UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

☒ **Annual report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934**

For the fiscal year ended December 31, 2025

or

☐ **Transition report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from _____ to _____

Commission File No. 001-33624

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

Delaware	**84-1375299**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification No.)**

1885 West 2100 South, Salt Lake City, UT 84119
(Address of principal executive offices and Zip Code)

(801) 839-3500
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.01 par value	**SINT**	**The Nasdaq Capital Market**

Securities registered under Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

Large Accelerated Filer	☐	Accelerated Filer	☐
Non-Accelerated Filer	☒	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 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter was $7,651,741.

The number of shares outstanding of the registrant's common stock, $0.01 par value per share, as of March 13, 2026 was 4,121,727.

DOCUMENTS INCORPORATED BY REFERENCE:

None

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CAUTIONARY NOTE CONCERNING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements other than statements of historical fact are forward-looking statements. SINTX Technologies, Inc. ("we," "us," "ourselves," the "Company") has tried to identify forward-looking statements by using words such as "believe," "may," "might," "could," "should," "will," "aim," "project," "target," "estimate," "continue," "anticipate," "intend," "expect," "plan" and similar words. These forward-looking statements are based on our current assumptions, expectations and estimates of future events and trends. Forward-looking statements are only predictions and are subject to many risks, uncertainties and other factors that may affect our businesses and operations and could cause actual results to differ materially from those predicted. These risks and uncertainties include, but are not limited to, factors affecting our quarterly and annual results, our ability to manage our growth, our ability to achieve and sustain profitability, demand for our products, our ability to compete successfully, our ability to rapidly develop and introduce new products, our ability to develop and execute on successful business strategies, our ability to comply with changes and applicable laws and regulations that are applicable to our businesses, our ability to safeguard our intellectual property, our success in defending legal proceedings brought against us, trends in the medical device industry, and general economic conditions, and other risks set forth throughout this Annual Report, including under **"Item 1, Business," "Item 1A, Risk Factors,"** and **"Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations,"** and those discussed in other documents we file with the Securities and Exchange Commission (the "SEC"). Moreover, we operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for us to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Given these risks and uncertainties, readers are cautioned not to place undue reliance on any forward-looking statements. Forward-looking statements contained in this Annual Report speak only as of the date of this Annual Report. We undertake no obligation to update any forward-looking statements as a result of new information, events or circumstances or other factors arising or coming to our attention after the date hereof.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act. Accordingly, we file periodic reports and other information with the SEC. We will make our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports available through our Internet site, https://investors.sintx.com/ as soon as reasonably practicable after electronically filing such materials with the SEC. They may also be obtained free of charge by writing to SINTX Technologies, Inc., Attn: Investor Relations, 1885 West 2100 South, Salt Lake City, UT 84119. In addition, copies of these reports may be obtained through the SEC's website at www.sec.gov or by visiting the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549 or by calling the SEC at 800-SEC-0330.

Our common stock trades on the Nasdaq Capital Market under the symbol "SINT."

SUMMARY OF PRINCIPAL RISK FACTORS

Our business operations are subject to numerous risks, factors and uncertainties, including those outside of our control, that could cause our actual results to be harmed, including risks regarding the following:

Risks Related to Our Capital Resources and Impairments

- We will require additional financing and our failure to obtain additional funding would force us to delay, reduce or eliminate our product development programs or commercialization efforts.
- Raising additional capital by issuing securities or through debt financings or licensing arrangements may dilute existing stockholders, restrict our operations or require us to relinquish proprietary rights.

Risks Related to Our Business and Strategy

- We have incurred net losses since our inception and may never achieve or sustain profitability.
- Our success depends on our ability to successfully commercialize advanced ceramic products for biomedical, technical, and antipathogenic applications, which to date have experienced only limited market acceptance and which we may not be able to successfully commercialize.
- We may not be able to compete effectively against the larger, well-established companies that dominate these markets or emerging and small innovative companies seeking to increase their share of the market.
- We depend on our aerospace and biomedical customers' ability to sell the products we manufacture. If our customers are not able to sell such products, our business and operating results will be adversely affected.
- If we are unable to manufacture our advanced ceramic products on a timely basis consistent with our quality standards, our results of operation will be adversely impacted.
- We depend on a limited number of third-party suppliers for key raw materials, and the loss of these third-party suppliers or their inability to supply us with adequate raw materials could harm our business.
- Part of our strategy is to establish and develop OEM partnerships and arrangements, which subjects us to various risks.
- If hospitals and other healthcare providers are unable to obtain coverage or adequate reimbursement for procedures performed with our products, it is unlikely our products will be widely used.
- Prolonged negative economic conditions in domestic and international markets may adversely affect us and could harm our financial position.
- We are dependent on our senior management team, engineering team, and external advisors, and the loss of any of them could harm our business.
- Cyber security risks and the failure to maintain the integrity of company, employee or guest data could expose us to business disruptions, data loss, litigation and liability, and our reputation and operating results could be significantly harmed.

Risks Related to Regulatory Approval of Our Products and Other Government Regulations

- Contracting with government entities exposes us to additional risks and regulatory requirements.
- We cannot be certain that we will be able to obtain regulatory clearance or approval and thereafter commercialize our biomedical or antipathogenic product candidates in a timely manner or at all.
- We have little experience conducting clinical trials, therefore, they may proceed more slowly than anticipated, and we cannot be certain that our product candidates will be shown to be safe and effective for human use.
- Our current and future relationships with third-party payers and current and potential customers in the United States and elsewhere may be subject, directly or indirectly, to various laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.
- U.S. federal income tax reform could adversely affect us.
- Legislation may increase the difficulty and cost for us to obtain and monitor regulatory approval or clearance of our product candidates and affect the prices we may obtain for our products.

Risks Related to Our Intellectual Property and Litigation

- If our patents, trade secrets and contractual provisions are inadequate to protect our intellectual property, we may not be able to successfully commercialize our products or operate our business profitably.
- We have no patent protection covering the composition of matter for our solid silicon nitride or components of the related manufacturing process, and competitors may create formulations or processes substantially similar to ours.
- We could become subject to intellectual property litigation that could consume significant amounts of our resources and adversely affect our business and results of operations.
- We may be subject to damages resulting from claims that we have wrongfully used or disclosed alleged trade secrets of our competitors or are in breach of non-competition agreements with our competitors or non-solicitation agreements.
- If our advanced ceramic products or our product candidates' conflict with the intellectual property rights of others, we may not be able to manufacture or market our products or product candidates.

Risks Related to Potential Litigation from Operating Our Business

- We may become subject to potential product liability claims or claims relating to our improper handling, storage or disposal of biological or hazardous materials, which could be time consuming and costly.

Risks Related to Public Companies

- We are a "smaller reporting company" and the reduced disclosure requirements applicable to smaller reporting companies may make our common stock less attractive to investors.
- We may not be able to maintain our listing on the Nasdaq Capital Market, which would adversely affect the price and liquidity of our common stock.

PART I

ITEM 1. BUSINESS

Overview – SINTX Technologies

SINTX Technologies is an advanced ceramics company formed in December 1996 that develops, manufactures, and commercializes silicon nitride biomaterials, composites, devices, and related technologies for medical and other high-value applications. SINTX provides biomedical solutions for medical devices specializing in silicon nitride (Si_3N_4) for musculoskeletal and antipathogenic applications. We also manufacture parts made from silicon nitride for customers in the electrical, aerospace and other industrial sectors. 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 October 2025, SINTX received U.S. Food and Drug Administration (FDA) 510(k) clearance for the SiNAPTIC® Foot & Ankle Osteotomy Wedge System, enabling SINTX's commercial entry into reconstructive foot and ankle surgery in the United States. These next-generation implants blend advanced biomaterials science with surgical precision and are designed to elevate standards in orthopedic procedures. 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. 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. 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 potentially 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 AS9100D certified. The Company's products are primarily sold in the United States.

Our Products

Silicon Nitride

To control the quality, cost and availability of our silicon nitride products and product candidates, we operate our own silicon nitride manufacturing facility. Our 30,764 square foot corporate facility includes a 19,000 square foot FDA registered ISO 13485:2016 certified, and AS9100D certified manufacturing space. It is equipped with state-of-the-art powder processing, spray drying, pressing and computerized machining equipment, sintering furnaces, and other testing equipment that enables us to control the entire manufacturing process for our silicon nitride products and product candidates. All operations, with the exception of raw material production, are performed in-house. We purchase raw materials, consisting of silicon nitride ceramic powder and dopant chemical compounds, from several vendors which are ISO registered and approved by us. These raw materials are characterized and tested in accordance with our specifications and then blended to formulate our silicon nitride. We believe that there are multiple vendors that can supply these raw materials, and we continually monitor the quality and pricing offered by our vendors to ensure high quality and cost-effective supply of these materials.

The chemical composition of our in-house formulation of silicon nitride and our processing and manufacturing experience allows us to produce silicon nitride in multiple distinct forms. This capability provides us with the ability to utilize our silicon nitride in a variety of ways depending on the intended application, which, together with our silicon nitride's key characteristics, distinguishes us from other manufacturers of silicon nitride products.

We currently produce silicon nitride for use in our commercial products and product candidates in the following forms:

- *Monolithic Solid Silicon Nitride.* This form of silicon nitride is a fully dense, load-bearing solid which can be used for devices that require high strength, toughness, fracture resistance and low wear. Applications include medical devices – such as interbody spinal fusion implants and foot and ankle wedges – and non-medical such as electrical and aerospace components.

- *Porous Silicon Nitride.* While this form of silicon nitride has a chemical composition that is identical to that of our monolithic solid silicon nitride, this formulation has a porous structure, which is engineered to mimic cancellous bone, the spongy bone tissue that typically makes up the interior of human bones. Our porous silicon nitride has interconnected pores similar to that of cancellous bone ranging in size between about 90 and 600 microns. This form of silicon nitride can be used for the promotion of bone in-growth and attachment. We believe our porous silicon nitride can act as a substitute for the orthobiologics currently used to fill interbody devices to stimulate fusion, as a bone void filler, and as a porous scaffold for medical devices.

- *Silicon Nitride Powder.* We can produce silicon nitride powder that is osteogenic and antipathogenic. This powder can then be utilized to produce composites or coatings.

- *Composites of Silicon Nitride and PEEK and PEKK.* We have demonstrated that it is possible to compound our silicon nitride powder and the polymers PEEK (Polyether Ether Ketone) and PEKK (Polyether Ketone Ketone) and that the ensuing composite material maintains the bioactive properties of silicon nitride. We have engaged academic and commercial partners to assist us in developing this technology and have received NIH grants to assist in advancing this work. This composite material would allow the straightforward 3D printing of complex spine and CMF devices that would be more challenging to manufacture from silicon nitride alone.

- *Silicon Nitride Coating.* With a similar chemical composition as our other forms of silicon nitride, this form of silicon nitride can be applied as an adherent coating to metallic substrates, including cobalt-chromium, titanium and steel alloys, polymers, and ceramics. We believe applying an extremely thin layer of silicon nitride as a coating may provide a highly wear-resistant articulation surface, such as on femoral heads, which may reduce problems associated with metal or polymer wear debris. We also believe that the silicon nitride coating can be applied to devices that require firm fixation and functional connections between the device or implant and the surrounding tissue, such as hip stems and screws. The use of silicon nitride coating may also create an antibacterial, antiviral, and antifungal barrier between the device and the adjacent bone or tissue. We are currently evaluating several different coating technologies.

We believe we are the only FDA-registered and ISO 13485:2016 certified silicon nitride medical device manufacturing facility in the world, and the only provider of structural ceramics-based medical devices used for spinal fusion applications.

We believe our silicon nitride is ideal as an implant material and is superior to other biomaterials currently used in the spine implant market such as PEEK, allograft and autograft bone, metal and traditional oxide ceramics, none of which possess all of the favorable characteristics of silicon nitride:

- *Promotes Bone Growth.* Our silicon nitride is osteointegrative through its inherent surface topography and surface chemistry. The surface topography provides scaffolding for new bone growth. As a hydrophilic material, silicon nitride attracts protein cells and nutrients that stimulate osteoprogenitor cells to differentiate into osteoblasts, which are needed for optimal bone growth environments. Our silicon nitride has an inherent surface chemistry that favors bone formation and healing, much more so than PEEK and metals. These properties were highlighted in an *in vivo* study, where we measured the force required to separate devices from the spine after being implanted for three months, which indicates the quality of osteointegration. In the absence of bacteria, the force required to separate our silicon nitride from its surrounding bone was approximately three times that of PEEK, and nearly two times that of titanium. In the presence of bacteria, the force required to separate our silicon nitride from its surrounding bone was over five times that of titanium, while there was effectively no separation force required for PEEK, indicating essentially no osteointegration in a septic environment.

- *Antibacterial.* We have demonstrated in *in vitro* and *in vivo* studies that silicon nitride has inherent surface antibacterial properties, which reduce the risk of bacterial infection and biofilm in and around a silicon nitride device. PEEK, traditional ceramics, metals and bone do not have this bacterial resistance. These properties were highlighted in an *in vitro* study (Acta Biomater. 2012 Dec;8(12):4447-54. Doi: 10.1016/j.actbio.2012.07.038. Epub 2012 Jul 31.), where live bacteria counts were between 8 and 30 times lower on our silicon nitride than PEEK and up to 8 times lower on our silicon nitride than titanium. In addition to improving patient outcomes, we believe the antibacterial properties of our silicon nitride should make it an attractive biomaterial to hospitals and surgeons who are not reimbursed by third-party payers for the treatment of acute, implant-related infections. Additionally, silicon nitride is synthetic and, therefore, there is a lower risk of disease transmission through cross-contamination or of an adverse auto-immune response, sometimes associated with the use of allograft bone.

- *Antiviral:* Solid-surface inactivation of microbial pathogens has ancient roots; the Smith Papyrus (2600~2200 B.C.) described the use of copper surfaces to sterilize chest wounds and drinking water. Today, brass and bronze on doorknobs help prevent microbial spread in hospitals, and metal particles and surface coatings of selected metals are used in hygiene-sensitive environments, both as inactivators and adjuvants in inducing cellular immunity. Cellular toxicity limits these approaches because while the reactive oxygen radicals generated at metal surfaces efficiently kill bacteria and viruses, they also damage cells by oxidizing their proteins and lipids. Recent data have shown that silicon nitride surfaces are effective against several types of viruses. With surface-contact transmission of viral pathogens, particularly influenza, and the increasing use of consumer touchscreens in various retail industries, we believe that our material may have value to OEM partners focused on consumer glass-based surface coatings and treatments. We have filed a U.S. patent application on this effect.

- *Antifungal:* We have conducted preliminary studies which suggest that our silicon nitride may be effective against fungal microbes. Plant-based viruses, bacteria, and fungi affect some 15% of the world's edible crops, or about 1 billion metric tons of edible produce annually, with an economic impact in the US and Canada alone estimated to be between $1.5 to $5.0 billion per year. The mycotoxins produced by these plant fungi have an overall negative impact on human health and longevity. The inorganic nature of silicon nitride may prove to be more beneficial than the use of petrochemical or organometallic fungicides which are known to have residual effects in soil, on plants, and in fruit. In 2025, we received the issuance of International Patent No. 7635292, which covers novel agricultural uses of our silicon nitride, particularly in plant protection and antimicrobial treatment. This patent, combined with issued U.S. Patent No. 11,591,217, creates a family of patents focused on addressing the antimicrobial agribiotech market.

- *Imaging Compatible.* Our silicon nitride interbody spinal fusion devices are semi-radiolucent, clearly visible in X-rays, and produce no distortion under MRI and no scattering under CT. These characteristics enable an exact view of the device for precise intra-operative placement and post-operative bone fusion assessment in spinal fusion procedures. These qualities provide surgeons with greater certainty of outcomes with our silicon nitride devices than with other biomaterials, such as PEEK and metals.

- *Hard, Strong and Resistant to Fracture.* Our silicon nitride is hard, strong and possesses superior resistance to fracture over traditional ceramics and greater strength than polymers currently on the market. For example, our silicon nitride's flexural strength is more than five times that of PEEK and our silicon nitride's compressive strength is over twenty times that of PEEK. Unlike PEEK interbody spinal fusion devices, we believe our silicon nitride interbody spinal fusion devices can withstand the forces exerted during implantation and daily activities over the long term.

- *Resistant to Wear.* We believe our silicon nitride joint implant product candidates could have higher resistance to wear than metal-on-cross-linked polyethylene and traditional oxide ceramic-on-cross-linked polyethylene joint implants, the two most commonly used total hip replacement implants. Wear debris associated with metal implants increases the risk of metal sensitivity and metallosis. It is a primary reason for early failures of metal and polymer articulating joint components.

- *Non-Corrosive.* Our silicon nitride does not have the drawbacks associated with the corrosive nature of metal within the body, including metal sensitivity and metallosis, nor does it result in the release of metal ions into the body. As a result, we believe our silicon nitride products will have lower revision rates and fewer complications than comparable metal and traditional oxide ceramic products.

We are leveraging our proprietary Silicon Nitride (SiN) and Polyether Ether Ketone (PEEK) formulation to advance AI designed 3D printing capabilities for Custom and Patient-Specific medical implants. This innovative material combination integrates the superior biocompatibility, osteointegration, and antimicrobial properties of silicon nitride with the strength, durability, and radiolucency of PEEK, resulting in next-generation implants that enhance mechanical performance, reduce infection risks, and improve imaging compatibility.

The demand for personalized implants is growing as surgeons seek optimized solutions tailored to individual patient anatomy, improving surgical outcomes and reducing complications. While demand for patient-matched implants continues to increase, regulatory pathways vary depending on device classification and intended use. Many patient-specific devices are reviewed under traditional 510(k), De Novo, or PMA pathways, depending on risk classification. Although FDA provides guidance regarding additive manufacturing and patient-matched devices, regulatory requirements remain substantial and may require extensive validation and, in some cases, clinical data. The Custom Device Exemption is available only in limited circumstances and is not applicable to most commercially marketed patient-specific implants.

The benefits of AI designed 3D-printed SiN/PEEK implants extend across the entire healthcare ecosystem. For hospitals, these implants may reduce hospital stays and operative times related to traditional custom implant manufacturing. It may also lower the costs associated with revision surgeries and improve patient satisfaction scores.

Physicians may benefit from implants designed to match patient anatomy and incorporate radiolucent materials, which can assist with intraoperative visualization using standard imaging modalities. Silicon nitride has been studied for its material properties, including surface characteristics that may inhibit bacterial adhesion under laboratory conditions. However, clinical outcomes, recovery times, and complication rates depend on numerous factors, including patient condition and surgical technique, and the Company makes no guarantee of improved outcomes relative to other available materials.

With our unique expertise and proprietary formulation and advanced manufacturing techniques of SiN/PEEK, we are well-positioned to capitalize on this rapidly expanding market, providing innovative solutions that meet the needs of healthcare providers and patients alike.

We and independent third parties have conducted biocompatibility, biomechanical, in vitro, and in vivo testing of our silicon nitride composition to support regulatory submissions for certain of our devices. Additional testing has been performed on specific products and product candidates. Findings from laboratory, animal, and limited human clinical investigations have been described in peer-reviewed publications and scientific presentations. The results of this testing have been published in over 130 peer reviewed publications and presentations that include basic science studies, small- and large-animal data, and human clinical studies. While these studies contribute to the scientific understanding of silicon nitride as a biomaterial, regulatory clearance and market adoption depend on multiple factors, including demonstration of safety and performance for specific indications and physician acceptance.

Our Competitive Strengths

We believe we can use our silicon nitride technology platform to become a leading advanced ceramic company and have the following principal competitive strengths:

- *Sole Provider of Silicon Nitride Medical Devices.* We believe we are the only company that designs, develops, manufactures and sells medical grade silicon nitride-based products. Due to its key characteristics, we believe our silicon nitride enables us to offer new and transformative products across multiple medical specialties. In addition, with the FDA clearance of our silicon nitride Valeo products and SiNAPTIC® Foot & Ankle Osteotomy Wedge System, we are the only company to develop and manufacture a ceramic for use in FDA cleared spinal fusion medical devices, and FDA cleared osteotomy wedges, in the United States.

- *In-House Manufacturing Capabilities.* We operate a 19,000 square foot manufacturing facility located at our corporate headquarters in Salt Lake City, Utah. This operation complies with the FDA's quality system regulation, or QSR, and is certified under the International Organization for Standardization's, or ISO, standard 13485:2016 for medical devices. This facility allows us to design and produce silicon nitride products while controlling the entire manufacturing process from raw material to finished components.

- *Extensive Network of Scientific Collaborators.* We have developed strong, multi-year, collaborative relationships with surgeons who have used our products. These surgeons have supported us in collecting clinical data on silicon nitride and on reporting the successful patient outcomes they have observed. We also have long standing relations with university laboratories in the U.S. and participate in a European consortium on silicon nitride.

- *Highly Experienced Management and Technical Advisory Team.* Members of our management team have extensive experience in silicon nitride, ceramics, research and development, manufacturing and operations, product development, and launching new silicon nitride products into multiple industries. We also collaborate with a network of leading technical advisors in the design, development and use of our silicon nitride products and product candidates.

Our Strategy

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

- *Develop new silicon nitride manufacturing technologies.* Our current manufacturing process has allowed us to successfully produce spinal implants for over 10 years. We have made advancements in our processes – including the purchase of new manufacturing equipment – which we have leveraged to develop new porous and textured implants, and new composite products of silicon nitride with rigid polymers and fabrics. We have received three NIH grants to develop 3D printed silicon nitride / polymer implantable medical devices.

- *Apply our silicon nitride technology platform to new medical opportunities.* We believe our biomaterial expertise, flexible manufacturing process, and strong intellectual property will allow us to transition currently available medical device products made of inferior biomaterials and manufacture them using silicon nitride and our technology platform to improve their characteristics. We are seeking partnerships to utilize our capabilities and manufacture products for medical OEM and private label partnerships. We see specific opportunities in markets such as foot and ankle, dental, maxillofacial, and arthroplasty.

- *Develop new products with antipathogenic properties, including inactivation of the SARS-CoV-2 virus, utilizing our silicon nitride technology.* We have conducted tests which have identified and verified the antipathogenic properties of our silicon nitride powders, fully dense components, and silicon nitride-containing composites. Our research has explored the fundamental mechanisms responsible for these antipathogenic properties with the objective of developing commercial products and revenue from them. We have several partnerships exploring opportunities in face masks, filters, wound care, and coatings. In 2025, the United States Patent and Trademark Office ("USPTO") granted our patent application titled, "Antipathogenic Fibrous Materials." This patent secures broad protection for our proprietary silicon nitride-based antipathogen platform. Additionally, in 2025, the USPTO issued a Notice of Allowance for our patent application containing method claims covering our antipathogenic fabric technology.

Market Opportunity

Biomedical

We believe our silicon nitride biomaterial technology platform provides us with numerous competitive advantages in the biomaterials market. We manufacture interbody spinal fusion devices for CTL Amedica and have approximately 2 years remaining of a 10-year exclusive right to continue to manufacture them for CTL Amedica. We are developing products on our own behalf and for third party manufacturers – including CTL – for use as components in spine, total hip and knee joint replacements, as well as dental, foot & ankle, and maxillofacial applications. We believe we can also utilize our silicon nitride technology platform to develop future products in additional medical markets.

We believe that the main drivers for growth within the medical device markets are the following:

- *Introduction of New Technologies.* Better performing and longer-lasting biomaterials, improved diagnostics, and advances in surgical procedures allow for surgical intervention earlier in the continuum of care and better outcomes for patients. We believe surgical options using better performing and longer-lasting biomaterials will gain acceptance among surgeons and patients and drive accelerated growth and increase the size of the spinal fusion and joint replacement markets. We are leveraging proprietary Silicon Nitride (SiN) and Polyether Ether Ketone (PEEK) formulation to advance AI designed 3D printing capabilities for Custom and Patient-Specific medical implants. This innovative material combination integrates the superior biocompatibility, osteointegration, and antimicrobial properties of silicon nitride with the strength, durability, and radiolucency of PEEK, which we believe will lead to next-generation implants that may enhance mechanical performance, reduce infection risks, and improve imaging compatibility.

