beneficially owned by MedTech Ceramics, LP, are subject to 9.99% Beneficial Ownership Limitation. Mr. Karl Kipke is the general partner of MedTech Ceramics, LP. The business address of MedTech Ceramics, LP is 925 S. Capital of Texas Hwy, #B-200, Austin, TX 78746.
- (8) Consists of (i) 79,928 shares of common stock and (ii) 108,696 Common Warrant Shares. Mr. Paul Walker and Mrs. Jennifer Walker are the Trustees of The Paul and Jennifer Walker Revocable Management Trust. The business address of The Paul and Jennifer Walker Revocable Management Trust is 13004 Lone Rider Trail, Austin, TX 78738.
- (9) Consists of (i) 57,972 shares of common stock and (ii) 43,479 Common Warrant Shares. The business address of Mr. Kevin McAdams is 201 Creekvista Drive, Holly Springs, NC 27540.
- (10) Consists of (i) 57,972 shares of common stock and (ii) 43,479 Common Warrant Shares. Mr. Buff Williams is the manager of Ethos Management, LLC. The business address of Ethos Management, LLC is 1808 South Rockcress Circle St. George, Utah 84790.
- (11) The Selling Stockholder is affiliated with H.C. Wainwright & Co., LLC, a registered broker dealer with a registered address of H.C. Wainwright & Co. 430 Park Ave, 3rd Floor, New York, NY 10022, and has sole voting and dispositive power over the securities held. The number of shares beneficially owned prior to this offering consist of shares of common stock issuable upon exercise of Placement Agent Warrants, which were received as compensation for our private placement. The Selling Stockholder acquired the Placement Agent Warrants in the ordinary course of business and, at the time the Placement Agent Warrants were acquired, the Selling Stockholder had no agreement or understanding, directly or indirectly, with any person to distribute such securities.

PLAN OF DISTRIBUTION

Each selling stockholder of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the Nasdaq Capital Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the selling stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus. Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

In connection with the sale of the securities or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The selling stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the selling stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

LEGAL MATTERS

Dorsey & Whitney LLP, Salt Lake City, Utah, will pass upon the validity of the securities offered by this prospectus and any supplement thereto.

EXPERTS

The consolidated financial statements of SINTX Technologies, Inc. appearing in SINTX Technologies, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2024 have been audited by TANNER LLC, independent registered public accounting firm, as set forth in their report thereon included therein, and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance upon the report of TANNER LLC pertaining to such financial statements given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth or incorporated by reference in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. In addition, we maintain a website that contains information about us at www.sintx.com. Information contained on or accessible through our website is not a part of this prospectus and is not incorporated by reference herein, and the inclusion of our website address in this prospectus is an inactive textual reference only.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC:

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2024, filed with the SEC on March 19, 2025;
- The Company’s Quarterly Reports on Form 10-Q for the period ended [March 31, 2025](#) and [June 30, 2025](#);
- The Company’s Current Reports on Form 8-K filed with the SEC on [February 20, 2025](#), [February 26, 2025](#), [March 13, 2025](#), [April 8, 2025](#), [May 7, 2025](#), [June 27, 2025](#), [September 5, 2025](#), [September 9, 2025](#), and [October 3, 2025](#); and
- The description of the Company’s common stock, which is contained in the Registration Statement on Form 8-A, as filed with the SEC on [February 7, 2014](#), as updated by the description of our common stock contained in [Exhibit 4.18](#) to our Annual Report on Form 10-K for the year ended December 31, 2022, including any amendment or report filed for the purpose of updating such description.

Notwithstanding the statements in the preceding paragraphs, no document, report or exhibit (or portion of any of the foregoing) or any other information that we have “furnished” to the SEC pursuant to the Exchange Act shall be incorporated by reference into this prospectus.

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

Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

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

Sintx Technologies, Inc.



1,741,539 Shares of Common Stock Offered by the Selling Stockholders

, 2025

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the estimated costs and expenses payable by us in connection with the offering of the securities being registered. All the amounts shown are estimates, except for the SEC registration fee.

	Amount
SEC registration fee	\$ 1,147.00
Accounting fees and expenses	\$ 7,500.00
Legal fees and expenses	\$ 30,000.00
Miscellaneous fees and expenses	\$ 5,000.00
Total	\$ 43,647.00

Item 15. Indemnification of Directors and Officers

Our Amended and Restated Certificate of Incorporation and Amended 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, or trustee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, whether the basis of such proceeding is alleged action in an official capacity as a director, officer or trustee or in any other capacity while serving as a director, officer or trustee, shall be indemnified and held harmless by us to the fullest extent permitted by the Delaware General Corporation Law, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits us to provide broader indemnification rights than such law permitted us to provide prior to such amendment) against all expense, liability and loss (including attorneys' fees, judgments, fines, Employee Retirement Income Security Act excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such indemnitee in connection therewith; *provided, however*, that, subject to other articles of our Amended and Restated Certificate of Incorporation, we cannot be required to indemnify or advance expenses to any such indemnitee in connection with a proceeding (or part thereof) initiated by such indemnitee unless such proceeding (or part thereof) was authorized by the Board of Directors. These provisions limit the liability of our directors and officers to the fullest extent permitted under Delaware law. A director will not receive indemnification if he or she is found not to have acted in good faith.