- *Favorable and Changing Demographics.* With the growing number of elderly people, age-related ailments are expected to rise sharply, which we believe will increase the demand and need for biomaterials and devices with improved performance capabilities. Also, middle-aged and older patients increasingly expect to enjoy active lifestyles and consequently demand effective treatments for painful spine and joint conditions, including better performing and longer-lasting interbody spinal fusion devices and joint replacements.

- *Market Expansion into New Geographic Areas.* We anticipate that demand for biomaterials and the associated medical devices will increase as the applications in which biomaterials are used are introduced to and become more widely accepted in underserved countries, such as South America and Asia.

Intellectual Property

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

We have twenty-one issued U.S. patents, ten issued foreign patents, three pending U.S. non-provisional patent applications, twenty-three pending foreign patent applications and no pending PCT patent applications. Our first issued patent expired in 2016, with the last of these patents expiring in 2042.

We have been issued two U.S. patents directed to articulating implants using our high-strength, high toughness doped silicon nitride solid ceramic. These issued patents, which include U.S. Patent Nos. 9,051,639 and US 9,517,136 expire in 2032 and 2034, respectively.

We have been issued U.S. Patent No. 10,806,831 and U.S. Patent No. 11,738,122 both directed to antipathogenic implants which expire in 2037 and 2039, respectively.

We also have been issued U.S. Patent No. 11,192,787; U.S. Patent No. 11,591,217; and U.S. Patent No. 12,017,912 directed to antipathogenic devices which all expire in 2038.

We have been issued U.S. Patent No. 9,353,010 directed to alumina-zirconia ceramic implants which expires in 2034.

We have been issued U.S. Patent No. 9,353,012 directed to charge-compensating dopant stabilized alumina-zirconia ceramic implants which expires in 2034.

We have been issued U.S. Patent No. 9,399,309 directed to directed to methods for threading a ceramic material which expires in 2034.

We have been issued U.S. Patent No. 9,925,295 directed to improved ceramic and/or glass materials which expires in 2032.

We have been issued U.S. Patent No. 11,672,252 directed to antifungal composites which expires in 2040.

We have been issued U.S. Patent No. 11,844,344 directed to rapid inactivation of SARS-CoV-2 which expires in 2039.

We have been issued U.S. Patent No. 11,850,214 directed to antiviral compositions and devices which expires in 2038.

We have been issued U.S. Patent No. 11,857,001 directed to antipathogenic face mask which expires in 2038.

We have been issued U.S. Patent No. 12,070,391 directed to improving wear performance of ceramic-polyethylene or ceramic-ceramic articulation couples utilized in orthopedic joint prostheses which expires in 2038.

We have been issued U.S. Patent No. 12,239,761 directed to silicon nitride laser cladding which expires in 2042.

We have been issued U.S. Patent No. 12,162,807 directed to surface functionalization of zirconia-toughened alumina with silicon nitride which expires in 2040.

We have been issued U.S. Patent No. 12,433,294 directed to Directed to methods for treating or preventing a fungal pathogen in a plant which expires in 2039.

We have been issued U.S. Patent No. 12,433,356 directed to a fibrous material with embedded silicon nitride powder which expires in 2039.

We have been issued U.S. Patent No. 12,520,890 directed to methods of embedding silicon nitride powder in a fibrous material which expires in 2039.

With respect to PCT patent application serial no. PCT/US2018/014781 directed to antibacterial biomedical implants, we have a pending patent application in Europe to seek potential patent protection for our proprietary technologies in that country. In addition, we have a separate pending continuation patent application in the United States. We also have issued patents in Australia, Canada, Japan, United States, and South Korea.

With respect to PCT patent application serial no. PCT/US2019/026789 directed to methods for improving the wear performance of ceramic-polyethylene or ceramic-ceramic articulation couples utilized in orthopedic joint prostheses, we have an issued patent in Japan and a separate issued patent in the United States.

With respect to PCT application serial no. PCT/US2019/048072 directed to antipathogenic devices and methods, we have pending national stage applications in Europe and China, to seek patent protection for our proprietary technologies in those countries. In addition, we have two issued patents in Japan and three issued patents in the United States for this technology.

With respect to PCT application serial no. PCT/US2020/037170 directed to methods of surface functionalization of zirconia-toughened alumina with silicon nitride, we have pending national stage application in China to seek patent protection for our proprietary technologies in that country. In addition, we have an issued patent in Japan and an issued patent in the United States for this technology.

With respect to PCT application serial no. PCT/US2021/014725 directed to antifungal composites and methods thereof, we have pending national stage applications in Europe, Australia, Canada, Mexico, and South Korea to seek patent protection for our proprietary technologies in those countries. We also have a separate issued patent in the United States for this technology.

With respect to PCT application serial no. PCT/US2021/027258 directed to antipathogenic face mask, we have pending national stage applications in Japan and Mexico to seek patent protection for our proprietary technologies in those countries. In addition, we have an issued patent in the United States for this technology.

With respect to PCT application serial no. PCT/US2021/027263 directed to systems and methods for rapid inactivation of SARS-CoV2 by silicon nitride, copper, and aluminum nitride, we have no pending national stage applications, although we obtained an issued U.S. patent for this technology.

With respect to PCT application serial no. PCT/US2021/038364 directed to antipathogenic devices and methods thereof for antifungal applications, we have pending national stage applications in South Korea and Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no. PCT/US2021/028975 directed to methods for laser coating of silicon nitride on a metal substrate, we have pending national stage application in Mexico to seek patent protection for our proprietary technologies in those countries.

With respect to PCT application serial no PCT/US2021/028641 directed to methods of silicon nitride laser cladding, we have a pending national stage application in Mexico to seek patent protection for our proprietary technologies in that country. We also have a separate issued patent in the United States for this technology.

With respect to PCT application serial no. PCT/US2021/027270 directed to antiviral compositions and devices and methods of use thereof, we have pending national stage applications in China and Mexico to seek patent protection for our proprietary technologies in those countries. In addition, we have a separate issued patent in the United States for this technology.

With respect to PCT application serial no. PCT/US2021/056461 directed to systems and methods for selective laser sintering of silicon nitride and metal composites, we have a pending national stage application in Mexico to seek patent protection for our proprietary technologies in that country.

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

With respect to PCT application serial no. PCT/US2021/062650 directed to nitride based antipathogenic compositions and devices and method of use thereof, we have a pending national stage application in Mexico to seek patent protection for our proprietary technologies in that country.

With respect to PCT application serial no. PCT/US2022/023868 directed to systems and methods for physical vapor deposition silicon nitride coatings having antimicrobial and osteogenic enhancements, we have pending national stage application in Mexico to seek patent protection for our proprietary technologies in that country.

With respect to PCT application serial no. PCT/US2022/076863 directed to methods for manufacturing silicon nitride materials, we have a pending national stage application in Europe. In addition, we have a separate pending patent application in the United States for this technology.

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

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

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

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

Competition

The main alternatives to our silicon nitride biomaterial include: PEEK, which is predominantly manufactured by Invibio; BIOLOX® *delta*, which is a traditional oxide ceramic manufactured by CeramTec; allograft bone; metals; and coated metals.

We believe our main competitors in the medical device market, which utilize a variety of competitive biomaterials, include: Medtronic, Inc.; DePuy Synthes Companies, a group of Johnson & Johnson companies; Stryker Corporation; and Zimmer Biomet, Inc. Presently, these companies buy ceramic components on an OEM basis from manufacturers such as CeramTec, Kyocera and CoorsTek, Inc., among others. We anticipate that these and other orthopedic companies and OEMs will seek to introduce new biomaterials and products that compete with ours.

Our main competitors in the antipathogenic market segment include BactiGuard and MicroBan.

Competition within our industries is primarily based on technology, innovation, product quality, and product awareness and acceptance by customers. Our principal competitors have substantially greater financial, technical and marketing resources, as well as significantly greater manufacturing capabilities than we do, and they may succeed in developing products that render our products and product candidates non-competitive. Our ability to compete successfully will depend upon our ability to develop innovative products with advanced performance features.

Government Regulation of Medical Devices

Governmental authorities in the United States, at the federal, state and local levels, and other countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, promotion, advertising, distribution, marketing, and export and import of products such as those we are commercializing and developing. Failure to obtain approval or clearance to market our products and products under development and to meet the ongoing requirements of these regulatory authorities could prevent us from continuing to market or develop our products and product candidates.

United States

Pre-Marketing Regulation

In the United States, medical devices are regulated by the FDA. Unless an exemption applies, a new medical device will require either prior 510(k) clearance or approval of a premarket approval application, or PMA, or authorization through the De Novo classification process, as applicable, before it can be marketed in the United States. The information that must be submitted to the FDA in order to obtain clearance or approval to market a new medical device varies depending on how the medical device is classified by the FDA. Medical devices are classified into one of three classes on the basis of the controls deemed by the FDA to be necessary to reasonably ensure their safety and effectiveness. Class I devices, which are those that have the lowest level or risk associated with them, are subject to general controls, including labeling, establishment registration and device listing, labeling requirements, and adherence to the Quality System Regulation ("QSR"), which is being harmonized with ISO 13485:2016 under the FDA's Quality Management System Regulation ("QMSR"), effective February 2, 2026. Class II devices are subject to general controls and special controls, including performance standards. Class III devices, which have the highest level of risk associated with them, are subject to most of the previously identified requirements as well as to premarket approval. Most Class I devices and some Class II devices are exempt from the 510(k) requirements, although manufacturers of these devices are still subject to registration, listing, labeling and applicable quality system requirements.

A 510(k) premarket notification must demonstrate that the device in question is substantially equivalent to another legally marketed device, or predicate device, that did not require premarket approval. In evaluating the 510(k), the FDA will determine whether the device has the same intended use as the predicate device, and (a) has the same technological characteristics as the predicate device, or (b) has different technological characteristics, and (i) the data supporting the substantial equivalence contains information, including appropriate clinical or scientific data, if deemed necessary by the FDA, that demonstrates that the device is as safe and as effective as a legally marketed device, and (ii) does not raise different questions of safety and effectiveness than the predicate device. While many 510(k) submissions do not require clinical data, FDA may require clinical or other additional data depending on the nature of the device, its technological characteristics, and associated risks. The FDA's review timelines are governed by performance goals established under the Medical Device User Fee Amendments ("MDUFA"), which include target timeframes for substantive interaction and decision-making, but it may take longer based on requests for additional information. In addition, requests for additional data, including clinical data, will increase the time necessary to review the notice. If the FDA does not agree that the new device is substantially equivalent to the predicate device, the new device will be classified in Class III, and the manufacturer must submit a PMA or pursue the De Novo classification pathway, which provides a process for certain novel low- to moderate-risk devices for which no legally marketed predicate device exists. Modifications to a 510(k)-cleared medical device may require the submission of another 510(k) or a PMA if the changes could significantly affect the safety or effectiveness or constitute a major change in the intended use of the device.

Modifications to a 510(k)-cleared device may require submission of a new 510(k); however, certain modifications may be eligible for review under FDA's Special 510(k) Program. If a device modification requires the submission of a 510(k), but the modification does not affect the intended use of the device or alter the fundamental scientific technology of the device, then summary information that results from the design control process associated with the cleared device can serve as the basis for clearing the application. Under the Special 510(k) Program, a manufacturer may rely on design control activities and risk analysis to support certain modifications, provided eligibility criteria are met; FDA may nevertheless request additional supporting information as needed. When the modification involves a change in material, the nature of the "new" material will determine whether a traditional or Special 510(k) is necessary. For example, in its Device Advice on How to Prepare a Special 510(k), the FDA uses the example of a change in a material in a finger joint prosthesis from a known metal alloy to a ceramic that has not been used in a legally marketed predicate device as a type of change that should not be submitted as a Special 510(k). However, if the "new" material is a type that has been used in other legally marketed devices within the same classification for the same intended use, a Special 510(k) is appropriate. The FDA gives as an example a manufacturer of a hip implant who changes from one alloy to another that has been used in another legally marketed predicate. Review timelines for Special 510(k)s are subject to MDUFA performance goals and may vary depending on the complexity of the submission.

The PMA process is more complex, costly and time consuming than the 510(k) clearance procedure. A PMA must be supported by extensive data including, but not limited to, technical, preclinical, clinical, manufacturing, control and labeling information to demonstrate to the FDA's satisfaction the safety and effectiveness of the device for its intended use. After a PMA is submitted, the FDA has 45 days to determine whether it is sufficiently complete to permit a substantive review. If the PMA is complete, the FDA will file the PMA. The FDA is subject to performance goal review times for PMAs under MDUFA, which establish target timeframes for review and decision-making, but if it has questions, it will likely issue a first major deficiency letter within 150 days of filing. It may also refer the PMA to an FDA advisory panel for additional review and will conduct a preapproval inspection of the manufacturing facility to ensure compliance with the applicable quality system regulations, including the QMSR once effective, either of which could extend the 180-day response target. A PMA can take several years to complete and there is no assurance that any submitted PMA will ever be approved. Even when approved, the FDA may limit the indication for which the medical device may be marketed or to whom it may be sold. In addition, the FDA may request additional information or request the performance of additional clinical trials before it will reconsider the approval of the PMA or as a condition of approval, in which case the trials must be completed after the PMA is approved. Changes to the device, including changes to its manufacturing process, may require the approval of a supplemental PMA.

If a medical device is determined to present a "significant risk," the manufacturer may not begin a clinical trial until it submits an investigational device exemption, or IDE, to the FDA and obtains approval of the IDE from the FDA. The IDE must be supported by appropriate data, such as animal and laboratory testing results and include a proposed clinical protocol. These clinical trials are also subject to the review, approval and oversight of an institutional review board, or IRB, which is an independent and multi-disciplinary committee of volunteers who review and approve research proposals, and the reporting of adverse events and experiences, at each institution at which the clinical trial will be performed. The clinical trials must be conducted in accordance with applicable regulations, including but not limited to the FDA's IDE regulations and current good clinical practices. A clinical trial may be suspended by the FDA, the IRB or the sponsor at any time for various reasons, including a belief that the risks to the study participants outweigh the benefits of participation in the trial. Even if a clinical trial is completed, the results may not demonstrate the safety and effectiveness of a device or may be equivocal or otherwise not be sufficient to obtain approval.

Post-Marketing Regulation

After a device is placed on the market, numerous regulatory requirements apply. These include:

- compliance with the Quality System Regulation and, beginning February 2, 2026, the Quality Management System Regulation (QMSR), which require manufacturers to follow stringent design, testing, testing, control, documentation, record maintenance, including maintenance of complaint and related investigation files, and other quality assurance controls during the manufacturing process;

- labeling regulations, which prohibit the promotion of products for uncleared or unapproved or "off-label" uses and impose other restrictions on labeling; and

- medical device reporting obligations, which require that manufacturers investigate and report to the FDA adverse events, including deaths, or serious injuries that may have been or were caused by a medical device and malfunctions in the device that would likely cause or contribute to a death or serious injury if it were to occur.

Failure to comply with applicable regulatory requirements can result in enforcement action by the FDA, which may include any of the following sanctions:

- warning letters;
- fines, injunctions, and civil penalties;
- recall or seizure of our products;
- operating restrictions, partial suspension or total shutdown of production;
- refusal to grant 510(k) clearance or PMA approvals of new products;
- withdrawal of 510(k) clearance or PMA approvals; and
- criminal prosecution.

To ensure compliance with regulatory requirements, medical device manufacturers are subject to market surveillance and periodic, pre-scheduled and unannounced inspections by the FDA, and these inspections may include the manufacturing facilities of our subcontractors.

International Regulation

Sales of our medical devices outside the United States are subject to the regulatory requirements of each jurisdiction in which the products are marketed. These requirements vary by country and may require additional testing, clinical evidence, quality system documentation, product registration, labeling modifications, and governmental approvals prior to commercialization. Regulatory approval timelines outside the United States may differ from those of the FDA and may be longer or more burdensome.

European Union

In the European Union ("EU"), medical devices are regulated under Regulation (EU) 2017/745 on medical devices ("EU MDR"), which establishes a harmonized regulatory framework across the 27 EU Member States. Under the MDR, devices are classified by risk (Class I, IIa, IIb and III), and manufacturers must demonstrate compliance with the General Safety and Performance Requirements set forth in the regulation.

Except for certain low-risk devices, manufacturers must engage a designated Notified Body to assess conformity, including review of the manufacturer's quality management system and technical documentation, which may include clinical evaluation data. Upon successful completion of the conformity assessment process, the manufacturer issues a Declaration of Conformity and affixes the CE marking, which permits commercial distribution throughout the EU. The MDR imposes significant pre- and post-market obligations, including clinical evaluation, post-market surveillance, vigilance reporting, and registration requirements. The transition to the MDR has increased regulatory scrutiny and compliance costs, and limited Notified Body capacity may affect review timelines.

Manufacturers established outside the EU must appoint an authorized representative within the EU.

United Kingdom and Other European Markets

Following the United Kingdom's withdrawal from the EU, Great Britain is regulated separately by the Medicines and Healthcare products Regulatory Agency (MHRA) and generally requires UKCA marking, subject to transitional arrangements. Northern Ireland continues to follow EU MDR requirements. Switzerland and certain other European countries maintain regulatory systems that are broadly aligned with EU requirements but may impose additional local obligations, including appointment of local representatives and registration requirements.

Other International Markets

Other jurisdictions, including Canada, Japan, China, Brazil and others, maintain independent regulatory approval processes that typically require submission of technical documentation, evidence of quality system compliance, and, in some cases, local testing or clinical data. Although some countries may consider prior approvals or certifications, such as CE marking, manufacturers must independently comply with applicable local regulatory requirements.

Failure to obtain or maintain required international approvals or certifications could restrict our ability to market our products in those jurisdictions.

Compliance with Healthcare Laws

Our operations are subject to numerous federal and state healthcare laws and regulations that govern fraud and abuse, transparency, privacy, security, and interactions with healthcare professionals. These laws are interpreted broadly and enforced by federal and state authorities, including the U.S. Department of Justice ("DOJ"), the U.S. Department of Health and Human Services Office of Inspector General ("HHS-OIG"), and state attorneys general.

We have entered into arrangements with certain surgeons and other healthcare professionals, including consulting, product development, royalty, and other compensation arrangements. Some of these individuals may order or use our products, and some may hold equity interests in our company. Such relationships are subject to scrutiny under applicable fraud and abuse laws. We structure these arrangements to comply with applicable legal requirements, including fair market value and commercial reasonableness standards and policies intended to avoid payments that are tied to the volume or value of referrals. However, these laws are complex and fact-specific, and there can be no assurance that regulatory authorities would not challenge our arrangements.

The federal Anti-Kickback Statute prohibits knowingly and willfully offering, paying, soliciting, or receiving remuneration to induce or reward referrals for items or services reimbursable by federal healthcare programs. The statute is broadly interpreted, and compliance with statutory exceptions or regulatory safe harbors is voluntary but often narrowly construed. Violations may result in criminal penalties, civil monetary penalties, exclusion from federal healthcare programs, and liability under the federal False Claims Act.

The federal False Claims Act imposes liability on persons who knowingly submit, or cause the submission of, false or fraudulent claims for payment to federal healthcare programs. The statute permits private whistleblowers to bring actions on behalf of the government and share in any recovery. Claims arising from alleged kickbacks, improper marketing practices, or other regulatory violations may give rise to liability. Many states have enacted similar fraud and abuse and false claims laws that may apply to claims submitted to commercial payors as well as government programs.

We are also subject to federal and state transparency laws. The federal Physician Payments Sunshine Act requires medical device manufacturers to report certain payments and other transfers of value to physicians, teaching hospitals, and certain non-physician practitioners, as well as certain ownership and investment interests. Various states impose additional reporting, marketing compliance, or gift restriction requirements.

Our business may involve the receipt or processing of health-related information, and we are subject to applicable federal and state privacy and data security laws. To the extent we act as a "business associate" under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), we are directly subject to HIPAA's privacy, security, and breach notification requirements. In addition, numerous states have enacted consumer privacy and data protection laws that impose obligations regarding the collection, use, storage, and protection of personal information. Outside the United States, we may be subject to foreign data protection laws, including the European Union's General Data Protection Regulation ("GDPR").

Clinical research activities are subject to FDA regulations governing investigational devices and the protection of human subjects, including requirements for informed consent and Institutional Review Board oversight, as well as applicable international regulations where studies are conducted.

If our operations are found to violate any applicable healthcare, fraud and abuse, transparency, privacy, or other regulatory requirements, we could be subject to significant civil or criminal penalties, exclusion from participation in federal healthcare programs, corporate integrity obligations, reputational harm, and other sanctions, which could materially and adversely affect our business, financial condition, and results of operations.

Third-Party Reimbursement

Our products are purchased primarily by hospitals and surgical centers rather than directly by third-party payors. However, the commercial success of our products depends in significant part on the availability of coverage and reimbursement for procedures in which our devices are used. Hospitals and physicians are unlikely to utilize our products if reimbursement for the applicable procedures is insufficient to cover associated costs.

In the United States, Medicare reimburses inpatient hospital services under the Inpatient Prospective Payment System ("IPPS"), which utilizes diagnosis-related groups ("DRGs"), and outpatient hospital services under the Outpatient Prospective Payment System ("OPPS"), which utilizes ambulatory payment classifications ("APCs"). Ambulatory surgical centers are reimbursed under a separate prospective payment system. These payment systems generally provide predetermined amounts intended to cover facility costs associated with a procedure, including implantable devices. Payment amounts are established without regard to the cost of a particular manufacturer's product, and hospitals bear the risk if device costs exceed reimbursement.

Coverage determinations may be made at the national or local level, and both governmental and private payors may deny or restrict coverage if a procedure is determined to be not medically necessary, not cost-effective, or inconsistent with applicable labeling or standards of care. Changes in coverage policies, reimbursement methodologies, payment rates, or site-of-service rules may adversely affect hospital purchasing decisions and utilization of our products. Private payors frequently adopt policies consistent with Medicare coverage and payment determinations.

Hospitals often participate in group purchasing organizations ("GPOs"), which negotiate pricing arrangements with manufacturers. Our ability to secure favorable contractual arrangements with GPOs, or to compete effectively outside of such arrangements, may affect our market access and pricing.

Federal and state healthcare programs and commercial payors continue to implement cost-containment measures, including value-based purchasing initiatives, bundled payment programs, and other payment models designed to control healthcare spending. These measures may increase pricing pressure on hospitals and, in turn, on medical device suppliers.

Outside the United States, reimbursement systems vary by jurisdiction and frequently involve government-established pricing controls, health technology assessments, or centralized procurement processes. In many countries, hospitals and healthcare facilities operate within budget constraints that may limit the adoption of new or higher-cost technologies. We cannot assure that favorable coverage, reimbursement, or pricing will be available in any market, and adverse changes in reimbursement policies could materially affect our business, financial condition, and results of operations.

Employees

As of December 31, 2025, we had 32 employees. We believe that our success will depend, in part, on our ability to attract and retain qualified personnel. We have never experienced a work stoppage due to labor difficulties, and believe our employee relations to be good. None of our employees are represented by labor unions. We strive toward having a diverse team of employees and are committed to equality, inclusion and workplace diversity.

ITEM 1A. RISK FACTORS

In addition to the other information contained in this Annual Report, the following risk factors should be considered carefully in evaluating our company. Our business, financial condition, liquidity or results of operations could be materially adversely affected by any of these risks.

Risks Related to Our Capital Resources and Impairments

We will require additional financing and our failure to obtain additional funding would force us to delay, reduce or eliminate our product development programs or commercialization efforts.

We currently have limited committed sources of capital, and we have limited liquidity. Our cash and cash equivalents as of December 31, 2025 were $4.1 million. In October 2025, the Company entered into an At The Market Offering Agreement to sell shares of its common stock, from time to time, through an "at the market offering" or "ATM" program, having an aggregate offering price of $6.4 million. There is presently $6.0 million available capacity under the ATM. We will require substantial future capital in order to continue operating our business, conduct the research and development and regulatory clearance and approval activities necessary to bring our products to market, and to establish effective marketing and sales capabilities. Our existing capital resources are not sufficient to enable us to fund the completion of the development and commercialization of all of our product candidates.

We cannot determine with certainty the duration and completion costs of the current or future development and commercialization of our product candidates or if, when, or to what extent we will generate revenues from the commercialization and sale of any of these product candidates for which we obtain regulatory approval. We may never succeed in achieving regulatory approval for certain or all of these product candidates. The duration, costs and timing of clinical trials and development of our spinal fusion, joint replacement and coated metal product candidates will depend on a variety of factors, including:

- the scope, rate of progress, and expense of our ongoing, as well as any additional, clinical trials and other research and development activities;
- future clinical trial results we may choose to conduct;
- potential changes in government regulation; and
- the timing and receipt of any regulatory approvals.

A change in the outcome of any of these variables with respect to the development of our product candidates could mean a significant change in the costs and timing associated with the development of these product candidates.

In addition, if adequate funds to develop our product candidates are not available on a timely basis, we may terminate or delay the development of one or more of our product candidates, or delay activities necessary to commercialize our product candidates. Additional funding may not be available to us on acceptable terms, or at all. Any additional equity financing, if available, may not be available on favorable terms and will most likely be dilutive to our current stockholders, and debt financing, if available, may involve more restrictive covenants. Our ability to access capital when needed is not assured and, if not achieved on a timely basis, will materially harm our business, financial condition and results of operations or could cause us to cease operations.

The timing and amount of our future capital requirements will depend on many factors, including:

- the level of sales of our current products and the cost of revenue and sales and marketing;
- the extent of any clinical trials that we will be required to conduct in support of the regulatory clearance of our future product candidates;
- the scope, progress, results and cost of our product development efforts;
- the costs, timing and outcomes of regulatory reviews of our product candidates;
- the number and types of products we develop and commercialize;
- the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending intellectual property-related claims; and
- the extent and scope of our general and administrative expenses.

Raising additional capital by issuing securities or through debt financings or licensing arrangements will likely cause dilution to existing stockholders, restrict our operations or require us to relinquish proprietary rights.

To the extent the Company raises additional capital through the issuance of equity or convertible debt securities, existing stockholders may experience dilution in their ownership interests. In addition, the terms of any such securities may include liquidation, conversion, dividend, or other preferential rights that are senior to or otherwise adversely affect the rights of holders of the Company's common stock. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaboration and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or products or grant licenses on terms that are not favorable to us. Any of these events could adversely affect our ability to achieve our product development and commercialization goals and have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Business and Strategy

We have incurred net losses since our inception and anticipate that we will continue to incur net losses for the foreseeable future. We may never achieve or sustain profitability.

We have incurred substantial net losses since our inception. For the years ended December 31, 2025 and 2024, we incurred a net loss of $10.4 million and $11.0 million, respectively, and used cash in operations of $8.6 million and $8.6 million, respectively. We have an accumulated deficit of $292.1 million and $281.7 million as of December 31, 2025 and 2024, respectively. Our losses have resulted principally from costs incurred in connection with our sales and marketing activities, research and development activities, manufacturing activities, general and administrative expenses associated with our operations, impairments on intangible assets and property and equipment, interest expense, loss on extinguishment of debt and offering costs. Even if we are successful in launching new products into the market, we may continue to incur losses for the foreseeable future as we continue to manufacture products for CTL Medical and other OEM customers and invest in research and development and regulatory approvals for our product candidates. While we are focused on improving margins and controlling costs and believe our new product initiatives may improve our operating results over time, we cannot predict when, or if, we will achieve profitability.

If sales revenue from any of our products or product candidates that receive marketing clearance from the FDA or other regulatory body is insufficient, if we are unable to develop and commercialize any of our product candidates, or if our product development is delayed, we may never become profitable. Even if we do become profitable, we may be unable to sustain or increase our profitability on a quarterly or annual basis.

Our success depends on our ability to successfully commercialize advanced ceramic products for biomedical, and antipathogenic applications, which to date have experienced only limited market acceptance.

We believe we are the first and only company to use silicon nitride in medical applications. To date, however, we have had limited acceptance of our silicon nitride-based products. In order to succeed in our goal of becoming a leading advanced ceramics company, we must increase market awareness of our silicon nitride interbody fusion products, including our spinal fusion implants and foot and ankle wedge systems, and develop and launch new biomedical, industrial, and antipathogenic products. If we fail in any of these endeavors or experience delays in pursuing them, we will not generate revenues as planned and will need to curtail operations or seek additional financing earlier than otherwise anticipated.

Our biomedical products may not achieve market acceptance or commercial success.

Following the sale of our spine implant business, we rely in part on third-party distribution partners to commercialize certain silicon nitride spinal fusion products that we manufacture. If these partners are unable to effectively market and sell such products or increase demand, our revenues would be adversely affected.

More broadly, our ability to generate meaningful revenue depends on market acceptance of our silicon nitride-based technologies by surgeons, hospitals, and other healthcare providers. Although we received FDA clearance for our first spinal fusion products in 2008, we have not achieved significant market share in the interbody spinal fusion market.

Our newer offerings, including the SiNAPTIC® foot and ankle wedge system, and any future products for which we obtain regulatory clearance or approval, may likewise fail to gain sufficient clinical adoption.

Market acceptance depends on numerous factors, including clinical outcomes, supporting data, reimbursement coverage and levels, pricing, surgeon familiarity, and competition from alternative biomaterials. If our products do not achieve adequate market acceptance, our business, results of operations, and financial condition would be materially adversely affected.

The orthopedic market is highly competitive, and we may not be able to compete effectively against the larger, well-established companies that dominate this market or emerging and small innovative companies that may seek to obtain or increase their share of the market.

The markets for orthopedic products are intensely competitive, and many of our competitors are much larger and have substantially more financial and human resources than we do. Many have long histories and strong reputations within the industry, and a relatively small number of companies dominate these markets. Medtronic, Inc.; DePuy Synthes Companies, a group of Johnson & Johnson companies; Stryker Corporation; Zimmer-Biomet, Inc.; Zimmer Holdings, Inc.; and Smith & Nephew plc, account for a significant number of orthopedic sales worldwide.

These companies enjoy significant competitive advantages over us, including:

- broad product offerings, which address the needs of orthopedic surgeons and hospitals in a wide range of procedures;
- products that are supported by long-term clinical data;
- greater experience in, and resources for, launching, marketing, distributing and selling products, including strong sales forces and established distribution networks;
- existing relationships with orthopedic surgeons;
- extensive intellectual property portfolios and greater resources for patent protection;
- greater financial and other resources for product research and development;
- greater experience in obtaining and maintaining FDA and other regulatory clearances and approvals for products and product enhancements;
- established manufacturing operations and contract manufacturing relationships;
- significantly greater name recognition and widely recognized trademarks; and
- established relationships with healthcare providers and payers.

Our products and any product candidates that we may introduce into the market may not enable us to overcome the competitive advantages of these large and dominant orthopedic companies. In addition, even if we successfully introduce additional product candidates incorporating our silicon nitride biomaterial into the market, emerging and small innovative companies may seek to increase their market share and they may eventually possess competitive advantages, which could adversely impact our business. Our competitors may also employ pricing strategies that could adversely affect the pricing of our products.

Moreover, numerous companies are developing and commercializing alternative biomaterials and surface technologies that may compete with our silicon nitride-based products in terms of safety, performance, cost, and clinical acceptance. These include advanced metals, modified polymer implants (such as enhanced PEEK formulations), ceramic-coated or oxidized metal devices, additive manufacturing solutions, and other proprietary materials designed to improve osseointegration, durability, or antimicrobial properties. For example, certain competitors have developed ceramic-coated or treated metal implants intended to address limitations associated with traditional metal devices, which may compete directly with our silicon nitride and silicon nitride-coated product offerings. Competitive materials and technologies are being advanced not only in spinal applications but also in extremity and other orthopedic segments, including foot and ankle procedures in which our SiNAPTIC® foot and ankle wedge system and potential future extremity products may compete. If competing technologies demonstrate comparable or superior clinical outcomes, are supported by more extensive clinical data, achieve broader surgeon adoption, or are offered at more competitive prices, our ability to gain or maintain market share across our product portfolio could be adversely affected.

The manufacturing process for our silicon nitride products is complex and requires sophisticated state-of-the-art equipment, experienced manufacturing personnel and highly specialized knowledge. If we are unable to manufacture our silicon nitride products on a timely basis consistent with our quality standards, our results of operation will be adversely impacted.

In order to control the quality, cost and availability of our silicon nitride products, we developed our own manufacturing capabilities. We operate a 30,764 square foot facility which is certified under the ISO 13485 medical device manufacturing standard for medical devices and operates under the FDA's quality systems regulations, or QSRs. All operations, with the exception of raw material production, are performed at this facility.

We are the sole manufacturer of our silicon-nitride based products. Our reliance solely on our internal resources to manufacture our silicon nitride products entails risks to which we would not be subject if we had secondary suppliers for their manufacture, including:

- the inability to meet our product specifications and quality requirements consistently;
- a delay or inability to procure or expand sufficient manufacturing capacity to meet additional demand for our products;
- manufacturing and product quality issues related to the scale-up of manufacturing;
- the inability to produce a sufficient supply of our products to meet product demands;
- the disruption of our manufacturing facility due to equipment failure, natural disaster or failure to retain key personnel; and
- our inability to ensure our compliance with regulations and standards of the FDA, including QSRs, and corresponding state and international regulatory authorities, including the NMPA (China).

Any of these events could lead to a reduction in our product sales, product launch delays, failure to obtain regulatory clearance or approval or impact our ability to successfully sell our products and commercialize our products candidates.

We depend on a limited number of third-party suppliers for key raw materials used in the manufacturing of our silicon nitride products, and the loss of these third-party suppliers or their inability to supply us with adequate raw materials could harm our business.

We rely on a limited number of third-party suppliers for the raw materials required for the production of our silicon nitride products and product candidates. Our dependence on a limited number of third-party suppliers involves several risks, including limited control over pricing, availability, quality, and delivery schedules for raw materials. We have no supply agreements in place with any of our suppliers and cannot be certain that our current suppliers will continue to provide us with the quantities of raw materials that we require or that satisfy our anticipated specifications and quality requirements. Any supply interruption in limited or single sourced raw materials could materially harm our ability to manufacture our products until a new source of supply, if any, could be identified and qualified. We may be unable to find a sufficient alternative supply channel within a reasonable time or on commercially reasonable terms. Any performance failure on the part of our suppliers could delay the production of our silicon nitride products and product candidates and delay the development and commercialization of our product candidates, including limiting supplies necessary for commercial sale, clinical trials and regulatory approvals, which could have a material adverse effect on our business.

In order to be successful, we must expand our available product lines by commercializing new product candidates, but we may not be able to do so in a timely fashion and at expected costs, or at all.

While we currently manufacture silicon nitride spinal fusion implants that are commercialized through third-party distribution arrangements, our long-term growth depends on expanding our product portfolio across orthopedic, extremity, and other medical applications, as well as selected non-medical markets. This includes continued commercialization of our SiNAPTIC® foot and ankle wedge system and the development of additional silicon nitride-based products incorporating our advanced ceramic technologies.

To succeed in these efforts, we must continue product development and testing, scale and optimize manufacturing processes, obtain necessary regulatory clearances and approvals, establish or expand distribution and strategic partner relationships, and enhance our sales and marketing capabilities. We are also pursuing opportunities in non-medical applications, including advanced ceramic armor and other industrial technologies, which involve different market dynamics, customer requirements, and competitive landscapes.

Product development and commercialization involve substantial technical, regulatory, financial, and market risks. We may encounter delays in development timelines, increased costs, manufacturing challenges, regulatory obstacles, or slower-than-expected market adoption. There can be no assurance that any of our current or future product candidates will achieve regulatory clearance or approval, be successfully commercialized, or generate meaningful revenue. If we are unable to successfully expand and commercialize our product lines, or if commercialization is delayed, our revenues and growth prospects would be adversely affected, and we may need to reduce operations or seek additional capital sooner than anticipated.

We rely on both strategic partners and our own commercialization capabilities to develop and market our product candidates, and if these efforts are unsuccessful, we may not achieve profitability.

We currently utilize a combination of third-party commercialization arrangements and internal capabilities to develop, manufacture, and market our biomedical and antipathogenic product offerings. For certain product lines, including silicon nitride spinal fusion implants, we rely on distribution or strategic partners for commercialization. At the same time, following our acquisition of the SiNAPTIC® foot and ankle wedge system and related assets, we are undertaking direct commercialization efforts for that product line and may elect to do so for additional products in the future.

Our success will depend on the effectiveness of both these third-party relationships and our internal commercialization infrastructure. Where we rely on strategic partners, we are dependent on their ability to successfully market and distribute our products, manage customer relationships, and allocate sufficient resources to our product lines. Where we pursue commercialization independently, we must continue to build and manage sales and marketing capabilities, establish and maintain effective distribution channels, manage certified and validated commercial-scale manufacturing operations, conduct product development and testing, and obtain and maintain required regulatory clearances and approvals.

There can be no assurance that we will be able to successfully execute on either our partnered or direct commercialization strategies. If our strategic partners fail to perform as expected, if we are unable to effectively build and scale our internal commercialization capabilities, or if we experience delays or increased costs in these efforts, we may not generate revenues as anticipated and may need to curtail operations or seek additional financing sooner than expected.

Building and managing an in-house sales and distribution organization subjects us to significant operational, financial, and execution risks.

In connection with the commercialization of the SiNAPTIC® foot and ankle wedge system and potentially other future products, we are developing internal sales, marketing, and distribution capabilities. Establishing and managing an effective in-house commercial organization requires substantial time, capital, and management resources, and we have limited prior experience operating a direct sales force at scale.

We must recruit, train, and retain experienced sales representatives, including those with established relationships in the foot and ankle and broader orthopedic markets. Competition for qualified sales personnel in the medical device industry is intense, particularly for individuals with existing surgeon relationships and experience calling on hospitals, ambulatory surgery centers, and group purchasing organizations. We may be unable to attract or retain such personnel on acceptable terms, and turnover among sales representatives could disrupt customer relationships and delay revenue growth.

In addition, we may utilize independent distributors in certain territories, which introduces risks related to managing distributor performance, aligning incentives, negotiating pricing and commission structures, and maintaining consistent branding and compliance practices. Distributors may represent competing products and may not prioritize our products. Poor distributor performance or disputes over commercial terms could adversely affect sales.

Direct commercialization also requires us to manage inventory forecasting, warehousing, logistics, instrument tray deployment, and consignment arrangements. Inaccurate demand forecasting, slow inventory turnover, product returns, or obsolescence could result in write-downs and negatively impact gross margins. Furthermore, the need to maintain inventory and instrument sets in the field may increase our working capital requirements and cash burn, particularly during the early stages of market adoption.

If we are unable to effectively build, manage, and scale our internal sales and distribution infrastructure, or if the associated costs exceed our expectations, our commercialization efforts may be delayed or less successful than anticipated, which could materially adversely affect our business, results of operations, financial condition, and liquidity.

Part of our strategy is to establish and develop OEM partnerships and arrangements, which subjects us to various risks.

Because we believe silicon nitride is a superior platform and technology for application in the spine, total joint and other markets and industrial applications, we are establishing OEM partnerships with other companies to replace their materials and products with silicon nitride. Sales of products to OEM customers will expose our business to a number of risks. Sales through OEM partners could be less profitable than direct sales. Sales of our products through multiple channels could also confuse customers and cause the sale of our products to decline. In addition, OEM customers will require that products meet strict standards. Our compliance with these requirements could result in increased development, manufacturing, warranty and administrative costs. A significant increase in these costs could adversely affect our operating results. If we fail to meet OEM specifications on a timely basis, our relationships with our OEM partners may be harmed. Furthermore, we would not control our OEM partners, and they could sell competing products, may not incorporate our technology into their products in a timely manner and may devote insufficient sales efforts to the OEM products.

If hospitals and other healthcare providers are unable to obtain coverage or adequate reimbursement for procedures performed using our medical products, our products may not achieve widespread adoption.

The commercial success of our medical products, including our silicon nitride spinal implants, the SiNAPTIC® foot and ankle wedge system, and any future orthopedic or other medical devices we develop, depends in part on the availability of coverage and adequate reimbursement from governmental and private third-party payers. Hospitals and other healthcare providers that purchase and use our products generally rely on Medicare, Medicaid, private insurers, and other payers to reimburse all or a portion of the costs of the procedures in which our products are used, typically under bundled or fixed payment rates. If coverage is unavailable or reimbursement levels are insufficient, providers may be unwilling to use our products.

Coverage and reimbursement policies vary among payers and may be influenced by determinations made by the Centers for Medicare & Medicaid Services (CMS). Private payers frequently follow CMS coverage and payment decisions, and adverse determinations at the federal or state level could negatively affect reimbursement by other payers. In addition, payers may deny reimbursement if they determine that a procedure was not medically necessary, was not cost-effective, or involved a use not approved or cleared by the FDA.

The U.S. healthcare system continues to face significant cost-containment pressures. Government and private payers periodically revise payment methodologies and may reduce reimbursement rates or impose value-based purchasing and pay-for-performance measures that increase pricing pressure on hospitals and, indirectly, on medical device manufacturers. As a result, hospitals and other providers may seek to reduce the prices they pay for our products or limit adoption of products perceived as more costly than alternatives.

Hospitals and clinics often participate in group purchasing organizations (GPOs), which negotiate pricing arrangements with selected vendors. If we are unable to secure contracts with key GPOs or otherwise persuade providers to purchase our products outside of existing contracts, our ability to achieve meaningful market penetration could be adversely affected.

Internationally, reimbursement systems and pricing controls vary by country, and many jurisdictions impose price ceilings or other restrictions on medical devices. Failure to obtain favorable reimbursement or pricing approvals in international markets could limit adoption of our products outside the United States.

Adverse changes in coverage, reimbursement levels, or healthcare policy, whether in the United States or internationally, could materially adversely affect our business, results of operations, and financial condition.

A pandemic, epidemic or outbreak of an infectious disease in the United States or elsewhere may adversely affect our business, operations, and financial condition.

Future outbreaks of infectious diseases or other public health emergencies in the United States or internationally could disrupt global and domestic economies, financial markets, and healthcare systems. Such events may result in reduced access to capital markets, increased market volatility, and constraints on our ability to raise additional financing on acceptable terms, or at all.

Public health crises may also disrupt our operations and those of our suppliers, manufacturers, and distribution partners. Travel restrictions, workforce shortages, quarantines, government-mandated shutdowns, or supply chain interruptions could delay product development, manufacturing, regulatory activities, or commercialization efforts. In addition, hospitals and healthcare providers may postpone elective or non-urgent procedures during periods of healthcare system strain, which could reduce demand for our orthopedic and other medical products.

The extent and duration of any future pandemic or public health emergency and its impact on our business would depend on numerous factors beyond our control, including the severity of the outbreak, governmental responses, and the resilience of global supply chains and healthcare systems. Any such event could materially adversely affect our business, results of operations, financial condition, and liquidity.

Prolonged negative economic conditions in domestic and international markets may adversely affect us, our suppliers, partners and consumers, and could harm our financial position.

There is a risk that one or more of our current suppliers may not continue to operate. Any lender that is obligated to provide funding to us under any future credit agreement with us may not be able to provide funding in a timely manner, or at all, when we require it. The cost of, or lack of, available credit or equity financing could impact our ability to develop sufficient liquidity to maintain or grow our company. These negative changes in domestic and international economic conditions or additional disruptions of either or both of the financial and credit markets may also affect third-party payers and may have a material adverse effect on our business, results of operations, financial condition and liquidity.

In addition, we believe that various demographics and industry-specific trends will help drive growth in our target markets, but these demographics and trends are uncertain. Actual demand for our products could be significantly less than expected if our assumptions regarding these factors prove to be incorrect or do not materialize.

We are dependent on our senior management team, engineering team, and external advisors, and the loss of any of them could harm our business. We may not have sufficient personnel to effectuate our business strategy due to our recent reduction in force.

The members of our current senior management team may not be able to successfully implement our strategy. There are no assurances that the services of any of these individuals will be available to us for any specified period of time. The successful integration of our senior management team, the loss of members of our senior management team, engineering team and key external advisors, or our inability to attract or retain other qualified personnel or advisors could have a material adverse effect on our business, financial condition and results of operations. We may not have sufficient number of qualified personnel to effectuate our business strategy, which could have a material adverse effect on our business, financial condition and results of operations.

If we experience significant disruptions in our information technology systems, our business, results of operations and financial condition could be adversely affected.

The efficient operation of our business depends on our information technology systems. We rely on our information technology systems to effectively manage our sales and marketing, accounting and financial functions; manufacturing processes; inventory; engineering and product development functions; and our research and development functions. As such, our information technology systems are vulnerable to damage or interruption including from earthquakes, fires, floods and other natural disasters; terrorist attacks and attacks by computer viruses or hackers; power losses; and computer systems, or Internet, telecommunications or data network failures. The failure of our information technology systems to perform as we anticipate or our failure to effectively implement new systems could disrupt our entire operation and could result in decreased sales, increased overhead costs, excess inventory and product shortages, all of which could have a material adverse effect on our reputation, business, results of operations and financial condition.

Cybersecurity risks and failures of our information technology systems could disrupt our operations, compromise confidential information, and materially adversely affect our business.

We rely on information technology systems and digital infrastructure to operate our business, including systems used for financial reporting, manufacturing operations, supply chain management, inventory control, sales and distribution activities, research and development, and communications with customers, suppliers, employees, and other third parties. We collect, process, and store sensitive information, including proprietary business information, intellectual property, employee data, and limited customer-related information.

Our systems, and those of our third-party service providers, distributors, and manufacturing partners, may be vulnerable to cybersecurity threats, including unauthorized access, ransomware attacks, phishing schemes, malware, business email compromise, insider misconduct, and other cyber incidents. The frequency and sophistication of cyberattacks have increased in recent years, particularly against healthcare and manufacturing companies.

A successful cyberattack or other security incident could result in the loss, theft, corruption, or unauthorized disclosure of confidential information; disruption of manufacturing or supply chain operations; delays in product development or commercialization; financial loss; and reputational harm. Ransomware or other attacks affecting our manufacturing systems could interrupt production or distribution of our medical products. In addition, a material cybersecurity incident could impair our ability to maintain effective internal control over financial reporting.

We are subject to evolving federal, state, and international data privacy and cybersecurity laws and regulations, as well as contractual obligations with third parties, which require us to safeguard information and, in certain circumstances, provide notice of data breaches. Compliance with these requirements may increase our costs, and any failure to comply could result in regulatory investigations, litigation, fines, or other liabilities.

Although we maintain cybersecurity policies, procedures, and technical safeguards designed to protect our systems and data, these measures may not be sufficient to prevent all incidents. Any significant cybersecurity breach or disruption could materially adversely affect our business, results of operations, financial condition, and liquidity.

Risks Related to Regulatory Approval of Our Products and Other Government Regulations

Contracting with government entities exposes us to additional risks inherent in the government procurement process.

We provide products and services, directly and indirectly, to a variety of domestic government entities, which introduces certain risks, including extended sales and collection cycles, varying governmental budgeting processes and adherence to complex procurement regulations and other government-specific contractual requirements. We have been, are currently and may in the future be subject to audits and investigations relating to our government contracts and any violations could result in various civil and criminal penalties and administrative sanctions, including termination of contracts, payment of fines and suspension or debarment from future government business, as well as harm to our reputation and financial results.

We design, manufacture and service products that incorporate advanced technologies; the introduction of new products and technologies involves risks, and we may not realize the degree or timing of benefits initially anticipated; competition may reduce our revenues and segment share and limit our future opportunities.