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

Pursuant to Section 102(b)(7) of the Delaware General Corporation Law, Article Eighth of our Amended and 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.

Item 16. Exhibits

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
2.1	Asset Purchase Agreement by and among Amedica Corporation, CTL Corporation and US Spine Inc. dated as of September 5, 2018		Form 8-K (Exhibit 2.1)	10/5/18	001-33624
2.2+†	Asset Purchase Agreement by and among SINTX Technologies, Inc. and B4C, LLC, dated July 20, 2021.		Form 8-K (Exhibit 2.1)	7/26/21	001-33624
2.3†	Stock Purchase Agreement		Form 8-K (Exhibit 2.1)	7/6/22	001-33624
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		Form S-3 (Exhibit 4.2)	3/25/19	333-230492
4.3	Dealer Manager Warrants issued to Maxim Group LLC on October 17, 2022		Form 8-K (Exhibit 4.1)	10/17/22	001-33624
4.4	Dealer Manager Warrants issued to Ascendant Capital Markets, LLC on October 17, 2022		Form 8-K (Exhibit 4.2)	10/17/22	001-33624
4.5	Form of Class C Warrant		Form S-1 (Exhibit 4.13)	2/7/23	333-269475
4.6	Form of Pre-Funded Warrant		Form S-1 (Exhibit 4.14)	2/6/23	333-269475
4.7	Form of Class D Warrant		Form S-1 (Exhibit 4.15)	2/7/23	333-269475
4.8	Form of Placement Agent Warrant		Form S-1 (Exhibit 4.16)	2/6/23	333-269475
4.9	Warrant Agency Agreement		Form 8-K (Exhibit 4.5)	2/9/23	001-33624
4.10	Form of Pre-Funded Warrant		Form 8-K (Exhibit 4.1)	2/2/24	001-33624
4.11	Form of Class E Warrant		Form 8-K (Exhibit 4.2)	2/2/24	001-33624

4.12	Form of Class F Warrant		Form 8-K (Exhibit 4.3)	2/2/24	001-33624
4.13	Form of Placement Agent Warrant		Form 8-K (Exhibit 4.4)	2/2/24	001-33624
4.14	Form of Warrant Agency Agreement		Form 8-K (Exhibit 4.5)	2/2/24	001-33624
4.15	Form of Senior Indenture, to be entered into between the Registrant and the trustee designated therein		Form S-3 (Exhibit 4.14)	10/12/23	333-274951
4.16	Form of Subordinated Indenture, to be entered into between the Registrant and the trustee designated therein		Form S-3 (Exhibit 4.16)	10/12/23	333-274951
4.17	Form of Pre-Funded Warrant		Form 8-K (Exhibit 4.1)	02/26/25	001-33624
4.18	Form of Common Warrant		Form 8-K (Exhibit 4.2)	02/26/25	001-33624
4.19	Form of Placement Agent Warrant		Form 8-K (Exhibit 4.3)	02/26/25	001-33624
4.20	Form of New Warrant		Form 8-K (Exhibit 10.2)	9/9/25	001-33624
4.21	Form of Placement Agent Warrant		Form 8-K (Exhibit 10.3)	9/9/25	001-33624
4.22	Form of Additional Placement Agent Warrant		Form 8-K (Exhibit 10.4)	9/9/25	001-33624
5.1	Opinion of Dorsey & Whitney LLP	X			
10.1	Form of Inducement Letter		Form 8-K (Exhibit 10.1)	9/9/25	001-33624
23.1	Consent of Independent Registered Public Accounting Firm	X			
23.2	Consent of Dorsey & Whitney LLP (included in Exhibit 5.1)	X			
24.1	Power of Attorney (included on the signature page to this registration statement)	X			
107	Filing Fee Table	X			

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(a)(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;

(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 SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Filing Fee Table" exhibit to 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 paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the registration statement is on Form S-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") 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, 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 to any purchaser:

(i) 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

(ii) 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 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 the 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.

(b) The undersigned registrant undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act 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 SEC 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 of the registrant 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 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 this 21st day of October, 2025.

SINTX Technologies, Inc.

Date: October 23, 2025

By: /s/ Eric Olson
Eric Olson
President and Chief Executive Officer, Principal Financial Officer
(Principal Executive Officer and Principal Financial Officer)

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Eric Olson, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462 promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and 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 attorneys-in-fact and agents, or their 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.

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
<u>/s/ Eric Olson</u> Eric Olson	President, Chief Executive Officer, and Director (Principal Executive Officer)	October 23, 2025
<u>/s/ Kevin Trask</u> Kevin Trask	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	October 23, 2025
<u>/s/ Jay M. Moyes</u> Jay M. Moyes	Director	October 23, 2025
<u>/s/ Robert D. Mitchell</u> Robert D. Mitchell	Director	October 23, 2025
<u>/s/ Gregg Honigblum</u> Gregg Honigblum	Director	October 23, 2025
<u>/s/ Chris Lyons</u> Chris Lyons	Director	October 23, 2025
<u>/s/ Mark Anderson</u> Mark Anderson	Director	October 23, 2025



October 23, 2025

SINTX Technologies, Inc.
1885 West 2100 South
Salt Lake City, UT 84119

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to SINTX Technologies, Inc., a Delaware corporation (the "Company"), in connection with a registration statement on Form S-3 (as amended or supplemented, the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement relates to the offer for resale of an aggregate of 1,741,539 shares of common stock, par value \$0.01 per share of the Company ("Common Stock"), consisting of (i) 1,649,147 shares of Common Stock issuable upon the exercise of common warrants (the "Common Warrants," and the shares of Common Stock underlying the Common Warrants, the "Common Warrant Shares"), with an exercise price of \$4.79 per share, and (ii) placement agent warrants to purchase an aggregate of up to (a) 82,457 shares of Common Stock at an exercise price of \$4.3844 per share and (b) 9,935 shares of Common Stock at an exercise price of \$4.3125 per share (the "Placement Agent Warrants" and the shares of Common Stock underlying the Placement Agent Warrants, the "Placement Agent Warrant Shares"), issued to the placement agent in the Private Placement (as defined below), with an exercise price of \$4.3125 per share.

The Common Warrants and Placement Agent Warrants are collectively referred to as the "Warrants," and the Common Warrant Shares and Placement Agent Warrant Shares are collectively referred to as the "Warrant Shares." The Warrants were issued in a private placement (the "Private Placement") pursuant to an inducement letter dated September 8, 2025.

We have examined such documents and have reviewed such questions of law as we have considered necessary or appropriate for the purposes of our opinions set forth below. In rendering our opinions set forth below, we have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures and the conformity to authentic originals of all documents submitted to us as copies. We have also assumed the legal capacity for all purposes relevant hereto of all natural persons. As to questions of fact material to our opinions, we have relied upon certificates or comparable documents of officers and other representatives of the Company and of public officials.

With respect to the Warrant Shares, we express no opinion to the extent that future issuances of securities of the Company, adjustments to outstanding securities of the Company or other matters cause the Warrants to be exercisable for more shares of Common Stock than the number available for issuance by the Company, or that the consideration paid upon exercise of the Warrants is below the par value per share of the Common Stock.

Based on the foregoing, we are of the opinion that:

1. Upon due exercise of the Common Warrants and payment to the Company of the applicable aggregate exercise price in accordance with the terms of the Common Warrants, the Common Warrant Shares issuable upon such exercise will be duly and validly issued, fully paid and non-assessable shares of Common Stock.
2. Upon due exercise of the Placement Agent Warrants and payment to the Company of the applicable aggregate exercise price in accordance with the terms of the Placement Agent Warrants, the Placement Agent Warrant Shares issuable upon such exercise will be duly and validly issued, fully paid and non-assessable shares of Common Stock.

Our opinions expressed above are limited to the Delaware General Corporation Law.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement, and to the reference to our firm under the heading "Legal Matters" in the prospectus constituting part of the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Dorsey & Whitney LLP

DPL/DFM

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

SINTX Technologies, Inc.
Salt Lake City, Utah

We hereby consent to the incorporation by reference in the Prospectus constituting part of this Registration Statement of our report dated March 18, 2025, relating to the consolidated financial statements of SINTX Technologies, Inc., and subsidiaries (collectively, the Company), as of December 31, 2024 and 2023 and for each of the years then ended, incorporated by reference in this Registration Statement.

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

/s/ Tanner LLC
Lehi, Utah
October 23, 2025

Calculation of Filing Fee Table

S-3
(Form Type)SINTX Technologies, Inc.
(Exact Name of Registrant as Specified in its Charter)**Table 1: Newly Registered Securities**

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Fees to Be Paid	Equity	Common Stock issuable upon exercise of the Common Warrants	Other	1,649,147	\$ 4.79 ⁽²⁾	\$ 7,899,414.13	0.0001381	\$ 1,091
Fees to Be Paid	Equity	Common Stock issuable upon exercise of Placement Agent Warrants	Other	82,457	\$ 4.3844 ⁽²⁾	\$ 361,524.47	0.0001381	\$ 50
Fees to Be Paid	Equity	Common Stock issuable upon exercise of Placement Agent Warrants	Other	9,935	\$ 4.3125 ⁽²⁾	\$ 42,844.69	0.0001381	\$ 6
Total Offering Amounts						\$ 8,303,783.29		\$ 1,147
Total Fees Previously Paid						—	—	—
Total Fee Offsets						—	—	—
Net Fee Due								\$ 1,147

(1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock, par value \$0.01 per share ("Common Stock"), in connection with any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of outstanding shares of Common Stock.

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(g) of the Securities Act. The proposed maximum offering price per share are calculated based on the exercise price of the Common Warrants and Placement Agent Warrants.