We seek to achieve growth through the design, development, production, sale and support of innovative commercial products that incorporate advanced technologies. The product, program and service needs of our customers change and evolve regularly, and we invest substantial amounts in research and development efforts to pursue advancements in a wide range of technologies, products and services. Our ability to realize the anticipated benefits of our technological advancements depends on a variety of factors, including meeting development, production, certification and regulatory approval schedules; receiving regulatory approvals; execution of internal and external performance plans; availability of supplier and internally produced parts and materials; performance of suppliers and subcontractors; availability of supplier and internal facility capacity to perform maintenance, repair and overhaul services on our products; hiring and training of qualified personnel; achieving cost and production efficiencies; identification of emerging technological trends for our target end-customers (such as sustainable technologies, as described below); validation of innovative technologies; risks associated with the development of complex software; the level of customer interest in new technologies and products; and customer acceptance of products we manufacture or that incorporate technologies we develop. In addition, many of our products must adhere to strict regulatory and market-driven safety and performance standards in a variety of jurisdictions. The evolving nature of these standards, along with the long duration of development, production and aftermarket support programs, creates uncertainty regarding program profitability, particularly with our aircraft engine products. Development efforts divert resources from other potential investments in our businesses, and these efforts may not lead to the development of new technologies or products on a timely basis or meet the needs of our customers as fully as competitive offerings. In addition, the industries for our products or products that incorporate our technologies may not develop or grow as we anticipate. We or our customers, suppliers or subcontractors may encounter difficulties in developing and producing new products and services, and may not realize the degree or timing of benefits initially anticipated or may otherwise suffer significant adverse financial consequences. Due to the design complexity of our products or those of our customers or third-party manufacturers that incorporate our products into theirs or our customers' products, we may experience delays in completing the development and introduction of new products or we may experience the suspension of production after these products enter into service due to safety concerns. Delays and/or suspension of production could result in increased development costs or deflect resources from other projects. We operate in highly competitive industries, and our competitors may have more extensive or more specialized engineering, manufacturing, marketing and servicing capabilities than we do. Our contracts are typically awarded on a competitive basis. Our bids are based upon, among other items, the cost to provide the products and services. To generate an acceptable return on our investment in these contracts, we must be able to accurately estimate our costs to provide the services and deliver the products and to be able to complete the contracts in a timely manner. If we fail to accurately estimate our costs or the time required to complete a contract, the profitability of our contracts may be materially and adversely affected. Furthermore, our competitors, including our customers, may develop competing technologies which gain industry acceptance in advance of or instead of our products, or meet particular in-demand technological needs before us or with technology that is superior to our existing or new technologies. For example, the enhanced focus on climate change has increased demand for more environmentally sustainable products and services, as described below. Our competitors may develop sustainable products or services that are available to our customers before our products or services, or that are adopted more readily than our products or services. In addition, our competitors or customers might develop new technologies or offerings that might cause our existing technologies and offerings to become obsolete or otherwise decrease demand for our offerings. In addition, the possibility exists that competitors or customers will develop aftermarket services and aftermarket parts for our products that attract customers and adversely impact our return on investment on new products. If we are unable to continue to compete successfully against our current or future competitors in our core businesses, we may experience declines in revenues and industry segment share. Any of the foregoing could have a material adverse effect on our competitive position, results of operations, financial condition or liquidity.

Exports and imports of certain of our products are subject to various export control, sanctions and import regulations and may require authorization from regulatory agencies of the U.S. or other countries.

We must comply with various laws and regulations relating to the export and import of products, services and technology from and into the U.S. and other countries having jurisdiction over our operations. In the U.S., these laws and regulations include, among others, the EAR administered by the U.S. Department of Commerce, the ITAR administered by the U.S. Department of State, embargoes and sanctions regulations administered by the U.S. Department of the Treasury, and import regulations administered by the U.S. Department of Homeland Security and the U.S. Department of Justice. Certain of our products, services and technologies have military or strategic applications and we are required to obtain licenses and authorizations from the appropriate U.S. government agencies before selling these products outside of the U.S. or importing these products into the U.S. U.S. foreign policy or foreign policy of other licensing jurisdictions may affect the licensing process or otherwise prevent us from engaging in business dealings with certain individuals, entities or countries. Any failure by us, our customers or our suppliers to comply with these laws and regulations could result in civil or criminal penalties, fines, seizure of our products, adverse publicity, restrictions on our ability to export or import our products, or the suspension or debarment from doing business with the U.S. government. Moreover, any changes in export control, sanctions or import regulations may further restrict the export of our products or services, and the possibility of such changes requires constant monitoring to ensure we remain compliant. Our ability to obtain required licenses and authorizations on a timely basis or at all is subject to risks and uncertainties, including changing U.S. government foreign policies or laws, delays in Congressional action, or geopolitical and other factors. If we are not successful in obtaining or maintaining the necessary licenses or authorizations in a timely manner, our sales relating to those approvals may be prevented or delayed, and revenue and profit previously recognized may be reversed. Any restrictions on the export or import of our products or product lines could have a material adverse effect on our competitive position, results of operations, financial condition or liquidity.

Our long-term success depends on our ability to obtain and maintain regulatory clearances and approvals for our medical products and product candidates, and we may be unable to do so in a timely manner or at all.

Our medical device products, including our silicon nitride spinal implants, extremity products such as the SiNAPTIC® foot and ankle wedge system, and any future medical device product candidates, are subject to extensive regulation by the U.S. Food and Drug Administration (FDA) and comparable regulatory authorities outside the United States. Before a new device may be commercially marketed in the United States, it generally must receive clearance under the FDA's 510(k) premarket notification process, be authorized through the De Novo classification process, or obtain approval through the more rigorous premarket approval (PMA) process. These regulatory pathways are costly, time-consuming, and inherently uncertain.

Although many orthopedic devices are reviewed under the 510(k) process, the FDA may require additional non-clinical testing, clinical data, or other information to support a submission. Devices that we believe are eligible for 510(k) clearance may instead be required to undergo the De Novo or PMA processes, which typically involve greater data requirements and longer review periods. If we seek to conduct a clinical study of a significant risk device, we would be required to obtain FDA approval of an investigational device exemption (IDE) prior to initiating such study. Delays in preparing or submitting applications, responding to FDA requests for additional information, completing required testing, or obtaining IDE approval, if required, could delay or prevent commercialization of our product candidates or modifications to existing products.

Even after a device receives clearance or approval, we remain subject to ongoing regulatory requirements, including compliance with the FDA's Quality System Regulation (which will transition to the Quality Management System Regulation (QMSR)), labeling and promotional restrictions, medical device reporting obligations, post-market surveillance, and FDA inspections. The FDA may disagree with our determination that a modification to a cleared device does not require a new premarket submission, which could result in enforcement actions such as warning letters, fines, product recalls, operating restrictions, or other corrective measures.

We are also subject to regulatory requirements in international markets, including under the European Union Medical Device Regulation (EU MDR) and other jurisdiction-specific frameworks. Approval processes, documentation standards, clinical evidence requirements, and timelines vary by jurisdiction, and regulatory approvals or certifications in one country do not ensure approval in another. Failure to obtain or maintain required regulatory authorizations in the United States or internationally, or significant delays in doing so, could prevent or delay commercialization of our products, increase our costs, and materially adversely affect our business, results of operations, and financial condition.

The safety and effectiveness of our products are not supported by long-term clinical data, and they may prove to be less safe or effective than our preclinical testing or limited clinical experience indicate.

We have received FDA clearance for our silicon nitride spinal implants and for the SiNAPTIC® foot and ankle wedge system, and we may seek additional regulatory clearances or approvals for future medical device products. Devices cleared through the FDA's 510(k) process are generally required to demonstrate substantial equivalence to a legally marketed predicate device and often are supported primarily by bench testing, biocompatibility data, and other non-clinical information, rather than extensive long-term clinical trial data.

As a result, our currently marketed products and any future product candidates may not have been evaluated in long-term clinical studies prior to commercialization. Post-market surveillance, published clinical experience, or additional studies conducted by us or third parties may identify previously unrecognized adverse events, complications, or performance limitations. If our products are shown to be less safe or effective than anticipated, or if they are associated with unanticipated risks, we could be subject to regulatory enforcement actions, including recalls or withdrawal of marketing authorization, as well as product liability claims, negative publicity, reputational harm, and reduced market acceptance.

Any such developments could materially adversely affect our business, financial condition, and results of operations.

We may be required to generate clinical or additional supporting data for certain product candidates, which could increase costs and delay commercialization.

Although our currently marketed medical devices have been cleared through the FDA's 510(k) process and we do not currently conduct, nor do we anticipate conducting, large-scale clinical trials for our existing product lines, the FDA may require clinical data or other additional testing to support future product candidates, new indications, or significant modifications to existing devices. If we seek to conduct a clinical study for a device that presents a significant risk, we would be required to obtain FDA approval of an investigational device exemption (IDE) before initiating such study.

Any requirement to conduct clinical studies could increase our development costs, require additional time and resources, and delay regulatory clearance or commercialization. Clinical studies, if required, are subject to regulatory oversight and may be affected by factors such as study design requirements, patient enrollment challenges, data variability, or adverse events. Even limited clinical investigations or post-market studies may produce results that are unfavorable or insufficient to support regulatory clearance or market acceptance.

If we are required to conduct more extensive clinical evaluations than anticipated, or if the results of any required studies are unfavorable, our ability to commercialize new or modified products could be delayed or prevented, which could materially adversely affect our business, financial condition, and results of operations.

Our relationships with healthcare providers, distributors, and third-party payers are subject to complex healthcare fraud and abuse, transparency, and privacy laws, and noncompliance could result in significant penalties and reputational harm.

Our sales, marketing, distribution, and other business arrangements with healthcare providers, hospitals, ambulatory surgery centers, distributors (including physician-owned distributorships), and other customers are subject to numerous federal, state, and foreign healthcare laws and regulations. These laws may affect the manner in which we promote, market, and sell our medical devices, including our spinal implants and the SiNAPTIC® foot and ankle wedge system.

In the United States, these laws include, among others, the federal Anti-Kickback Statute, which prohibits offering or receiving remuneration to induce referrals or purchases reimbursable under federal healthcare programs; the federal False Claims Act, which imposes civil and criminal liability for false or fraudulent claims for payment to the government; HIPAA and HITECH, which establish healthcare fraud offenses and impose privacy and security requirements for protected health information; and the Physician Payments Sunshine Act, which requires reporting of certain payments or transfers of value to physicians and teaching hospitals. Many states and foreign jurisdictions have adopted analogous fraud and abuse, transparency, and data privacy laws, some of which apply to commercial payers and may be broader in scope than federal requirements.

These laws are complex and subject to evolving interpretations. Our compliance efforts may require substantial resources, and we cannot assure that our business arrangements, or those of our distributors or customers, will not be challenged by governmental authorities. If our operations or relationships are found to violate applicable laws, we could be subject to significant civil, criminal, or administrative penalties, including fines, damages, exclusion from participation in government healthcare programs, contractual damages, reputational harm, and the restructuring of our operations. Any such action could materially adversely affect our business, results of operations, and financial condition.

Changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns could adversely affect our results of operations and financial condition.

We are subject to taxes by the U.S. federal, state, local and foreign tax authorities, and our tax liabilities will be affected by the allocation of expenses to differing jurisdictions. Our future effective tax rates could be subject to volatility or adversely affected by a number of factors, including:

- changes in the valuation of our deferred tax assets and liabilities;
- expected timing and amount of the release of any tax valuation allowance;
- tax effects of equity-based compensation;
- changes in tax laws, regulations or interpretations thereof; or
- future earnings being lower than anticipated in jurisdictions where we have lower statutory tax rates and higher than anticipated earnings in jurisdictions where we have higher statutory tax rates.

We may also be subject to audits of our income, sales and other transaction taxes by U.S. federal, state, local and foreign taxing authorities. Outcomes from these audits could have an adverse effect on our operating results and financial condition.

Changes in tax laws or their interpretation could adversely affect our business and the value of our securities.

U.S. federal, state, and foreign tax laws are subject to change, and such changes could adversely affect our financial condition, results of operations, cash flows, and the value of our securities. Legislative, administrative, or judicial developments may modify tax rates, the availability of tax credits or net operating loss carryforwards, the timing of income recognition, deductibility of expenses, or other tax attributes that affect us.

The Inflation Reduction Act of 2022 introduced significant changes to U.S. corporate taxation, including a 15% minimum tax on adjusted financial statement income for certain large corporations and a 1% excise tax on certain corporate stock repurchases. Although we do not currently expect to be subject to the corporate minimum tax based on our size and financial profile, future changes in our operations, profitability, ownership structure, or applicable law could affect our tax obligations. The stock repurchase excise tax may increase the cost of any future share repurchase transactions, if undertaken.

In addition, states and foreign jurisdictions may adopt new or revised tax laws, increase tax rates, or change the interpretation of existing laws. The impact of any such changes is uncertain and could result in increased tax expense, reduced cash flows, or additional compliance costs, which could materially adversely affect our business and the value of our securities.

Changes in healthcare laws, regulations, and reimbursement policies may increase our costs, delay regulatory review, and adversely affect pricing and demand for our products.

Healthcare systems in the United States and internationally are subject to ongoing legislative, regulatory, and policy changes intended to control costs, expand access, and improve quality. These changes may affect the regulatory requirements applicable to our medical devices, including our spinal implants and extremity products such as the SiNAPTIC® foot and ankle wedge system, as well as the reimbursement available for procedures in which our products are used.

In the United States, the FDA periodically updates its regulations, guidance, and policies governing the premarket review, clearance, and approval of medical devices, including the 510(k), De Novo, and PMA pathways. Regulatory expectations may evolve with respect to clinical data requirements, cybersecurity, quality systems (including the transition from the Quality System Regulation to the Quality Management System Regulation), and post-market surveillance. Such changes could increase the time and expense associated with obtaining or maintaining regulatory clearance or approval for our products or modifications thereto. In addition, the FDA retains authority to revisit prior clearance determinations in certain circumstances.

Healthcare reform efforts at the federal and state levels, as well as initiatives by commercial payers, may reduce coverage, limit reimbursement, or increase pricing pressures on medical device manufacturers. Value-based purchasing programs, bundled payment models, and other cost-containment initiatives may encourage hospitals and providers to seek lower-cost alternatives or restrict adoption of new technologies.

Internationally, many countries maintain government-sponsored healthcare systems that regulate pricing, reimbursement, and market access. The implementation of the European Union Medical Device Regulation (EU MDR) has increased regulatory scrutiny and compliance costs, and pricing and reimbursement controls in various jurisdictions may include price caps, mandatory discounts, reference pricing, and other measures designed to limit public expenditures. These policies may reduce the prices we are able to obtain for our products, limit patient access, or delay commercialization in certain markets.

Any significant changes in healthcare laws, regulations, or reimbursement policies could increase our regulatory and compliance burdens, reduce demand for our products, or adversely affect our revenues, profitability, and growth prospects.

Risks Related to Our Intellectual Property and Litigation

If the combination of patents, trade secrets and contractual provisions that we rely on to protect our intellectual property is inadequate, our ability to commercialize our products successfully will be harmed, and we may not be able to operate our business profitably.

Our success depends significantly on our ability to protect our proprietary rights to the technologies incorporated in our products. We rely on a combination of patent protection, trade secret laws and nondisclosure, confidentiality and other contractual restrictions to protect our proprietary technology. However, these may not adequately protect our rights or permit us to gain or keep any competitive advantage.

The issuance of a patent is not conclusive as to its scope, validity or enforceability. The scope, validity or enforceability of our issued patents can be challenged in litigation or proceedings before the U.S. Patent and Trademark Office, or the USPTO, or foreign patent offices. In addition, our pending patent applications include claims to numerous important aspects of our products under development that are not currently protected by any of our issued patents. We cannot assure you that any of our pending patent applications will result in the issuance of patents to us. The USPTO or foreign patent offices may deny or require significant narrowing of claims in our pending patent applications. Patents issued as a result of the pending patent applications, if any, may not provide us with significant commercial protection or be issued in a form that is advantageous to us. Proceedings before the USPTO or foreign patent offices could result in adverse decisions as to the priority of our inventions and the narrowing or invalidation of claims in issued patents. The laws of some foreign countries may not protect our intellectual property rights to the same extent as the laws of the United States, if at all.

Our competitors may successfully challenge and invalidate or render unenforceable our issued patents, including any patents that may be issued in the future, which could prevent or limit our ability to market our products and could limit our ability to stop competitors from marketing products that are substantially equivalent to ours. In addition, competitors may be able to design around our patents or develop products that provide outcomes that are comparable to our products but that are not covered by our patents.

We have also entered into confidentiality and assignment of intellectual property agreements with all of our employees, consultants and advisors as one of the ways we seek to protect our intellectual property and other proprietary technology. However, these agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements.

In the event a competitor infringes upon any of our patents or other intellectual property rights, enforcing our rights may be difficult, time consuming and expensive, and would divert management’s attention from managing our business. There can be no assurance that we will be successful on the merits in any enforcement effort. In addition, we may not have sufficient resources to litigate, enforce or defend our intellectual property rights.

We have no patent protection covering the composition of matter for our solid silicon nitride or for all of the components of the process we use for manufacturing our silicon nitride, and competitors may create silicon nitride formulations substantially similar to ours.

Although we have a number of U.S. and foreign patents and pending applications relating to our solid silicon nitride products or product candidates, we have no patent protection either for the composition of matter for our silicon nitride or for the processes of manufacturing solid silicon nitride. As a result, competitors may create silicon nitride formulations substantially similar to ours and use their formulations in products that may compete with our silicon nitride products, provided they do not violate our issued product patents. Although we have, and will continue to develop, significant know-how related to these processes, there can be no assurance that we will be able to maintain this know-how as trade secrets, and competitors may develop or acquire equally valuable or more valuable know-how related to the manufacture of silicon nitride.

We could become subject to intellectual property litigation that could be costly, result in the diversion of management's time and efforts, require us to pay damages, prevent us from marketing our commercially available products or product candidates and/or reduce the margins we may realize from our products that we may commercialize.

The medical devices industry is characterized by extensive litigation and administrative proceedings over patent and other intellectual property rights. Whether a product infringes a patent involves complex legal and factual issues, and the determination is often uncertain. There may be existing patents of which we are unaware that our products under development may inadvertently infringe. The likelihood that patent infringement claims may be brought against us increases as the number of participants in the orthopedic market increases and as we achieve more visibility in the marketplace and introduce products to market.

Any infringement claims against us, even if without merit, may cause us to incur substantial costs, and would place a significant strain on our financial resources, divert the attention of management from our core business, and harm our reputation. In some cases, litigation may be threatened or brought by a patent holding company or other adverse patent owner who has no relevant product revenues and against whom our patents may provide little or no deterrence. If we were found to infringe any patents, we could be required to pay substantial damages, including triple damages if an infringement is found to be willful, and royalties and could be prevented from selling our products unless we obtain a license or are able to redesign our products to avoid infringement. We may not be able to obtain a license enabling us to sell our products on reasonable terms, or at all, and there can be no assurance that we would be able to redesign our products in a way that would not infringe those patents. If we fail to obtain any required licenses or make any necessary changes to our technologies or the products that incorporate them, we may be unable to commercialize one or more of our products or may have to withdraw products from the market, all of which would have a material adverse effect on our business, financial condition and results of operations.

In addition, in order to further our product development efforts, we have entered into agreements with orthopedic surgeons to help us design and develop new products, and we expect to enter into similar agreements in the future. In certain instances, we have agreed to pay such surgeons royalties on sales of products which incorporate their product development contributions. There can be no assurance that surgeons with whom we have entered into such arrangements will not claim to be entitled to a royalty even if we do not believe that such products were developed by cooperative involvement between us and such surgeons. In addition, some of our surgeon advisors are employed by academic or medical institutions or have agreements with other orthopedic companies pursuant to which they have agreed to assign or are under an obligation to assign to those other companies or institutions their rights in inventions which they conceive or develop or help conceive or develop.

There can be no assurance that one or more of these orthopedic companies or institutions will not claim ownership rights to an invention we develop in collaboration with our surgeon advisors or consultants on the basis that an agreement with such orthopedic company or institution gives it ownership rights in the invention or that our surgeon advisors on consultants otherwise have an obligation to assign such inventions to such company or institution. Any such claim against us, even without merit, may cause us to incur substantial costs, and would place a significant strain on our financial resources, divert the attention of management from our core business and harm our reputation.

We may be subject to damages resulting from claims that we have wrongfully used or disclosed alleged trade secrets of our competitors or are in breach of non-competition agreements with our competitors or non-solicitation agreements.

Some of our employees were previously employed at other medical device or ceramic companies, including our competitors and potential competitors. Many of our former distributors and potential distributors sell, or in the past have sold, products of our competitors. We may be subject to claims that either we, or these employees or distributors, have inadvertently or otherwise used or disclosed the trade secrets or other proprietary information of our competitors. In addition, we have been and may in the future be subject to claims that we caused an employee or sales agent to break the terms of his or her non-competition agreement or non-solicitation agreement. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. If we fail in defending such claims, in addition to paying money damages, we may lose valuable intellectual property rights or personnel. A loss of key personnel or their work product could hamper or prevent our ability to commercialize products, which could have an adverse effect on our business, financial condition and results of operations.

If our advanced ceramic products or our product candidates conflict with the rights of others, we may not be able to manufacture or market our products or product candidates, which could have a material and adverse effect on us.

Our commercial success will depend in part on not infringing the patents or violating the other proprietary rights of third parties. Issued patents held by others may limit our ability to develop commercial products. All issued patents are entitled to a presumption of validity under the laws of the United States. If we need suitable licenses to such patents to permit us to develop or market our product candidates, we may be required to pay significant fees or royalties, and we cannot be certain that we would even be able to obtain such licenses. Competitors or third parties may obtain patents that may cover subject matter we use in developing the technology required to bring our products to market, that we use in producing our products, or that we use in treating patients with our products. We know that others have filed patent applications in various jurisdictions that relate to several areas in which we are developing products. Some of these patent applications have already resulted in patents and some are still pending. If we were found to infringe any of these issued patents or any of the pending patent applications, when and if issued, we may be required to alter our processes or product candidates, pay licensing fees or cease activities. If use of technology incorporated into or used to produce our product candidates is challenged, or if our processes or product candidates conflict with patent rights of others, third parties could bring legal actions against us, in Europe, the United States and elsewhere, claiming damages and seeking to enjoin manufacturing and marketing of the affected products. Additionally, it is not possible to predict with certainty what patent claims may issue from pending applications. In the United States, for example, patent prosecution can proceed in secret prior to issuance of a patent, provided such application is not filed in foreign jurisdiction. For U.S. patent applications that are also filed in foreign jurisdictions, such patent applications will not publish until 18 months from the filing date of the application. As a result, third parties may be able to obtain patents with claims relating to our product candidates which they could attempt to assert against us. Further, as we develop our products, third parties may assert that we infringe the patents currently held or licensed by them, and we cannot predict the outcome of any such action.

There has been extensive litigation in the medical devices industry over patents and other proprietary rights. If we become involved in any litigation, it could consume a substantial portion of our resources, regardless of the outcome of the litigation. If these legal actions are successful, in addition to any potential liability for damages, we could be required to obtain a license, grant cross-licenses and pay substantial royalties in order to continue to manufacture or market the affected products.

We cannot assure you that we would prevail in any legal action or that any license required under a third-party patent would be made available on acceptable terms, or at all. Ultimately, we could be prevented from commercializing a product, or forced to cease some aspect of our business operations, as a result of claims of patent infringement or violation of other intellectual property rights, which could have a material and adverse effect on our business, financial condition and results of operations.

Risks Related to Potential Litigation from Operating Our Business

We may become subject to potential product liability claims, and we may be required to pay damages that exceed our insurance coverage.

Our business exposes us to potential product liability claims that are inherent in the design, testing, manufacture, sale and distribution of our currently marketed products and each of our product candidates that we are seeking to introduce to the market. The use of orthopedic medical devices can involve significant risks of serious complications, including bleeding, nerve injury, paralysis, infection, and even death. Any product liability claim brought against us, with or without merit, could result in an increase of our product liability insurance rates or in our inability to secure coverage in the future on commercially reasonable terms, if at all. In addition, if our product liability insurance proves to be inadequate to pay a damage award, we may have to pay the excess of this award out of our cash reserves, which could significantly harm our financial condition. If longer-term patient results and experience indicate that our products or any component of a product causes tissue damage, motor impairment or other adverse effects, we could be subject to significant liability. A product liability claim, even one without merit, could harm our reputation in the industry, lead to significant legal fees, and result in the diversion of management's attention from managing our business.

Any claims relating to our improper handling, storage or disposal of biological or hazardous materials could be time consuming and costly.

Although we do not believe that the manufacture of our silicon nitride or non-silicon nitride products will involve the use of hazardous materials, it is possible that regulatory authorities may disagree or that changes to our manufacturing processes may result in such use. Our business and facilities and those of our suppliers and future suppliers may therefore be subject to foreign, federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous materials and waste products. We may incur significant expenses in the future relating to any failure to comply with environmental laws. Any such future expenses or liability could have a significant negative impact on our business, financial condition and results of operations.

Risks Related to Public Companies

We are a "smaller reporting company" and the reduced disclosure requirements applicable to smaller reporting companies may make our common stock less attractive to investors.

We are currently a "smaller reporting company" as defined in the Securities Exchange Act of 1934. Smaller reporting companies are able to provide simplified executive compensation disclosures in their filings, are exempt from the provisions of Section 404(b) of the Sarbanes-Oxley Act requiring that independent registered public accounting firms provide an attestation report on the effectiveness of internal control over financial reporting, and have certain other decreased disclosure obligations in their SEC filings, including, among other things, only being required to provide two years of audited financial statements in annual reports. We cannot predict whether investors will find our common stock less attractive because of our reliance on any of these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile.

We incur substantial costs as a result of being a public company and our management expects to devote substantial time to public company compliance programs.

As a public company, we incur significant legal, insurance, accounting and other expenses, including costs associated with public company reporting. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment will result in increased general and administrative expenses and may divert management's time and attention from product development and commercialization activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us, and our business may be harmed. These laws and regulations could make it more difficult and costlier for us to obtain director and officer liability insurance for our directors and officers, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified executive officers and qualified members of our board of directors, particularly to serve on our audit and compensation committees. In addition, if we are unable to continue to meet the legal, regulatory and other requirements related to being a public company, we may not be able to maintain the listing of our common stock on the Nasdaq Capital Market, which would likely have a material adverse effect on the trading price of our common stock.

We may not be able to maintain our listing on the Nasdaq Capital Market, which would adversely affect the price and liquidity of our common stock.

As a small capitalization company, the price of our common shares has been, and is likely to continue to be, highly volatile. Any announcements concerning us or our competitors, quarterly variations in operating results, introduction of new products, delays in the introduction of new products or changes in product pricing policies by us or our competitors, acquisition or loss of significant customers, partners and suppliers, changes in earnings estimates or our ratings by analysts, regulatory developments, or fluctuations in the economy or general market conditions, among other factors, could cause the market price of our common shares to fluctuate substantially. There can be no assurance that the market price of our common shares will not decline below its current price or that it will not experience significant fluctuations in the future, including fluctuations that are unrelated to our performance.

Currently our common stock is quoted on the Nasdaq Capital Market under the symbol "SINT." We must satisfy certain minimum listing maintenance requirements to maintain the Nasdaq Capital Market quotation, including certain governance requirements and a series of financial tests relating to stockholders' equity or net income or market value, public float, number of market makers and stockholder, market capitalization, and maintaining a minimum bid price of $1.00 per share.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 1C. CYBERSECURITY

Risk Management and Strategy

We maintain processes designed to assess, identify, and manage material risks from cybersecurity threats to our information technology systems and data. These processes are integrated into our broader risk management activities and are intended to protect the confidentiality, integrity, and availability of our systems and information.

We rely on information technology systems to support our manufacturing operations, supply chain management, inventory and distribution activities, research and development, financial reporting, and corporate functions. To protect these systems, we implement a range of technical and administrative safeguards, including access controls, network monitoring tools, data backup procedures, incident response protocols, and employee cybersecurity awareness training. We periodically assess our systems for vulnerabilities and engage third-party service providers, as appropriate, to assist in evaluating and strengthening our cybersecurity posture.

We also maintain processes to assess cybersecurity risks associated with certain third-party vendors and service providers that have access to our systems or data. These processes may include due diligence, contractual safeguards, and ongoing oversight, as appropriate based on the nature of the services provided.

As of the date of this Annual Report, we have not identified any cybersecurity incidents that have materially affected, or are reasonably likely to materially affect, our business strategy, results of operations, or financial condition. However, cybersecurity threats are continually evolving, and there can be no assurance that our processes and controls will be sufficient to prevent all incidents. For additional information regarding cybersecurity risks, see Part I, Item 1A. “Risk Factors.”

Governance

Our Board of Directors has oversight responsibility for risk management, including risks arising from cybersecurity threats. The Board receives periodic updates from management regarding cybersecurity matters, including risk exposures, mitigation efforts, and significant developments, as appropriate.

Management is responsible for the day-to-day management of cybersecurity risk. Members of senior management oversee the Company’s cybersecurity policies, procedures, and controls, coordinate efforts across relevant functional areas, and lead response efforts in the event of a cybersecurity incident. Management reports to the Board on cybersecurity risks and related matters on a periodic basis and would promptly inform the Board of any material cybersecurity incident.

ITEM 2. PROPERTIES

Our 30,764 square foot corporate office and manufacturing facilities are located in Salt Lake City, Utah. We occupy these facilities pursuant to a lease that expires in October 2031. Pursuant to the terms of the lease agreement, we may extend the lease for one additional period of five years.

We also lease a 10,936 square foot facility located in Salt Lake City, Utah. This facility is pursuant to a lease that expires in October 2031. As of November 2025, this facility is subleased through October 2031.

We believe that our existing facilities are adequate for our current and projected needs for the foreseeable future.

ITEM 3. LEGAL PROCEEDINGS

We are currently not a party to any material legal proceedings. However, our industry is characterized by frequent claims and litigation, including claims regarding intellectual property and product liability. As a result, we may be subject to various legal proceedings in the future.

ITEM 4. MINE SAFETY DISCLOSURES

This item does not apply to our business.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our shares of common stock are currently quoted on the Nasdaq Capital Market under the symbol "SINT."

Holders of Record

As of December 31, 2025, we had approximately 164 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, this number is not indicative of the total number of stockholders represented by these stockholders of record.

Dividends

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

Issuer Purchases of Equity Securities

None

ITEM 6. RESERVED

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes appearing elsewhere in this Annual Report. This discussion and analysis contain forward-looking statements based upon current beliefs, plans, expectations, intentions and projections that involve risks, uncertainties and assumptions, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth under "Risk Factors" and elsewhere in this Annual Report.

Overview

SINTX Technologies is an advanced ceramics company formed in December 1996 that develops, manufactures, and commercializes silicon nitride biomaterials, composites, devices, and related technologies for medical and other high-value applications. SINTX provides biomedical solutions for medical devices specializing in silicon nitride (Si_3N_4) for musculoskeletal and antipathogenic applications. We also manufacture parts made from silicon nitride for customers in the electrical, aerospace and other industrial sectors. SINTX is a global leader in the research, development, and manufacturing of silicon nitride, and its products have been implanted in humans since 2008.

Components of our Results of Operations

We manage our business within one reportable segment, which is consistent with how our management reviews our business, makes investment and resource allocation decisions and assesses operating performance.

Revenue

Our product revenue is derived from the manufacture and sale of products. These revenue sources include coatings, materials, and components for aerospace and medical device markets, toll processing services, and government contracts and grants. We generally recognize revenue from sales where control transfers at a point in time as the title and risk of loss passes to the customer, which is at the time the product is shipped. In general, our customer does not have rights of return or exchange.

We believe our product revenue will increase as we secure opportunities to manufacture third party products with silicon nitride, and as we continue to introduce new products into the market.

We derive grant and contract revenue from awards provided by governmental agencies. The goal of these grants and contracts is ultimately to develop revenue producing products.

Cost of Revenue

The expenses that are included in cost of revenue include all in-house manufacturing costs for the products we manufacture.

Gross Profit

Our gross profit measures our product revenue relative to our cost of revenue.

Research and Development Expenses

Our research and development costs are expensed as incurred. Research and development costs consist of engineering, product development, clinical trials, test-part manufacturing, testing, developing and validating the manufacturing process, manufacturing, facility and regulatory-related costs. Research and development expenses also include employee compensation, employee and non-employee stock-based compensation, supplies and materials, consultant services, and travel and facilities expenses related to research and development activities.

We expect to incur additional research and development costs as we continue to develop new medical devices, industrial and ceramic armor products, product candidates for antipathogenic applications, and other products which may increase our total research and development expenses.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries, benefits and other related costs, including stock-based compensation for certain members of our executive team and other personnel employed in finance, compliance, administrative, information technology, customer service, executive and human resource departments. General and administrative expenses also include other expenses not part of the other cost categories mentioned above, including facility expenses and professional fees for accounting and legal services.

Results of Operations

Year Ended December 31, 2025 Compared to the Year Ended December 31, 2024

The following table sets forth, for the periods indicated, our results of operations for the years ended December 31, 2025 and 2024 (dollars, in thousands):

	Year Ended December 31,			
	2025	2024	$ Change	% Change
Product revenue	$ 729	$ 1,246	$ (517)	-41%
Grant and contract revenue	289	1,641	(1,352)	-82%
Total revenue	1,018	2,887	(1,869)	-65%
Cost of revenue	557	811	(254)	-31%
Gross profit	461	2,076	(1,615)	-78%
Operating expenses:				
Research and development	4,587	5,201	(614)	-12%
General and administrative	6,197	3,997	2,200	55%
Sales and marketing	242	614	(372)	-61%
Armor exit costs	-	4,602	(4,602)	-100%
Reduction in force	-	407	(407)	-100%
Grant and contract expense	156	1,302	(1,146)	-88%
Total operating expenses	11,182	16,123	(4,941)	-31%
Loss from operations	(10,721)	(14,047)	3,326	-24%
Other income (expense), net	357	3,023	(2,666)	-88%
Net loss before income taxes	(10,364)	(11,024)	660	-6%
Provision for income taxes	-	-	-	-%
Net loss	$ (10,364)	$ (11,024)	$ 660	-6%

Revenue

Product revenue decreased $0.5 million, or 41%, compared to the same period in 2024. Grant and contract revenue decreased $1.4 million, or 82%, compared to the same period in 2024.

Revenue trends and strategic focus

The decrease in total revenue was primarily due to the Company's ongoing strategic repositioning away from non-core, low-margin OEM technical manufacturing contracts that did not support long-term profitability. This planned reduction in OEM-related revenue is consistent with our corporate shift toward commercializing proprietary silicon nitride-based biomedical devices, which we believe offer stronger margins, a more defensible competitive position, and better long-term value for shareholders.

While this strategic realignment has led to a decline in reported revenue, we believe it is a necessary step in positioning the Company for sustainable growth. During this transitional period, we continue to invest in the development and regulatory advancement of silicon nitride-based orthopedic and surgical implants, as evidenced by the recently received 510(k) clearance for osteotomy wedges used in foot and ankle fusion procedures. Additionally, we entered into a private label agreement to supply OsseoSculpt™, a next-generation biologic designed to complement the foot and ankle osteotomy wedges. We began recognizing commercial revenue from OsseoSculpt™ in the second half of 2025. We believe that these products will serve as key revenue drivers in 2026.

Cost of Revenue and Gross Profit

Cost of revenue decreased $0.3 million, or 31%, compared to the same period in 2024, while gross profit decreased $1.6 million, or 78%, for the same period. These decreases were primarily due to the decrease in revenue mentioned above.

Research and Development Expenses

Research and development expenses decreased $0.6 million, or 12%, compared to the same period in 2024. This decrease was primarily due to a decrease in payroll related costs, patent expenses, prototypes, and outside consulting costs, partially offset by an increase in costs related to a research agreement.

General and Administrative Expenses

General and administrative expenses increased $2.2 million, or 55%, compared to the same period in 2024. This increase is primarily due to increased stock-based compensation and other headcount related costs, and fees paid to departing members of the board of directors, partially offset by lower legal expenses and outside consulting costs.

Sales and Marketing Expenses

Sales and marketing expenses decreased $0.4 million, or 61%, compared to the same period in 2024. This decrease was primarily due to decreases in payroll related costs and outside consulting costs.

Armor Exit Costs

Armor exit costs decreased $4.6 million, or 100%, compared to the same period in 2024. This decrease was attributable to the asset impairment costs at the SINTX Armor facility.

Reduction in Force Expenses

Reduction in force expenses decreased $0.4 million, or 100%, as compared to the same period in 2024. This decrease was attributable to payroll expenses related to severance and accrued vacation payouts.

Grant and Contract Expenses

Grant and contract expenses decreased $1.1 million, or 88%, compared to the same period in 2024. This decrease was primarily due to the decrease in grant and contract revenue associated with the sale of the TA&T subsidiary.

Other Income (Expense), Net

Other income (expense), net decreased $2.7 million, or 88%, compared to the same period in 2024. This decrease was primarily due to a $3.6 million decrease in the change in value of derivative liabilities, partially offset by $0.5 million change in derivative liabilities offering costs, a $0.3 million gain on disposal of property and equipment associated with SINTX Armor, and a $0.1 million increase in interest income.

Liquidity and Capital Resources

The consolidated financial statements have been prepared assuming the Company will continue to operate as a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business, and does not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from uncertainty related to its ability to continue as a going concern within one year from the date of issuance of these consolidated financial statements.

For the years ended December 31, 2025 and 2024, the Company incurred a net loss of $10.4 million and $11.0 million, respectively, and used cash in operations of $8.6 million and $8.6 million, respectively. The Company had an accumulated deficit of $292.1 million and $281.7 million as of December 31, 2025 and 2024, respectively. We will require substantial future capital in order to continue operating our business, conduct research and development and regulatory clearance and approval activities necessary to bring our products to market, and to establish effective marketing and sales capabilities. Our existing capital resources are not sufficient to enable us to fund the completion of the development and commercialization of all our product candidates.

To date, our operations have been principally financed from proceeds from the issuance of preferred and common stock and, to a lesser extent, cash generated from product sales. We expect that we will continue to generate operating losses and use cash in operations. Our continuation as a going concern is dependent upon its ability to increase sales, decrease expenses and raise additional funding. It is uncertain when, if ever, we will attain profitability and positive cash flows from operations or obtain additional financing.

We continue to seek opportunities to raise additional funding through equity and/or debt financing. However, such funding is not guaranteed and may not be available on favorable terms and may involve restrictive covenants. Any additional equity financing, if available, will most likely be dilutive to its current stockholders. If we are not able to obtain additional debt or equity financing, the impact on our company and business will be material and adverse.

The board of directors, together with management, remains focused on advancing our business strategy and focus. Our strategic emphasis is focused on utilizing our technology in making advancements in the biomedical sector. Historically engaged in both industrial and biomedical applications, we have prioritized the development and commercialization of innovative medical devices, leveraging our expertise in advanced ceramics and biomaterials. This renewed focus aligns with a commitment to improving patient outcomes through the creation of products designed for surgical, orthopedic, and other specialized medical applications. We are concentrating our resources on high-growth areas within the healthcare sector where our proprietary materials and technologies—such as silicon nitride—provide a distinct competitive advantage due to their unique strength, durability, and biocompatibility.

Through this transformation, as demonstrated by the recent FDA 510(k) clearance of our SiNAPTIC® Foot & Ankle Osteotomy Wedge System, our aim is to deliver meaningful innovations to the medical community. Our current research and development pipeline is centered on medical-grade devices that incorporate antimicrobial properties, enhanced imaging capabilities, and durability under physiological conditions, which are critical for orthopedic implants, spinal fusion devices, and other surgical tools. As we transition our focus away from industrial applications, we anticipate this strategic shift will enable us to better serve the medical sector, address critical unmet needs, and position SINTX as a leading provider in the medical device market. By focusing on partnerships and collaborations with healthcare institutions and industry leaders, we believe that we are positioned to expand our footprint in the medical device sector and drive shareholder value through sustainable, high-impact innovations.

On August 8, 2024, the board of directors approved a plan to implement a Company-wide reduction in the workforce. This decision was part of an ongoing strategic review of our operations aimed at improving operational efficiency and reducing costs.

On August 12, 2024, the board of directors approved a plan to cease efforts to make the armor plant operational. This decision was made to streamline operations and focus on core business areas that align with our long-term strategic goals. The armor plant had not been fully operational since the acquisition of the armor equipment in July 2021 and had been completely shut down since October 2023 due to the malfunctioning of the sintering furnace. In connection with this decision, we incurred an impairment charge of approximately $4.6 million during the year ended December 31, 2024. This charge primarily relates to the write-down of certain long-lived assets associated with the armor plant to their estimated fair value.

On February 19, 2025, we entered into an Entity Acquisition Agreement (the “Agreement”) with Tethon Corporation (“Tethon”), pursuant to which the Company sold to Tethon all of the issued and outstanding shares of TA&T in exchange for the assumption by Tethon of the outstanding liabilities of TA&T.

In October 2025, we received FDA 510(k) clearance for a new foot and ankle osteotomy wedge system, enabling SINTX’s commercial entry into reconstructive foot and ankle surgery in the United States. Revenue is expected to begin during the first half of 2026.

In October 2025, we entered into the 2025 ATM Agreement to sell shares of its common stock from time to time, through an “at the market offering” program, having an aggregate offering price of $6.4 million was filed with the SEC. As of December 31, 2025, there is $6.0 million remaining balance on the 2025 ATM Agreement.

In October 2025, we entered into a sublease agreement to lease the SINTX armor facility to a third party, which is expected to save the Company approximately $1.0 million over the sublease term.

While management has implemented plans intended to mitigate these conditions, we have concluded that substantial doubt exists about the Company’s ability to continue as a going concern for 12 months from the date these consolidated financial statements are issued. The consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Cash Flows

The following table summarizes, for the periods indicated, cash flows from operating, investing and financing activities (in thousands):

	Year Ended December 31,	
	2025	2024
Net cash used in operating activities	$ (8,571)	$ (8,642)
Net cash provided by (used in) investing activities	913	(194)
Net cash provided by financing activities	8,200	9,094
Net increase in cash and cash equivalents	$ 542	$ 258

Net Cash Used in Operating Activities

Net cash used in operating activities was $8.6 million in 2025, compared to $8.6 million used in 2024, remaining consistent year over year.

Net Cash Provided by (Used in) Investing Activities

Net cash provided by investing activities was $0.9 million during 2025, compared to $0.2 million used in investing activities during the same period in 2024, an increase of $1.1 million. The increase in cash provided by investing activities during 2025 was primarily due to $0.8 million in proceeds from the acquisition of Sinaptic Surgical, $0.5 million decrease in purchase of property and equipment and $0.3 million increase in proceeds from the sale of property and equipment, partially offset by a $0.5 million decrease in proceeds from notes receivable.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was $8.2 million during 2025, compared to $9.1 million provided by financing activities during the same period in 2024, a decrease of $0.9 million. The $0.9 million decrease to net cash provided by financing activities was primarily attributable to a decrease in proceeds from issuance of warrant derivative liabilities of $3.4 million, and a decrease in proceeds from issuance of common stock and prefunded warrants of $1.7 million, partially offset by increases in proceeds from the exercise of warrants, net of cash fees, and deposit for stock issuance (in other current liabilities) of $3.6 million, proceeds from issuance of common stock in connection with ATM, net of fees of $0.3 million, and proceeds from issuance of warrants in connection with exercise of warrants of $0.2 million.

Indebtedness

Information with respect to our indebtedness may be found in Note 7 to the consolidated financial statements included in Part II, Item 8 of this Annual Report, which is incorporated by reference.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined in Item 303(a)(4) of Regulation S-K.

Related-Party Transactions

Information with respect to our related party transactions may be found in Note 14 to the consolidated financial statements included in Part II, Item 8 of this Annual Report, which is incorporated by reference.

Indemnification Agreements: We have entered into indemnification agreements with each of our executive officers and directors that require us to indemnify such persons against any and all expenses, including judgments, fines or penalties, attorney's fees, witness fees or other professional fees and related disbursements and other out-of-pocket costs incurred, in connection with any action, suit, arbitration, alternative dispute resolution mechanism, investigation, inquiry or administrative hearing, whether threatened, pending or completed, to which any such person may be made a party by reason of the fact that such person is or was a director, officer, employee or agent of our company, provided that such director or officer acted in good faith and in a manner that the director or officer reasonably believed to be in, or not opposed to, our best interests. The indemnification agreements also set forth procedures that will apply in the event of a claim for indemnification thereunder. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and officers.

Seasonality and Backlog

Our business is generally not seasonal in nature. The majority of our product revenue is derived from the manufacture and sale of spinal fusion products, used in the treatment of spine disorders, to CTL Medical. We also retained CTL Medical to act as our exclusive broker to offer for sale, and sell, our manufacturing services to third party developers of spinal implants and spinal devices that incorporate silicon nitride technology, which has a remaining term through 2028. CTL Medical's sales generally consist of products that are in stock with them or maintained at hospitals or with their sales distributors. Accordingly, we do not have a backlog of sales orders.

Critical Accounting Policies and Estimates

A summary of our significant accounting policies and estimates is discussed in Management's Discussion and Analysis of Financial Condition and Results of Operations and in Note 1 to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2024. There have been no material changes to those policies for the year ended December 31, 2025. The preparation of the consolidated financial statements in accordance with U.S. generally accepted accounting principles requires us to make judgments, estimates and assumptions regarding uncertainties that affect the reported amounts of assets and liabilities. Significant areas of uncertainty that require judgments, estimates and assumptions include the accounting for income taxes and other contingencies as well as valuation of derivative liabilities, asset impairment and collectability of accounts receivable. We use historical and other information that we consider to be relevant to make these judgments and estimates. However, actual results may differ from those estimates and assumptions that are used to prepare our consolidated financial statements.

New Accounting Pronouncements

Information with respect to new accounting pronouncements may be found in Note 1 to the consolidated financial statements included in Part II, Item 8 of this Annual Report, which is incorporated by reference.

Revenue Recognition

The Company derives its product revenue primarily from the sale of aerospace components and spinal fusion products, used in the treatment of spine disorders to CTL Medical, with whom the Company has a 10-year exclusive sales agreement in place, through 2028. The Company is currently pursuing other sales opportunities for silicon nitride outside the spinal fusion application. The sale of the Company's products has a single performance obligation and revenue is recognized at the time the product is shipped to the customer. In general, the Company's customers do not have any rights of return or exchange.

Revenue is recognized when control of the goods or services promised under the contract is transferred to the customer either at a point in time (e.g., upon delivery) or over time (e.g., as performed under the contract). The Company accounts for a contract when it has approval and commitment from both parties, the rights and payment terms of the parties are identified, the contract has commercial substance and collectability of consideration is probable. Contracts are reviewed to determine whether there is one or multiple performance obligations. A performance obligation is a promise to transfer a distinct good or service to a customer and represents the unit of accounting for revenue recognition. For contracts with multiple performance obligations, the expected consideration, or the transaction price, is allocated to each performance obligation identified in the contract based on the relative standalone selling price of each performance obligation. Revenue is then recognized for the transaction price allocated to the performance obligation when control of the promised goods or services underlying the performance obligation is transferred. Contract consideration is not adjusted for the effects of a significant financing component when, at contract inception, the period between when control transfers and when the customer will pay for that good or service is one year or less. Contact modifications that provide for additional distinct goods or services at the standalone selling price are treated as separate contracts. The transaction price for our contracts reflects our estimate of returns, rebates and discounts, which historically have not been significant. Amounts billed to customers for shipping and handling are included in the transaction price and generally are not treated as separate performance obligations as these costs fulfill a promise to transfer the product to the customer. The Company does not employ salespeople to actively seek additional customers; there are no incremental costs for obtaining customers that need to be capitalized.

Account and Other Receivables and Allowance for Credit Losses Doubtful Accounts

Financial assets, which potentially subject the Company to credit losses, consist primarily of receivables. We measure expected credit losses of financial assets based on historical loss and other information available to management using type of receivable (commercial, grants or contracts, retainage, or other) and different aging categories (less than 90 days past due, over 90 days past due, over 180 days past due, and financially troubled customers). These expected credit losses are recorded to an allowance for credit losses valuation account that is deducted from receivables to present the net amount expected to be collected on the financial asset on the consolidated balance sheet. Management believes that the historical loss information it has compiled is a reasonable basis on which to determine expected credit losses for trade receivables held as of December 31, 2025, because the composition of the trade receivables as of that date is consistent with that used in developing the historical credit-loss percentages (i.e., the similar risk characteristics of its customers and its lending practices have not changed significantly over time).

Inventories

Inventories are stated at the lower of cost or net realizable value, with cost for manufactured inventory determined under the standard costs, which approximate actual costs, determined on the first-in first-out ("FIFO") method. Manufactured inventory consists of raw material, direct labor and manufacturing overhead cost components. The Company reviews the carrying value of inventory on a periodic basis for excess or obsolete items, and records any write-down as a cost of revenue, as necessary.

Long Lived Intangible Assets

The Company evaluates the carrying value of intangibles when events or changes in circumstances indicate that the carrying value may not be recoverable. Factors the Company considers important which could trigger an impairment review include, but are not limited to, significant under-performance relative to historical or projected future operating results, significant changes in the manner of its use of acquired assets or its overall business strategy, and significant industry or economic trends. The Company amortizes definite-lived intangible assets on a straight-line basis over their useful lives. The Company recorded no impairment for definite-lived intangible assets during the year ended December 31, 2025.

Goodwill

Goodwill represents the excess of the purchase price over the fair market value of identifiable net assets. Goodwill is not amortized, but rather is tested at the reporting unit level at least annually for impairment or more frequently if triggering events or changes in circumstances indicate impairment. Initially, qualitative factors are considered to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. Some of these qualitative factors may include macroeconomic conditions, industry and market considerations, a change in financial performance, entity-specific events, a sustained decrease in share price, and consideration of the difference between the fair value and carrying amount of a reporting unit as determined in the most recent quantitative assessment. If, through this qualitative assessment, the conclusion is made that it is more likely than not that a reporting unit's fair value is less than its carrying amount, a quantitative impairment analysis is performed. This analysis involves estimating the fair value of a reporting unit using widely accepted valuation methodologies including the income and market approaches, which requires the use of estimates and assumptions. These estimates and assumptions include revenue growth rates, discount rates, and determination of appropriate comparable entities. If the fair value of the reporting unit is less than its carrying amount, an impairment loss is recognized in an amount equal to the excess of the carrying amount over the fair value of the reporting unit, not to exceed the carrying amount of the goodwill. The Company recorded no impairment for goodwill during the year ended December 31, 2025.

Property and Equipment

Property and equipment, including leasehold improvements, are stated at cost, less accumulated depreciation and amortization. Property and equipment are depreciated using the straight-line method over the estimated useful lives of the assets, which range from three to five years. Leasehold improvements are amortized over the shorter of their estimated useful lives or the related lease term, generally five years.

The Company reviews the carrying value of the Company's property and equipment that are held and used in the Company's operations for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of these assets is determined based upon expected undiscounted future net cash flows from the operations to which the assets relate, utilizing management's best estimate, assumptions, and projections at the time. If the carrying value is determined to be unrecoverable from future operating cash flows, the asset is deemed impaired, and an impairment charge would be recognized to the extent the carrying value exceeded the estimated fair value of the asset. The Company estimates the fair value of assets based on the estimated future discounted cash flows of the asset.

Income Taxes

The Company recognizes deferred tax assets and liabilities for the future tax consequences attributable to the differences between the financial statement carrying value of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the fiscal year in which those temporary differences are expected to be recovered or settled. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company operates in various tax jurisdictions and is subject to audit by various tax authorities. The Company provides for tax contingencies whenever it is deemed probable that a tax asset has been impaired, or a tax liability has been incurred for events such as tax claims or changes in tax laws. Tax contingencies are based upon their technical merits relative tax law and the specific facts and circumstances as of each reporting period. Changes in facts and circumstances could result in material changes to the amounts recorded for such tax contingencies.

The Company recognizes uncertain income tax positions taken on income tax returns at the largest amount that is more-likely than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained.

The Company's policy for recording interest and penalties associated with uncertain tax positions is to record such items as a component of our income tax provision. For the years ended December 31, 2025 and 2024, the Company did not record any material interest income, interest expense or penalties related to uncertain tax positions or the settlement of audits for prior periods.

Stock-Based Compensation

The Company measures stock-based compensation expense related to employee stock-based awards based on the estimated fair value of the awards as determined on the date of grant and is recognized as expense over the remaining requisite service period. The Company utilizes the Black-Scholes-Merton option pricing model to estimate the fair value of employee stock options. The Black-Scholes-Merton model requires the input of highly subjective and complex assumptions, including the estimated fair value of the Company's common stock on the date of grant, the expected term of the stock option, and the expected volatility of the Company's common stock over the period equal to the expected term of the grant. The Company estimates forfeitures at the date of grant and revises the estimates, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company accounts for stock options to purchase shares of stock that are issued to non-employees based on the estimated fair value of such instruments using the Black-Scholes-Merton option pricing model.

Derivative Liabilities

Derivative liabilities include the fair value of instruments such as common stock warrants, preferred stock warrants and convertible features of notes, which are initially recorded at fair value and are required to be re-measured to fair value at each reporting period. The change in fair value of the instruments is recognized as a component of other income (expense) in the Company's consolidated statements of operations until the instruments settle, expire or are no longer classified as derivative liabilities. The Company estimates the fair value of these instruments using the Black-Scholes-Merton or Monte-Carlo valuation models depending on the complexity of the underlying instrument. The significant assumptions used in estimating the fair value include the exercise price, volatility of the stock underlying the instrument, risk-free interest rate, estimated fair value of the stock underlying the instrument and the estimated life of the instrument.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Financial Statements

The consolidated financial statements of the Company appear at the end of this Annual Report beginning with the index to Financial Statements on page F-1 (see Part IV, Item 15 “Financial Statements”), and are incorporated herein.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934 (the “Exchange Act”), that are designed to ensure that information required to be disclosed in the reports filed or submitted under the Exchange Act, is recorded, processed, summarized, and reported within the time periods specified by the Commission’s rules and forms. Disclosure controls and procedures include controls and procedures designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act are properly recorded, processed, summarized and reported within the time periods required by the Commission’s rules and forms.

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial and Accounting Officer), of the effectiveness of the design and operation of these disclosure controls and procedures, as such term is defined in Exchange Act Rule 13a-15(e), as of December 31, 2025. Based on this evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2025, the end of the period covered by this Annual Report on Form 10-K.

(b) Management's Report on Internal Control over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act.

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness of internal control over financial reporting to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our internal control over financial reporting is designed to provide reasonable assurance of achieving its objectives as specified above. Management does not expect, however, that our internal control over financial reporting will prevent or detect all error and fraud. Any control system, no matter how well designed and operated, is based upon certain assumptions and can provide only reasonable, not absolute, assurance that its objectives will be met. Further, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected.

Management, including our Chief Executive Officer and Chief Financial Officer, has assessed the effectiveness of our internal control over financial reporting as of December 31, 2025. In making our assessment of the effectiveness of internal control over financial reporting, management used the criteria set forth in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

As defined in SEC Regulation S-X, a material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. Based on this assessment, management determined that, as of December 31, 2025, the Company's internal control over financial reporting was effective.

There were no changes in our internal control over financial reporting that occurred during 2025 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

During the three months ended December 31, 2025, none of our directors or officers adopted or terminated a "Rule 10-b5-1 trading arrangement" or "non-Rule 10-b5-1 trading arrangement" as each term is identified in Item 408 of Regulation S-K.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Directors

The following table sets forth the names, ages, and positions with SINTX for each of our directors.

Name	Age	Positions
Eric Olson	62	CEO and Chairman of the Board of Directors
Jay Moyes	72	Director
Robert Mitchell	63	Director
Chris Lyons	56	Director
Mark Anderson	62	Director
Gregg Honigblum	63	Director

Our Board is divided into three classes (Class I, Class II and Class III) with staggered three-year terms. Directors in each class are elected to serve for three-year staggered terms that expire in successive years. Officers serve at the discretion of our Board. The following is information on the business experience of each director now serving and a discussion of the qualifications, attributes and skills that led to the Board of Directors' conclusion that each one is qualified to serve as a director.

The following is a brief summary of the background of each of our directors:

Class I Director – continuing director with a term expiring at the 2027 annual meeting of stockholders.

Eric Olson, age 62, was appointed to the board of directors in November 2024 and has served as Chief Executive Officer since August 1, 2024. Prior to being appointed as Chief Executive Officer, from June 2022 to August 2024, Mr. Olson served as Founder, Chief Executive Officer and Board Member of Foresite Innovations, LLC, a private healthcare innovation and development holding company. From January 2016 to June 2022, Mr. Olson was the founder, President, Chief Executive Officer and Board Member of Predictive Biotech, Inc., which developed the first human stem cell and tissue product (HCT/P) derived from the perinatal tissue. Prior to joining Predictive Biotech, Mr. Olson was the President and Chief Executive Officer for Cupertino based Skeletal Kinetics from December 2014 to January 2016. This Colson & Associates company developed and commercialized synthetic bone substitute products for Orthopedic and Spinal applications. From February 2012 to September 2014, Mr. Olson served as Chief Executive Officer and President and a member of the board of directors of SINTX Technologies (formerly Amedica Corporation). Mr. Olson began his career with London-based Smith & Nephew and has worked in Senior Sales and Marketing leadership roles with Johnson & Johnson, Medtronic and Wright Medical. He earned Bachelor of Science Degrees in Behavioral Science and Health Administration from The University of Utah and completed a Master's level Hospital Administration Internship Program at the same institution

Jay M. Moyes, age 72, was appointed to the board of directors in April 2025. Since April 2012, Mr. Moyes has also served on the board of directors of Puma Biotechnology, Inc., a public biopharmaceutical company with a focus on the development and commercialization of innovative products to enhance cancer care. Mr. Moyes has been a member of the board of directors of Biocardia, Inc., a public cardiovascular regenerative medicine company, since January 2011. Mr. Moyes served as the Chief Financial Officer of Sera Prognostics, Inc., a public commercial-stage biotechnology company focused on improving maternal and neonatal health through innovative biomarker approaches, from March 2020 to June 2023. Mr. Moyes previously served as a member of the board of directors of Achieve Life Sciences, Inc., a public specialty pharmaceutical company, from August 2017 to May 2023; Predictive Technology Group, Inc., a public molecular diagnostics and regenerative medicine company, from February 2019 to December 2019; Osiris Therapeutics, Inc., a public bio-surgery company, from May 2006 until December 2017; and Amedica Corporation (now SINTX Technologies, Inc.), a public orthopedic implant company, from November 2012 to August 2014. He served as Chief Financial Officer of Amedica from October 2013 to August 2014. From May 2008 through July 2009, Mr. Moyes served as Chief Financial Officer of XDx (now CareDx), Inc., a privately held molecular diagnostics company. Prior to that, Mr. Moyes served as Chief Financial Officer of Myriad Genetics, Inc., a public healthcare diagnostics company, from June 1996 until November 2007, and as its Vice President of Finance from July 1993 until May 1996. From 1991 to 1993, Mr. Moyes served as Vice President of Finance and Chief Financial Officer of Genmark, Inc., a privately held genetics company. Mr. Moyes held various positions with the accounting firm of KPMG LLP from 1979 through 1991. He holds an M.B.A. from the University of Utah, a B.A. in economics from Weber State University, and is formerly a Certified Public Accountant. Mr. Moyes also served as a member of the Board of Trustees of the Utah Life Science Association from 1999 through 2006. Mr. Moyes was nominated to serve as a director because his extensive background in finance and accounting and his experience in the context of the life sciences industry enable him to make significant contributions to the Board.

Class II Directors – continuing director with a term expiring at the 2028 annual meeting of stockholders.

Robert D. Mitchell, age 63, was appointed to our board of directors in April 2025. Since March 1, 2018, he has served on the board of directors of Conavi Medical Corp., a public (TSX), commercial stage medical device company focused on designing, manufacturing, and marketing imaging technologies to guide common minimally invasive cardiovascular procedures and is currently their chairperson of the HR and Governance Committee. Since August 2021, Mr. Mitchell has served as Executive Chairman of the Board of Directors for Life Seal Vascular Inc, a privately held medical device company pioneering solutions to revolutionize endovascular intervention. Mr. Mitchell is a general partner since January 2024 in NLP Ventures LLC. Since January 2022 he has also served as a General Partner in FF20 Ventures, an early-stage venture capital fund. Since March 2018 he has served as Chairman and founder of RDM Enterprises, LLC. From December 2010 to 2018, Mr. Mitchell served as President of Endologix, Inc., a public company focused on the development, manufacture, and commercialization of innovative medical devices for the treatment of aortic disorders. Mr. Mitchell served as President and Chief Executive Officer of Nellix, Inc. from February 2008 until its acquisition of by Endologix in December 2010. From November 2006 to February 2008, Mr. Mitchell served as Executive Vice President and Chief Operating Officer of AngioDynamics, Inc., a publicly-held medical device company. From 2005 to 2006, Mr. Mitchell served as Chairman, President and Chief Executive Officer of Millimed Holdings, Inc., a privately-held medical device company based in Roskilde, Denmark. From 2004 to 2005, Mr. Mitchell served as Vice President of Worldwide Sales for Align Technology, Inc., a publicly-held company. From 1987 to 2004, Mr. Mitchell held various positions with Cook Incorporated, a privately-held medical device company, including Vice President and Director, Global Sales and Marketing for various business units including diagnostic and interventional, endovascular, critical care. Mr. Mitchell holds a B.S. from the University of Utah and an M.B.A. from Indiana Wesleyan University. Mr. Mitchell was nominated to serve as a director because his extensive background and experience in the context of the life sciences industry enable him to make significant contributions to the Board.

Chris Lyons, age 56, has served on our board of directors since April 2025. Since January 2024, Mr. Lyons has served as a partner with BiotechExec, a provider of executive management services and fractional executive placement for medical device, biotech, diagnostics and digital health companies. Additionally, since January 2018, Mr. Lyons has served as the chief executive officer for Southern Metrics Consulting where he advises emerging medtech companies on commercialization and successful exits. Mr. Lyons worked for Medtronic Spine and Biologics, from February 2005 to January 2018 in various roles, including Director Global Business Development for 10 years, as Director of International Biologic Marketing, and Senior Product Manager – International Biologics. Prior to joining Medtronic, Mr. Lyons worked for Smith & Nephew for 16 years in various roles including Clinical Therapies Sales Representative, Group Manager Orthopedic Navigation and Group Product Manager. Mr. Lyons holds a BBA, Marketing & Sales from Fogelman College of Business & Economics, University of Memphis. Mr. Lyons was nominated to serve as a director because his extensive background and experience in the context of the medical device industry enable him to make significant contributions to the Board.

Class III Directors - continuing directors with a term expiring at the 2026 annual meeting of stockholders.

Mark Anderson, age 62, was appointed to our board of directors in April 2025. Since May 2022, Mr. Anderson has served as a consultant in the medical device industry. From June 1991 to April 2022, Mr. Anderson served in various roles with Boston Scientific, a public medical device company, including Regional Manager, Area Vice President and Sales Director. Mr. Anderson is a seasoned executive with over 35 years in the medical device industry. His experience at Boston Scientific crossed four divisions Cardiology, Watchman, Endoscopy, and Corporate Contracts. Additionally, he managed the #1 customer for Boston Scientific (HCA Healthcare) for nearly 9 years. Mr. Anderson is recognized for building high-performing teams, expanding global markets, and scaling businesses with a strong commercial and clinical focus. Mr. Anderson holds a BBA, Finance from The University of Texas at Austin. Mr. Anderson was nominated to serve as a director because his extensive background and experience in the context of the medical device industry enable him to make significant contributions to the Board.

Gregg Honigblum, age 63, has served as the Company's Chief Investment Officer since May 2025. Prior to serving as the Company's Chief Investment Officer, Mr. Honigblum served as the Company's Chief Strategy Officer from November 2024 to May 2025. From December 2023 to November 2024, Mr. Honigblum served as a Managing Director for FNEX Capital, LLC, a global leader in Private Securities transaction and investment banking. From June 2021 to December 2023 Mr. Honigblum served as a Managing Director for Westlake Securities, an investment banking firm focused on growth, merger and acquisitions, and capital raising services for middle market companies. From August 2016 to December 2023 Mr. Honigblum was a co-founder and Director for HealthGrowth Capital, LLC specializing in providing capital, strategic advisory services, and a Group Purchasing Organization Platform with large wholesale pharmaceutical distributors. He earned a Bachelor of Arts degree in Economics from the University of Texas at Austin. Mr. Honigblum holds Series 7, 24, and 63 securities licenses.

Executive Officers

Our current executive officers and their respective ages and positions are as follows:

Name	Age	Position
Eric Olson	62	Chief Executive Officer
Ryan Elmore	51	President
Gregg Honigblum	63	Chief Investment Officer and Director
Kevin Trask	41	Chief Financial Officer

The following is a brief summary of the background of each of our executive officers.

Eric Olson has served as the Company's Chief Executive Officer since August 2024 and as a member of the Board of Directors since November 2024. Prior to being appointed as Chief Executive Officer, from June 2022 to August 2024, Mr. Olson, age 62, served as Founder, Chief Executive Officer and Board Member of Foresite Innovations, LLC, a private healthcare innovation and development holding company. From January 2016 to June 2022, Mr. Olson was the founder, President, Chief Executive Officer and Board Member of Predictive Biotech, Inc., which developed the first human stem cell and tissue product (HCT/P) derived from the perinatal tissue. Prior to joining Predictive Biotech, Mr. Olson was the President and Chief Executive Officer for Cupertino based Skeletal Kinetics from December 2014 to January 2016. This Colson & Associates company developed and commercialized synthetic bone substitute products for Orthopedic and Spinal applications. From February 2012 to September 2014, Mr. Olson served as Chief Executive Officer and President and a member of the board of directors of SINTX Technologies (formerly Amedica Corporation). Mr. Olson began his career with London-based Smith & Nephew and has worked in Senior Sales and Marketing leadership roles with Johnson & Johnson, Medtronic and Wright Medical. He earned Bachelor of Science Degrees in Behavioral Science and Health Administration from The University of Utah and completed a Master's level Hospital Administration Internship Program at the same institution.

Ryan Elmore has served as President of SINTX Technologies, Inc. since March 16, 2026. Mr. Elmore reports to the Chief Executive Officer and is responsible for execution of the Company's business and operational strategy, including innovation, commercialization, business development, and global expansion of SiNERGY, the Company's proprietary implantable-grade silicon nitride biomaterial platform. Prior to joining SINTX, Mr. Elmore served in various leadership roles at Invibio, a division of Victrex plc, a global manufacturer of high-performance biomaterials and polymers used in medical device applications. Most recently, from September 2021 to March 2026, he served as Core Business Director, where he was responsible for leadership of the Victrex Biomaterials business across three strategic segments including Musculoskeletal, Cardiovascular, and Pharmaceutical markets. From October 2010 to November 2021, Mr. Elmore served as Invibio Global Head of Sales, with responsibility for international commercial strategy, channel management, contracts administration and sales execution across all continents including facilitation of high growth markets in Asia. Mr. Elmore holds a B.S. In Mechanical Engineering with sub-specialization through certification in Biomedical Engineering from the University of South Florida.

Gregg Honigblum has served as the Company's Chief Investment Officer since May 2025. Prior to serving as the Company's Chief Investment Officer, Mr. Honigblum served as the Company's Chief Strategy Officer from November 2024 to May 2025. From December 2023 to November 2024, Mr. Honigblum served as a Managing Director for FNEX Capital, LLC, a global leader in Private Securities transaction and investment banking. From June 2021 to December 2023 Mr. Honigblum served as a Managing Director for Westlake Securities, an investment banking firm focused on growth, merger and acquisitions, and capital raising services for middle market companies. From August 2016 to December 2023, Mr. Honigblum was a co-founder and Director for HealthGrowth Capital, LLC specializing in providing capital, strategic advisory services, and a Group Purchasing Organization Platform with large wholesale pharmaceutical distributors. He earned a Bachelor of Arts degree in Economics from the University of Texas at Austin. Mr. Honigblum holds Series 7, 24, and 63 securities licenses.

Kevin Trask has served as the Company's Chief Financial Officer since September 2025. Prior to being appointed as the Company's Chief Financial Officer, Mr. Trask served as the Company's Corporate Controller from May 2025 to September 2025. From May 2024 to May 2025, he served as Corporate Controller at USANA Health Sciences, Inc., a global publicly traded company. From October 2022 to May 2024, Mr. Trask served as the Head of Finance and Accounting at an early-stage private consumer goods company. From June 2021 to October 2022, Mr. Trask served as the Director of Accounting at Quotient Technologies, Inc, a publicly traded company. Prior to Quotient, Mr. Trask held multiple, progressive accounting and finance management positions at global publicly traded companies. He began his career in public accounting, providing assurance services to both large and small private and public companies. Mr. Trask holds a B.S. in Accounting from California State Polytechnic University and is an actively licensed CPA.

Arrangements between Officers and Directors

To our knowledge, there is no arrangement or understanding between any of our officers and any other person, including directors, pursuant to which the officer was selected to serve as an officer.

Family Relationships

None of our directors are related by blood, marriage, or adoption to any other director, executive officer, or other key employees.

Other Directorships

With the exception of Mr. Moyes, who is also on the board of directors of Puma Biotechnology, Inc. and Biocardia, Inc., both SEC public reporting companies, none of the directors of the Company are also directors of issuers with a class of securities registered under Section 12 of the Exchange Act (or which otherwise are required to file periodic reports under the Exchange Act).

Other Involvement in Certain Legal Proceedings

None of our directors or executive officers has been involved in any bankruptcy or criminal proceedings (other than traffic and other minor offenses) or been subject to any of the items set forth under Item 401(f) of Regulation S-K, nor have there been any judgments or injunctions brought against any of our directors or executive officers during the last ten years that we consider material to the evaluation of the ability and integrity of any director or executive officer.

The Board and Committees

Our Board of Directors has six members, namely, the Chairman of the Board, Eric Olson, who also serves as our Chief Executive Officer and Gregg Honigblum, who also serves as our Chief Investment Officer, and four non-employee directors Jay Moyes, Mark Anderson, Robert Mitchell and Chris Lyons (the "non-employee directors"). The Board has determined that the non-employee directors (who constitute a majority of the Board) are "independent directors" under the criteria set forth in Rule 5605(a)(2) of the Nasdaq Listing Rules. The Board met eight (8) times during the year ended December 31, 2025. All directors attended more than seventy-five percent (75%) of the meetings of the Board and committee meetings of which such director was a member held during 2025.

In accordance with our restated Certificate of Incorporation, our Board of Directors is divided into three classes with staggered three-year terms. At each annual meeting of stockholders, the successors to the directors whose terms then expire will be elected to serve until the third annual meeting following such election. Our directors are divided among the three classes as follows:

- The Class I directors are Eric Olson and Jay Moyes, and their terms will expire at the 2027 annual meeting of stockholders.
- The Class II directors are Robert Mitchell and Chris Lyons, and their terms will expire at the 2028 annual meeting of stockholders.
- The Class III directors are Gregg Honigblum and Mark Anderson, and their terms will expire at the annual meeting of stockholders to be held in 2026.

Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors.

Our Board of Directors has three permanent committees: the Audit Committee, the Compensation Committee, and the Corporate Governance and Nominating Committee. The written charters for these committees are on our website at https://investors.sintx.com/corporate-governance/documents-charters. Our Board of Directors may from time to time establish other standing committees. In addition, from time to time, special committees may be established under the direction of our Board of Directors when necessary to address specific issues.

The following table sets forth a description of the three permanent Board committees and the chairpersons and members of those committees, all of whom are independent directors:

Committee	Independent Chairman	Independent Members		
Audit Committee	Jay Moyes	Mark Anderson	Robert Mitchell	Chris Lyons
Compensation Committee	Mark Anderson	Jay Moyes	Robert Mitchell	Chris Lyons
Nominating and Governance Committee	Robert Mitchell	Jay Moyes	Mark Anderson	Chris Lyons

Nominating and Governance Committee

The Nominating and Governance Committee is currently comprised of the following members: Robert Mitchell (Chairman), Jay Moyes, Mark Anderson and Chris Lyons. Among other items, the Nominating and Governance Committee is tasked by the Board to: (1) identify individuals qualified to serve as members of the Board and, recommend individuals to be nominated by the Board for election by the stockholders or to be appointed by the Board to fill vacancies consistent with the criteria approved by the Board; (2) develop and periodically evaluate and recommend changes to SINTX's Corporate Governance Guidelines and Code of Ethics, and to review the Company's policies and programs that relate to matters of corporate responsibility, including public issues of significance to the Company and its stakeholders; and (3) oversee an annual evaluation of the performance of the Board. The Board has determined that each of the members of the Nominating and Governance Committee is "independent" under the standard set forth in Rule 5605(a)(2) of the Nasdaq Listing Rules. The Nominating and Governance Committee did not meet as a separate committee in 2025, but rather, because the committee is comprised of all three independent directors, governance matters were addressed as necessary in meetings of the Board. The Nominating and Governance Committee operates under a written charter adopted by the Board of Directors, which sets forth the responsibilities and powers delegated by the Board to the Nominating and Governance Committee.

Board Nominations

In considering Board candidates, the Board seeks individuals of proven judgment and competence who have strong reputations in their respective fields. Although we do not have a formal diversity policy, the Board considers such factors as experience, education, employment history, special talents or personal attributes, anticipated participation in Board activities, and geographic and diversity factors. The process for identifying and evaluating nominees would include detailed consideration of the recommendations and opinions of members of our Board, our executive officers, and our stockholders. There would be no difference in the process of evaluation of candidates recommended by a stockholder and those recommended by other sources.

The Nominating and Governance Committee has adopted a policy and procedures for shareholders to recommend nominees to the Company's Board. The Committee will only consider qualified proposed nominees that meet the qualification standards set forth on Appendix A to the Committee's charter available on the Company's website at www.SINTX.com. Pursuant to the policy, only shareholders who meet minimum percentage ownership requirements as established by the Board may make recommendations for consideration by the Committee. At this time, the Board has set a minimum percentage ownership of 5% of the Company's issued and outstanding shares of common stock for a period of at least one year. To make recommendations, a shareholder must submit the recommendation in writing by mail, courier or personal delivery to: Corporate Secretary, SINTX Technologies, Inc., 1885 West 2100 South, Salt Lake City, UT 84119. For each annual meeting the Committee will consider only one proposed nominee from each shareholder or shareholder group (within the meaning of Regulation 13D under the Exchange Act).

The recommendation must set forth (1) the name, address, including telephone number, of the recommending shareholder or shareholder group; (2) the number of the Company's shares of common stock held by such shareholder and proof of ownership if the shareholder is not a holder of record; and (3) a statement that the shareholder has a good faith intention of holding the shares through the record date of the Company's next annual meeting. For shareholder groups this information must be submitted for each shareholder in the group.

The recommendation must set forth in relation to the proposed nominee being recommended by the shareholder: (1) the information required by Items 401, 403 and 404 of Regulation S-K under the Exchange Act, (2) any material relationships or agreements between the proposed nominee and the recommending shareholder or the Company's competitors, customers, labor unions or other persons with special interests in the Company; (3) a statement regarding the qualifications of the proposed nominee to serve on the Board; (4) a statement that the proposed nominee can fairly represent the interests of all shareholders of the Company; and (5) a signed consent by the proposed nominee to being interviewed by the Nominating and Governance Committee.

Recommendations must be made not later than 120 calendar days prior to the first anniversary of the date of the proxy statement for the prior annual meeting of shareholders. In the event that the date of the annual meeting of shareholders for the current year is more than 30 days following the first anniversary date of the annual meeting of shareholders for the prior year, the submission of a recommendation will be considered timely if it is submitted not earlier than the close of business on the 120 days prior to such annual meeting and not later than the close of business on the later of 90 days prior to such annual meeting or the close of business 10 days following the day on which public announcement of the date of such meeting is first made by the Company.

Audit Committee

We have a standing Audit Committee and audit committee charter, which complies with Rule 10A-3 of the Exchange Act, and the requirements of the Nasdaq Listing Rules. Our Audit Committee was established in accordance with Section 3(a)(58)(A) of the Exchange Act. The Audit Committee is currently comprised of the following members: Jay Moyes (Chairman), Mark Anderson, Robert Mitchell and Chris Lyons. The Audit Committee provides oversight for financial reporting matters, internal controls, and compliance with the Company's financial policies, and meets with its auditors when appropriate. The Audit Committee met two (2) times as a separate committee in 2025, as well addressing other committee matters as necessary in meetings of the Board. The Board has determined that Jay Moyes is an "audit committee financial expert" within the meaning of Item 407(d)(5) of Regulation S-K. Further, the Board has determined that each member of the Audit Committee is "independent" under the standard set forth in Rule 5605(a)(2) of the Nasdaq Listing Rules. The Audit Committee operates under a written charter adopted by the Board of Directors, which sets forth the responsibilities and powers delegated by the Board to the Audit Committee.

Compensation Committee

The Compensation Committee of the Board is comprised of the following members: Mark Anderson (Chairman), Jay Moyes, Robert Mitchell and Chris Lyons. The Board has determined that each member of the Compensation Committee is "independent" under the standard set forth in Rule 5605(a)(2) of the Nasdaq Listing Rules. The Compensation Committee recommends to the Board for determination compensation of our executive officers, including the chief executive officer, and addresses salary and benefit matters for other key personnel and employees of the Company. The Compensation Committee met two (2) times as a separate committee in 2025, as well addressing other committee matters as necessary in meetings of the Board. The Compensation Committee operates under a written charter adopted by the Board of Directors, which sets forth the responsibilities and powers delegated by the Board to the Compensation Committee.

Code of Business Conduct

The Board has adopted a Code of Business Conduct that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. The code of business conduct is available on our website at https://investors.sintx.com/corporate-governance/documents-charters. We intend to disclose any amendments to the code or any waivers of its requirements on our website.

The Bylaws of the Company provide that no contract or transaction between SINTX and one or more of its directors or officers, or between SINTX and any other corporation, firm, association, or other organization in which one or more of its directors or officers are financially interested, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the Board of Directors or committee that authorizes or approves the contract or transaction, or because their votes are counted for such purpose, provided that:

- the material facts as to his, her, or their relationship or interest as to the contract or transaction are disclosed or are known to the Board of Directors or the committee and noted in the minutes, and the Board of Directors or committee authorizes the contract or transaction in good faith by the affirmative vote of a majority of disinterested directors, even though the disinterested directors are less than a quorum;

- the material facts as to his, her, or their relationship or interest as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon and the contract or transaction is specifically approved in good faith by vote of the stockholders; or

- the contract or transaction is fair as to SINTX as of the time it is authorized, approved or ratified by the Board of Directors, a committee thereof, or the stockholders.

ITEM 11. EXECUTIVE COMPENSATION

The following discussion relates to the compensation of our "named executive officers."

Summary Compensation Table

The following table sets forth information about certain compensation awarded or paid to our named executive officers for the 2025 and 2024 fiscal years.

Name and Principal Position	Year	Salary	Bonus	Non-Equity Incentive Plan Compensation	Stock Awards	Option Awards	All Other Comp (1)	Total Compensation
Eric Olson (2) Chief Executive Officer	2025	$ 366,346	$ 120,000	$ -	$ 512,650	$ -	$ 55,014	$ 1,054,010
	2024	$ 135,962	$ 25,000	$ -	$ -	$ -	$ 33,632	$ 194,594
Gregg Honigblum (3) Chief Investment Officer	2025	$ 321,442	$ 97,000	$ -	$ 501,700	$ -	$ 52,830	$ 972,972
Kevin Trask (4) Chief Financial Officer	2025	$ 169,231	$ 25,000	$ -	$ 363,320	$ -	$ 4,953	$ 562,504

(1) Amount reflects matching of 401(k) contributions paid by us, severance, vacation payouts, housing expenses, and commuting expenses, unless otherwise noted.
(2) Mr. Olson has served as the Chief Executive Officer since August 2024.
(3) Mr. Honigblum has served as the Chief Investment Officer since May 2025, and served as the Chief Strategy Officer from November 2024 to May 2025.
(4) Mr. Trask has served as the Chief Financial Officer since September 2025.

Narrative Disclosure to Summary Compensation Table. The base salaries for our named executive officers were determined by our compensation committee after reviewing a number of factors, including: the responsibilities associated with the position, the seniority of the executive's position, the base salary level in prior years, and our financial position; and for executive officers other than our Chief Executive Officer, recommendations made by our Chief Executive Officer. The Board, on an annual basis, adopts an executive bonus payment plan that is designed to provide executive officers with annual incentive compensation based on the achievement of certain pre-established performance objectives. By utilizing a combination of objective and subjective performance factors critical to our success, this program incentivizes our executive officers to achieve results that benefit them and the Company. Performance factors include the achievement of predetermined financial performance objectives, adherence to financial discipline measures and achievement of business development, product development and long-term business stability. The Board may modify or re-weight the objectives during the course of the fiscal year, if necessary, to reflect changes in our business plan.

Employment Agreements

On May 5, 2025, the Company entered into new Executive Employment Agreements with Eric Olson, Chief Executive Officer and President, and Gregg Honigblum, Chief Investment Officer (each, an "Executive"), which superseded and replaced their prior employment and change-in-control agreements.

Each agreement provides for an initial two-year term beginning May 5, 2025, with automatic one-year renewals unless either party provides at least 90 days' prior written notice of non-renewal.

Base Salary and Annual Bonus

Pursuant to his employment agreement, Mr. Olson receives an annual base salary of $375,000, subject to annual review by the Compensation Committee. Mr. Olson is eligible for an annual target cash bonus opportunity equal to 40% of his base salary, based on performance criteria established by the Compensation Committee.

Pursuant to his employment agreement, Mr. Honigblum receives an annual base salary of $325,000, subject to annual review by the Compensation Committee. Mr. Honigblum is eligible for an annual target cash bonus opportunity equal to 35% of his base salary.

Annual bonuses are generally earned based on continued employment through the last day of the applicable fiscal year and are payable no later than March 15 of the following year.

Equity Awards

In connection with entering into their employment agreements, each of Mr. Olson and Mr. Honigblum was granted 55,000 restricted stock units ("RSUs") effective May 2, 2025. Under the original terms of the awards:

- 25% of the RSUs vested immediately upon grant; and
- The remaining 75% were scheduled to vest in equal annual installments on May 2, 2026, May 2, 2027, and May 2, 2028, subject to continued service.

In November 2025, the Board of Directors approved the acceleration of vesting of all unvested RSUs granted in May 2025 to the Company's executives. As a result, all remaining unvested RSUs held by Messrs. Olson and Honigblum became fully vested during fiscal 2025. The incremental compensation expense associated with such acceleration is reflected in the "Stock Awards" column of the Summary Compensation Table for 2025.

All equity awards are subject to the terms of the Company's Equity Incentive Plan and applicable award agreements.

Severance and Change-in-Control Provisions

Each Executive's employment agreement provides for severance benefits upon certain terminations of employment.
If the Executive's employment is terminated by the Company without "Cause" or by the Executive for "Good Reason" (each as defined in the applicable employment agreement), the Executive is entitled to:

- Accrued but unpaid salary and earned benefits;
- A lump sum cash payment equal to one times the sum of (i) base salary and (ii) the greater of the target annual bonus for the year of termination or the average annual bonus for the prior three completed years (subject to specified assumptions if fewer than three years of bonus history exist); and
- Payment of certain continued health benefit amounts for up to twelve months.

If such termination occurs within one year following (or six months prior to) a Change in Control, the Executive is entitled to enhanced severance consisting of:

- A prorated annual bonus for the year of termination;
- A lump sum payment equal to three times the sum of (i) base salary and (ii) the greater of target annual bonus for the year of termination or the highest annual bonus paid in the preceding three years; and
- Continued health benefit payments for up to thirty-six months.

Severance payments are conditioned upon the Executive's execution and non-revocation of a general mutual release of claims.

The agreements also contain customary definitions of "Cause," "Good Reason," and "Change in Control," as well as provisions addressing indemnification, directors' and officers' insurance coverage, Section 409A compliance, and excise tax cutback under Section 280G of the Internal Revenue Code.

Other Compensation and Benefits

Each Executive is eligible to participate in employee benefit plans made available to senior executives, including health and welfare plans, 401(k) participation, and paid time off. The amounts reflected in the "All Other Compensation" column of the Summary Compensation Table include Company 401(k) matching contributions and other benefits described in footnote (1) to the table.

Outstanding Equity Awards at Fiscal Year-End

The following table shows information regarding equity awards held by our named executive officers as of December 31, 2025:

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price	Option Expiration Date	Number of Restricted Stock Units that have not vested (1)	Market value of shares or units of stock that have not vested ($)
Eric Olson	-	-	$ -	-	826	$ 6,408
	-	-	-	-	60,000	231,600
Gregg Honigblum	-	-	$ -	-	826	$ 3,188
	-	-	-	-	58,000	223,880
Kevin Trask	-	-	$ -	-	40,000	$ 154,400

401(k) Plan

We offer our executive officers, including our named executive officers, retirement benefits, including participation in our tax-qualified profit-sharing plan that includes a "cash-or-deferred" (or 401(k)) feature in the same manner as other employees. The plan is intended to satisfy the requirements of Section 401 of the Internal Revenue Code. Our employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit and have a like amount contributed to the plan. In addition, we may make discretionary and/or matching contributions to the plan in amounts determined annually by our Board. We currently match the contributions of our employees who participate in our 401(k) plan as follows: a match of 100% on the first 3% of compensation contributed by a plan participant and a match of 50% on amounts above 3%, up to 5%, of compensation contributed by a plan participant.

Potential Payments upon Termination or Change in Control

We have entered into certain agreements and maintained certain plans that may have required us to make certain payments and/or provide certain benefits to the executive officers named in the Summary Compensation Table in the event of termination of employment or change in control.

The following summarizes the material terms of the severance and change in control provisions applicable to Mr. Olson or Mr. Honigblum pursuant to their respective employment agreements in effect as of December 31, 2025. The amounts payable depend on the circumstances of termination and satisfaction of certain conditions, including the execution and non-revocation of a general release of claims in favor of the Company.

Termination Without Cause or for Good Reason (Not in Connection with a Change in Control)

If the employment of Mr. Olson or Mr. Honigblum is terminated by the Company without "Cause" or by the executive for "Good Reason" (each as defined in the applicable employment agreement), and such termination is not in connection with a Change in Control, the executive would be entitled to:

- Accrued but unpaid base salary and any earned but unpaid bonus;
- A lump sum cash severance payment equal to one times the sum of:
    - the executive's then-current annual base salary; and
    - the greater of (i) the target annual bonus for the year of termination or (ii) the average annual bonus earned for the three most recently completed fiscal years (subject to adjustment if fewer than three years of bonus history exist); and
- Payment or reimbursement of the employer portion of COBRA premiums for up to twelve (12) months following termination.

Equity awards would be treated in accordance with the applicable equity incentive plan and award agreements.

Termination in Connection with a Change in Control

If the executive's employment is terminated by the Company without Cause or by the executive for Good Reason within one year following, or six months prior to, a Change in Control (as defined in the employment agreement), the executive would be entitled to enhanced severance benefits consisting of:

- Accrued but unpaid base salary and any earned but unpaid bonus;
- A prorated annual bonus for the fiscal year of termination;
- A lump sum cash payment equal to three times the sum of:
    - the executive's then-current annual base salary; and
    - the greater of (i) the target annual bonus for the year of termination or (ii) the highest annual bonus earned during the preceding three fiscal years; and
- Payment or reimbursement of the employer portion of COBRA premiums for up to thirty-six (36) months.

The employment agreements include a "best net" excise tax provision under Section 280G of the Internal Revenue Code, pursuant to which payments may be reduced if such reduction would result in a greater after-tax benefit to the executive.

Termination for Cause, Death, Disability, or Voluntary Resignation Without Good Reason

If the executive's employment is terminated:

- By the Company for Cause,
- By the executive without Good Reason, or
- As a result of death or disability, the executive (or his estate) would be entitled only to accrued but unpaid base salary and any earned but unpaid bonus through the date of termination, and any vested benefits under applicable plans.

Equity Awards

Equity awards, if any, will be governed by the terms of the applicable equity incentive plan and award agreements.

Code of Business Conduct Violations

It is our policy under our Code of Business Conduct to take appropriate action against any executive officer whose actions are found to violate the Code or any other policy of SINTX. Disciplinary actions may include immediate termination of employment and, where SINTX has suffered a loss, pursuing its remedies against the executive officer responsible. SINTX will cooperate fully with the appropriate authorities where laws have been violated.

Role of the Board in Risk Oversight

Our Board of Directors has overall responsibility for risk oversight. The Board oversees the Company's risk management framework, including strategic, operational, financial, regulatory, compliance, information technology security, and governance risks. Management is responsible for the day-to-day identification, assessment, and management of risks and reports regularly to the Board and its committees regarding significant risk exposures and mitigation efforts. The Board administers its oversight function both directly and through its standing committees, in accordance with their respective charters.

The Audit Committee assists the Board in overseeing risks relating to financial reporting, internal control over financial reporting, accounting policies, liquidity, legal and regulatory compliance, and related party transactions. Consistent with its charter, the Audit Committee also oversees matters relating to information technology security and control and receives periodic reports from management regarding compliance processes and risk exposures.

The Compensation Committee oversees risks relating to executive and employee compensation policies and practices. As provided in its charter, the Compensation Committee reviews compensation programs to determine whether such policies and practices create risks that are reasonably likely to have a material adverse effect on the Company and evaluates whether incentive structures appropriately align management interests with long-term stockholder value.

The Nominating and Governance Committee oversees risks relating to corporate governance, Board composition and independence, succession planning for the Chief Executive Officer (in coordination with the Compensation Committee), and the implementation and monitoring of the Company's Code of Business Conduct and Ethics. The Committee also oversees compliance with Nasdaq listing standards and applicable governance requirements.

While each committee focuses on specific risk areas within its mandate, the full Board receives reports from its committees and considers significant risks in the context of the Company's overall business strategy and long-term objectives.

Board Compensation

The following table shows the total compensation paid or accrued during the fiscal year ended December 31, 2025 to each of our non-employee directors.

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)	Option Awards ($)(11)	Total ($)
Jay Moyes (1)	$ 54,250	$ -	$ 112,640	$ 166,890
Robert Mitchell (2)	44,563	-	112,640	157,203
Chris Lyons (3)	44,563	-	112,640	157,203
Mark Anderson (4)	44,563	-	112,640	157,203
Sonny Bal (5)(10)	50,000	-	31,100	81,100
David Truetzel (6)(10)	150,000	-	31,100	181,100
Jeffrey White (7)(10)	50,000	-	31,100	81,100
Eric Stookey (8)(10)	50,000	-	31,100	81,100
Mark Froimson (9)(10)	$ 50,000	$ -	$ 31,100	$ 81,100

(1) As of December 31, 2025, Mr. Moyes had 30,000 option awards outstanding.

(2) As of December 31, 2025, Mr. Mitchell had 30,000 option awards outstanding.

(3) As of December 31, 2025, Mr. Lyons had 30,000 option awards outstanding.

(4) As of December 31, 2025, Mr. Anderson had 30,000 option awards outstanding.

(5) As of December 31, 2025, Mr. Bal had 10,000 option awards outstanding.

(6) As of December 31, 2025, Mr. Truetzel had 10,000 option awards outstanding.

(7) As of December 31, 2025, Mr. White had 10,000 option awards outstanding.

(8) As of December 31, 2025, Mr. Stookey had 10,000 option awards outstanding.

(9) As of December 31, 2025, Mr. Froimson had 10,000 option awards outstanding.

(10) Tenure on the Board of Directors ended April 2025.

(11) The amounts in this column do not reflect compensation actually received by our non-employee directors nor do they reflect the actual value that will be recognized by the non-employee directors. Instead, the amounts reflect the aggregate grant date fair value computed in accordance with Accounting Standards Codification ("ASC") 718 of awards of stock options made to non-employee directors for the fiscal year ended December 31, 2025, but excludes an estimate for forfeitures. The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model.

The following compensation schedule sets forth calendar year 2026 compensation for non-employee directors (paid on a monthly basis) as approved by the Board:

- Annual retainer of $65,000 paid in 12 equal monthly installments of $5,417 each;
- Additionally, an annual retainer of $26,000 to the chair of the Audit Committee and annual retainer of $9,750 for chairpersons of all other committees of the Board;
- Reimbursement of reasonable expenses as supported by documentation and receipts.

A new Board appointee receives an option award upon appointment. Further, each non-employee member of the Board is awarded an option award on an annual basis.

Equity Compensation Plan Information

The following table sets forth information as of December 31, 2025 relating to all of our equity compensation plans:

Plan Category	(a) Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted-average Exercise Price of Outstanding Options, Warrants and Rights	(c) Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Referenced in Column (a))

Equity compensation plans approved by stockholders	592,359[1]	$ 6.65[2]	102,325
Equity compensation plans not approved by Stockholders	-	-	-
Total	592,359[1]	$ 6.65[2]	102,325

(1) Includes options outstanding under our 2020 Equity Incentive Plan and 2025 Equity Incentive Plan.

(2) Represents weighted-average exercise price per share of common stock acquirable upon exercise of outstanding stock options.

Equity Incentive Plan

2025 Equity Incentive Plan

The 2025 Equity Incentive Plan (the "2025 Plan"), as approved by the Company's shareholders on September 4, 2025, provides for the grant of stock options (including incentive stock options and nonqualified stock options), stock appreciation rights ("SARs"), restricted stock, restricted stock units, performance awards, and other stock-based awards to employees, officers, non-employee directors, consultants, and other service providers selected by the Compensation Committee of the Board of Directors (the "Committee") or, if applicable, the Board of Directors.

Share Reserve

The maximum number of shares of common stock available for issuance under the 2025 Plan is 700,000 shares, plus any shares that become available in connection with the cancellation or forfeiture of awards issued under the Company's 2020 Equity Incentive Plan. The number of shares available for issuance under the Plan is subject to adjustment for stock splits, recapitalizations, and other customary capital structure changes. Beginning January 1, 2026, and on each January 1 thereafter for ten years, the number of shares available under the 2025 Plan will automatically increase by the lesser of (i) 10% of the Company's outstanding shares (calculated on a fully diluted basis as described in the Plan) as of the preceding December 31, or (ii) such lesser number of shares as determined by the Board of Directors . The Board may elect to provide for no increase for any year.

Share Counting and Recycling

Shares subject to awards under the 2025 Plan count against the share reserve only to the extent they are actually issued and delivered. Shares forfeited, cancelled, or returned to the Company may again become available for issuance under the Plan in accordance with its terms. Shares withheld or tendered to satisfy tax withholding obligations or exercise price requirements are treated in accordance with the Plan's share counting provisions. Awards granted in connection with corporate acquisitions or mergers that qualify under Nasdaq Listing Rule 5635 do not count against the share reserve. No further awards may be granted under the Company's 2020 Equity Incentive Plan.

Administration

The 2025 Plan is administered by the Compensation Committee, which must consist of at least two directors meeting applicable independence requirements under Nasdaq and Rule 16b-3 of the Exchange Act. The Committee has broad authority to interpret the Plan, determine eligibility, select recipients, establish award terms and conditions, accelerate vesting, and adopt administrative rules. The Committee may delegate certain authority consistent with the terms of the Plan and applicable law. The Plan prohibits repricing of stock options or cash buyouts of underwater options without shareholder approval in accordance with Nasdaq Listing Rule 5635.

Options

Options granted under the 2025 Plan may be either incentive stock options or nonqualified stock options. The exercise price of any option may not be less than 100% of the fair market value of the Company's common stock on the grant date (subject to limited exceptions for corporate transactions). Options may not have a term longer than ten years (or five years in the case of certain 10% stockholders receiving incentive stock options).

Change in Control

The 2025 Plan includes provisions governing the treatment of awards in the event of a Change in Control, as defined in the Plan. In general:

- If awards are assumed or substituted by the successor entity, accelerated vesting may occur upon certain qualifying terminations following the Change in Control.
- If awards are not assumed or substituted, outstanding awards may accelerate or be cancelled in exchange for cash or other consideration, as determined by the Committee.
- The Committee has discretion to determine appropriate adjustments in connection with mergers, asset sales, or similar transactions.

Amendment and Termination

The Board of Directors may amend, suspend, or terminate the 2025 Plan at any time, subject to shareholder approval where required by applicable law, tax rules, or Nasdaq listing standards. No amendment may materially impair outstanding awards without the consent of the affected participant, except as provided in the Plan.

No awards may be granted under the 2025 Plan after the tenth anniversary of its shareholder approval.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding the beneficial ownership of our common stock as of March 1, 2026 by:

- each of our current directors;
- each of our executive officers; and
- all of our directors and executive officers as a group;
- each stockholder known by us to own beneficially more than 5% of our Common Stock.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. Shares of common stock that may be acquired by an individual or group within 60 days of March 1, 2026, pursuant to the exercise or vesting of options or warrants or conversion of convertible promissory notes, are deemed to be outstanding for the purpose of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table. Percentage of shares beneficially owned is based on 4,004,699 shares issued and outstanding on March 1, 2026.

Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them, based on information provided to us by such stockholders. The address for each director and executive officer listed is: c/o SINTX Technologies, Inc., 1885 West 2100 South, Salt Lake City, Utah 84119.

	Shares Beneficially Owned	
Name and Address of Beneficial Owner	**Number**	**Percentage**
Five Percent Stockholders:**		
Sinaptic Holdings, LLC (1)	281,450	6.9%
Medtech Ceramics, LP (2)	400,069	9.9%
Kevin Patrick Murphy (3)	356,350	8.6%
Directors and Named Executive Officers:		
Eric Olson (4)	134,553	3.3%
Gregg Honigblum (5)	233,680	5.8%
Kevin Trask (6)	57,566	1.4%
Jay Moyes (7)	34,000	*
Robert Mitchell (8)	30,000	*
Chris Lyons (9)	38,292	*
Mark Anderson (10)	48,000	1.2%
All executive officers and directors as a group (7 persons)	576,091	13.7%

* Indicates ownership of less than 1% of the outstanding shares of the Company's common stock.
** Based solely on information stated in Schedule 13G/A filings.

(1) Represents 216,450 shares of common stock, and warrants to purchase 65,000 shares of common stock that are currently exercisable within 60 days of March 1, 2026.

(2) Medtech Ceramics holds (a) 370,384 shares of common stock, (b) prefunded warrants to purchase 129,170 shares of common stock, (c) 760,881 warrants to purchase 760,881 shares of common stock, and (d) 507,254 shares of common stock underlying previously owned warrants. The Common Warrants, pre-funded warrants, and shares of common stock underlying previously owned warrants beneficially owned by MedTech Ceramics, LP, are subject to 9.99% Beneficial Ownership Limitation. The number of shares beneficially owned by Medtech Ceramics set forth in the table above reflects the application of such 9.99% Beneficial Ownership Limitation.

(3) Represents 225,914 shares of common stock and common stock purchase warrants to purchase 130,436 shares of common stock.

(4) Represents 99,553 shares of common stock and 35,000 RSUs that will vest within 60 days of March 1, 2026.

(5) Represents 204,180 shares of common stock and 29,500 RSUs that will vest within 60 days of March 1, 2026.

(6) Represents 35,566 shares of common stock and 22,000 RSUs that will vest within 60 days of March 1, 2026.

(7) Represents 4,000 shares of common stock, and options to purchase 30,000 shares of common stock that are currently exercisable within 60 days of March 1, 2026.

(8) Represents options to purchase 30,000 shares of common stock that are currently exercisable within 60 days of March 1, 2026.

(9) Represents options to purchase 30,000 shares of common stock that are currently exercisable within 60 days of March 1, 2026.

(10) Represents 18,000 shares of common stock, and options to purchase 30,000 shares of common stock that are currently exercisable within 60 days of March 1, 2026.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Transactions with Related Persons

During the year ended December 31, 2025, the Company entered into a Research Collaboration Agreement ("Research Agreement") with a company that is majority owned by a shareholder of the Company. The Company paid $500,000 to fund the Research Agreement. As of December 31, 2025, there was no remaining balance. Other than the Research Agreement, we have not entered into any transactions since January 1, 2025 to which we have been a party, in which the amount involved in the transaction exceeded the lesser of $120,000 or one percent of the average of our total assets at year-end for the last two completed fiscal years, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our common stock, on an as converted basis, or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described above under "Executive and Director Compensation."

Indemnification Agreements: We have entered into indemnification agreements with each of our executive officers and directors that require us to indemnify such persons against any and all expenses, including judgments, fines or penalties, attorney's fees, witness fees or other professional fees and related disbursements and other out-of-pocket costs incurred, in connection with any action, suit, arbitration, alternative dispute resolution mechanism, investigation, inquiry or administrative hearing, whether threatened, pending or completed, to which any such person may be made a party by reason of the fact that such person is or was a director, officer, employee or agent of our company, provided that such director or officer acted in good faith and in a manner that the director or officer reasonably believed to be in, or not opposed to, our best interests. The indemnification agreements also set forth procedures that will apply in the event of a claim for indemnification thereunder. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and officers.

Policy for Review of Related Party Transactions

The Company has adopted a written policy for the review and approval of related party transactions, as reflected in the Audit Committee Charter and the Company's internal governance practices. The policy applies to transactions in which the Company is a participant and in which any director, executive officer, holder of more than five percent of the Company's outstanding common stock, any immediate family member of the foregoing persons, or any other person determined by the Board of Directors to be a related person, has a direct or indirect material interest, and which are required to be disclosed pursuant to Item 404 of Regulation S-K.

Under the policy, related party transactions subject to Item 404 are required to be submitted to the Audit Committee for review and approval or, if appropriate, ratification. In reviewing a proposed transaction, the Audit Committee considers all relevant facts and circumstances available to it, including the nature of the related person's interest in the transaction, the material terms of the transaction, and whether the transaction is on terms comparable to those that could be obtained in arm's-length dealings with an unrelated third party.

The Audit Committee determines whether the transaction is fair to and in the best interests of the Company and its stockholders. No related party transaction subject to the policy may be entered into without prior review and approval of the Audit Committee, unless pre-approval is not practicable, in which case the transaction will be submitted for ratification as promptly as reasonably practicable.

All related party transactions disclosed in this Annual Report were reviewed and approved, or ratified, by the Audit Committee in accordance with the Company's related party transaction policy.

Director Independence

Information regarding the independence of directors is disclosed above under Item 10 under the heading "The Board and Committees" and incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The aggregate fees and expenses incurred from our principal accounting firm, Tanner LLP, for fiscal years ended December 31, 2025 and 2024, were as follows (in thousands):

	Year Ended December 31, 2025	Year Ended December 31, 2024
Audit fees	$ 208,118	$ 247,382
Audit related fees	42,399	109,238
Total Fees	$ 250,517	$ 356,620

Each of the permitted non-audit services has been pre-approved by the Audit Committee or the Audit Committee's Chairman pursuant to delegated authority by the Audit Committee, other than de minimus non-audit services for which the pre-approval requirements are waived in accordance with the rules and regulations of the Securities and Exchange Commission.

Audit Fees

Consist of fees billed for professional services rendered for the audit of our financial statements and review of interim consolidated financial statements included in quarterly reports and services that are normally provided by the principal accountants in connection with statutory and regulatory filings or engagements.

Audit Related Fees

Consist of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements (i.e. consents and comfort letters associated with offerings) and are not reported under "Audit Fees."

Policy for Approval of Audit and Permitted Non-Audit Services

The Audit Committee charter provides that the Audit Committee will pre-approve audit services and non-audit services to be provided by our independent auditors before the accountant is engaged to render these services. The Audit Committee may consult with management in the decision-making process, but may not delegate this authority to management. The Audit Committee may delegate its authority to pre-approve services to one or more committee members, provided that the designees present the pre-approvals to the full committee at the next committee meeting.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Reference is made to the Index to Consolidated Financial Statements beginning on Page F-1 hereof.

(1) *Financial Statements*. The following consolidated financial statements and the notes thereto, and the Report of Independent Registered Public Accounting Firm are incorporated by reference as provided in Item 8 of this report:

Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2025 and 2024	F-3
Consolidated Statements of Operations for the Years Ended December 31, 2025 and 2024	F-4
Consolidated Statements of Stockholders' Equity for the Years Ended December 31, 2025 and 2024	F-5
Consolidated Statements of Cash Flows for the Years Ended December 31, 2025 and 2024	F-6
Notes to Consolidated Financial Statements	F-7

(2) Consolidated Financial Statement Schedules

Consolidated Financial Statement Schedules have been omitted because they are either not required or not applicable, or because the information required to be presented is included in the consolidated financial statements or the notes thereto included in this Annual Report.

(3) Exhibits

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

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	Entity Acquisition Agreement between the Company and Tethon Corporation dated February 19, 2025		Form 8-K (Exhibit 1.1)	2/20/25	001-33624
3.1	Restated Certificate of Incorporation of the Registrant		Form 8-K (Exhibit 3.1)	2/20/14	001-33624
3.1.1	Certificate of Amendment to the Restated Certificate of Incorporation of SINTX Corporation		Form 8-K (Exhibit 3.1)	1/22/16	001-33624
3.1.2	Certificate of Amendment to the Restated Certificate of Incorporation of SINTX Corporation		Form 8-K (Exhibit 3.1)	11/16/17	001-33624
3.1.3	Certificate of Designation of Series B Preferred Stock		Form 8-K (Exhibit 3.1)	5/15/18	001-33624
3.1.4	Certificate of Amendment to the Restated Certificate of Incorporation		Form 8-K (Exhibit 3.1)	11/02/18	001-33624
3.1.5	Certificate of Amendment to the Restated Certificate of Incorporation of SINTX Technologies, Inc.		Form 8-K (Exhibit 3.1)	7/26/19	001-33624
3.1.6	Certificate of Designation of Series C Preferred Stock		Form 8-K (Exhibit 3.1)	2/07/20	001-33624
3.1.7	Certificate of Designation of Series D Preferred Stock		Form 8-K (Exhibit 3.1)	10/17/22	001-33624
3.1.8	Certificate of Designation of Series E Preferred Stock		Form 8-K (Exhibit 3.1)	10/28/22	001-33624
3.1.9	Certificate of Amendment to the Restated Certificate of Incorporation of Sintx Technologies, Inc.		Form 8-K (Exhibit 3.1)	12/19/22	001-33624
3.1.10	Certificate of Amendment to the Restated Certificate of Incorporation of Sintx Technologies, Inc.		Form 8-K (Exhibit 3.1)	5/23/24	001-33624
3.2	Amended and Restated Bylaws of SINTX Technologies, Inc.		Form 8-K (Exhibit 3.1)	10/01/21	001-33624
4.1	Form of Common Stock Certificate of the Registrant		Amendment No. 3 to Form S-1 (Exhibit 4.1)	1/29/14	333-192232

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
4.2	Form of Warrant Agency Agreement between Amedica Corporation and American Stock Transfer and Trust Company, LLC, dated February 6, 2020		Form 8-K (Exhibit 10.1)	2/07/20	001-33624
4.3	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 Ascendiant Capital Markets, LLC on October 17, 2022		Form 8-K (Exhibit 4.2)	10/17/22	001-33624
4.5	Form of Class A Warrant		Form 8-K (Exhibit 4.3)	10/17/22	001-33624
4.6	Form of Class B Warrant		Form 8-K (Exhibit 4.4)	10/17/22	001-33624
4.7	Form of Class C Warrant		Form S-1 (Exhibit 4.13)	2/7/23	333-269475
4.8	Form of Pre-Funded Warrant		Form S-1 (Exhibit 4.14)	2/6/23	333-269475
4.9	Form of Class D Warrant		Form S-1 (Exhibit 4.15)	2/7/23	333-269475
4.10	Form of Placement Agent Warrant		Form S-1 (Exhibit 4.16)	2/6/23	333-269475
4.11	Warrant Agency Agreement		Form 8-K (Exhibit 4.5)	2/9/23	001-33624
4.12	Form of Pre-Funded Warrant		Form 8-K (Exhibit 4.1)	2/2/24	001-33624
4.13	Form of Class E Warrant		Form 8-K (Exhibit 4.2)	2/2/24	001-33624
4.14	Form of Class F Warrant		Form 8-K (Exhibit 4.3)	2/2/24	001-33624
4.15	Form of Placement Agent Warrant		Form 8-K (Exhibit 4.4)	2/2/24	001-33624
4.16	Form of Warrant Agency Agreement		Form 8-K (Exhibit 4.5)	2/2/24	001-33624
4.17	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
4.18	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
4.19	Description of Registrant's Securities	X			
4.20	Form of Pre-Funded Warrant		Form 8-K (Exhibit 4.1)	2/26/25	001-33624
4.21	Form of Common Warrant		Form 8-K (Exhibit 4.2)	2/26/25	001-33624
4.22	Form of Placement Agent Warrant		Form 8-K (Exhibit 4.3)	2/26/25	001-33624
4.23	Form of Warrant		Form 8-K (Exhibit 4.1)	6/27/25	001-33624
10.1	Centrepointe Business Park Lease Agreement Net by and between the Registrant and Centrepointe Properties, LLC, dated as of April 21, 2009		Form S-1 (Exhibit 10.10)	11/8/13	333-192232
10.2	First Addendum to Centrepointe Business Park Lease Agreement Net by and		Form S-1 (Exhibit	11/8/13	333-192232

	between the Registrant and Centrepointe Properties, LLC, dated as of January 31, 2012	10.11)		
10.3	Form of Indemnification Agreement by and between the Registrant and its officers and directors	Amendment No. 2 Form S-1 (Exhibit 10.14)	12/20/13	333-192232

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.4	Amendment to Centrepointe Business Park Lease Agreement, dated June 7, 2019, between SINTX Technologies, Inc. and Centrepointe Properties, LLC.		Form 8-K (Exhibit 10.1)	6/10/19	001-33624
10.5	Promissory Note issued by CTL Corporation in favor of Amedica Corporation dated as of October 1, 2018.		Form 8-K (Exhibit 10.1)	10/5/18	001-33624
10.6	Security Agreement between Amedica Corporation and CTL Corporation dated as of October 1, 2018.		Form 8-K (Exhibit 10.2)	10/5/18	001-33624
10.7	Guaranty between Amedica Corporation and Daniel Chon dated as of October 1, 2018.		Form 8-K (Exhibit 10.3)	10/5/18	001-33624
10.8	ROFN Security Agreement between Amedica Corporation and CTL Corporation dated as of October 1, 2018.		From 8-K (Exhibit 10.4)	10/5/18	001-33624
10.9	2025 Equity Incentive Plan*		Form 8-K (Exhibit 10.1)	9/5/25	001-33624
10.10	2020 Equity Incentive Plan*		Defn 14a Proxy Statement	7/10/2020	001-33624
10.11	Form of Warrant Agency Agreement between SINTX Technologies, Inc. and American Stock Transfer & Trust Company, LLC		Form 8-K (Exhibit 10.1)	10/17/22	001-33624
10.12	Form of Securities Purchase Agreement		Form 8-K (Exhibit 10.1)	2/9/23	001-33624
10.13	Form of Placement Agent Agreement		Form S-1 (Exhibit 10.25)	2/6/23	333-269475
10.14	Form of Securities Purchase Agreement		Form 8-K (Exhibit 10.1)	2/2/24	001-33624
10.15	Form of Placement Agency Agreement		Form 8-K (Exhibit 10.2)	2/2/24	001-33624
10.16	Form of Stock Purchase Agreement		Form 8-K (Exhibit 10.1)	3/26/24	001-33624
10.17	Form of Placement Agency Agreement		Form 8-K (Exhibit 10.2)	3/26/24	001-33624
10.18	Form of Stock Purchase Agreement		Form 8-K (Exhibit 10.1)	4/4/24	001-33624
10.19	Form of Placement Agency Agreement		Form 8-K (Exhibit 10.2)	4/4/24	001-33624
10.20	Form of Asset Purchase Agreement		Form 8-K (Exhibit 10.1)	6/27/25	001-33624
10.20.1	Amendment No. 1 to Asset Purchase Agreement		Form 8-K (Exhibit 10.1.1)	6/27/25	001-33624
10.21	Executive Employment Agreement with Eric Olson, dated May 5, 2025*	X			
10.22	Executive Employment Agreement with Gregg Honigblum, dated May 5, 2025*	X			
10.23	Form of Purchase Agreement		Form 8-K (Exhibit 10.1)	2/26/25	001-33624
10.24	Form of Registration Rights Agreement		Form 8-K (Exhibit 10.2)	2/26/25	001-33624
10.25	Form of Inducement Letter		Form 8-K (Exhibit 10.1)	9/9/25	001-33624
10.26	Form of New Warrant		Form 8-K (exhibit 10.2)	9/9/25	001-33624
10.27	Form of Placement Agent Warrant		Form 8-K (exhibit 10.3)	9/9/25	001-33624
10.28	Form of Additional Placement Agent Warrant		Form 8-K (Exhibit 10.4)	9/9/25	001-33624
10.29	At The Market Offering Agreement, dated October 3, 2025, by and between the Company and H.C. Wainwright & Co., LLC		Form 8-K (Exhibit 10.1)	10/3/25	001-33624
10.30	Executive Employment Agreement with Ryan Elmore, dated February 6, 2026*		Form 8-K (Exhibit 10.1)	2/18/26	001-33624

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
19	Insider Trading Policy		Form 10-K (Exhibit 19)	3/19/25	001-33624
21.1	List of Subsidiaries	X			
23.1	Consent of Independent Registered Public Accounting Firm, Tanner LLC	X			
31.1	Certification of Chief Executive Officer	X			
31.2	Certification of Principal Financial Officer	X			
32	Certification pursuant to Section 906 of the Sarbanes Oxley Act of 2002 (furnished herewith)	X			
97	SINTX Technologies, Inc. Clawback Policy		Form 10-K (Exhibit 97)	3/27/24	001-33624
101 SCH	Inline XBRL Taxonomy Extension Schema Document (A)	X			
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document (A)	X			
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document (A)	X			
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document (A)	X			
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document (A)	X			
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				

* Management contract of compensatory plan or arrangement

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

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

(A) XBRL (EXTENSIBLE BUSINESS REPORTING LANGUAGE) information is furnished and not filed for purposes of Section 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SINTX Technologies, Inc.

Date: March 20, 2026

/s/ Eric Olson

Eric Olson
Chief Executive Officer and Chairman of the Board of Directors

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Date: March 20, 2026

/s/ Eric Olson

Eric Olson
Chief Executive Officer and Chairman of the Board of Directors
(Principal Executive Officer)

Date: March 20, 2026

/s/ Kevin Trask

Kevin Trask
Chief Financial Officer
(Principal Financial Officer)

Date: March 20, 2026

/s/ Jay Moyes

Jay Moyes
Director

Date: March 20, 2026

/s/ Robert Mitchell

Robert Mitchell
Director

Date: March 20, 2026

/s/ Mark Anderson

Mark Anderson
Director

Date: March 20, 2026

/s/ Chris Lyons

Chris Lyons
Director

Date: March 20, 2026

/s/ Gregg Honigblum

Gregg Honigblum
Director

As of and For the Years Ended December 31, 2025 and 2024	
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Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders of
SINTX Technologies, Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of SINTX Technologies, Inc. and subsidiaries (the "Company") as of December 31, 2025 and 2024, the related consolidated statements of operations, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2025, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2025 and 2024, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2025, in conformity with accounting principles generally accepted in the United States of America.

Going Concern

The financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has recurring losses from operations and negative operating cash flows and needs to obtain additional financing to finance its operations. These issues raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosure to which it relates.

Warrants classified as Derivative Liabilities Valuation

As described in Note 1 to the financial statements, the Company initially records warrants classified as derivative liabilities at fair value and is required to re-measure the fair value each reporting period. The Company estimates the fair value of these instruments using Monte-Carlo valuation models. The significant assumptions used in estimating the fair value include the exercise price, volatility of the stock underlying the instrument, risk-free interest rate, estimated fair value of the stock underlying the instrument and the estimated life of the instrument.

We obtained an understanding and evaluated the design and implementation of controls over the Company's process for calculating the fair values of the warrants classified as derivative liabilities, including controls over management's review of the significant assumptions described above.

To test the estimated fair value of the warrants classified as derivative liabilities, we performed audit procedures that included, among others, assessing methodologies and testing the significant assumptions discussed above as well as the underlying data used by the Company in its analysis, and evaluating management's specialist.

/s/ TANNER LLP

(PCAOB ID 270)
We have served as the Company's auditors since 2017
Lehi, Utah
March 20, 2026

SINTX Technologies, Inc.
Consolidated Balance Sheets
(in thousands, except share and per share data)

	As of December 31,	
	2025	**2024**
Assets		
Current assets:		
Cash and cash equivalents	$ 4,140	$ 3,598
Account and other receivables, net of allowance totaling $2.4 and $61.0 respectively	178	196
Prepaid expenses and other current assets	507	225
Inventories	825	502
Total current assets	5,650	4,521
Inventories, net	219	465
Property and equipment, net	476	922
Intangible assets, net	142	16
Goodwill	302	-
Operating lease right of use asset	2,458	3,159
Other long-term assets	259	330
Total assets	$ 9,506	$ 9,413
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 382	$ 299
Accrued liabilities	422	986
Debt	7	32
Derivative liabilities	827	208
Current portion of operating lease liability	398	456
Other current liabilities	1,697	1
Total current liabilities	3,733	1,982
Operating lease liability, net of current portion	2,844	3,537
Total liabilities	6,577	5,519
Commitments and contingencies		
Stockholders' equity:		
Convertible preferred stock Series B, $0.01 par value, 130,000,000 total shares authorized inclusive of all series of preferred; 19 shares issued and outstanding of December 31, 2025 and December 31, 2024.	-	-
Convertible preferred stock Series C, $0.01 par value, 130,000,000 total shares authorized inclusive of all series of preferred; 50 shares issued and outstanding as of December 31, 2025 and 2024.	-	-
Convertible preferred stock Series D, $0.01 par value, 130,000,000 total shares authorized inclusive of all series of preferred; 180 shares issued and outstanding as of December 31, 2025 and 2024.	-	-
Treasury stock, 50,424 shares as of December 31, 2025	(133)	-
Common stock, $0.01 par value, 250,000,000 shares authorized; 3,970,869 and 1,342,853 shares issued and outstanding as of December 31, 2025 and 2024, respectively.	40	13
Additional paid-in capital	295,124	285,619
Accumulated deficit	(292,102)	(281,738)
Total stockholders' equity	2,929	3,894
Total liabilities and stockholders' equity	$ 9,506	$ 9,413

The accompanying notes are an integral part of these consolidated financial statements.

SINTX Technologies, Inc.
Consolidated Statements of Operations
(in thousands, except share and per share data)

	Years Ended December 31,	
	2025	**2024**
Product revenue	$ 729	$ 1,246
Grant and contract revenue	289	1,641
Total revenue	1,018	2,887
Cost of revenue	557	811
Gross profit	461	2,076
Operating expenses:		
Research and development	4,587	5,201
General and administrative	6,197	3,997
Sales and marketing	242	614
Armor exit costs	-	4,602
Reduction in force	-	407
Grant and contract expenses	156	1,302
Total operating expenses	11,182	16,123
Loss from operations	(10,721)	(14,047)
Other income (expenses):		
Interest expense	(52)	(29)
Interest income	175	107
Gain (loss) on the disposal of assets	327	(19)
Change in fair value of derivative liabilities	(124)	3,475
Offering costs of derivative liabilities	-	(550)
Other income (expense)	31	39
Total other income (expense), net	357	3,023
Net loss before income taxes	(10,364)	(11,024)
Provision for income taxes	-	-
Net loss	(10,364)	(11,024)
Deemed dividend related to warrant inducement	(6,719)	-
Net loss attributable to common stockholders	$ (17,083)	$ (11,024)
Net loss per share – basic and diluted		
Basic – net loss	$ (3.74)	$ (14.87)
Basic – deemed dividend related to warrant inducement	(2.42)	-
Basic – attributable to common stockholders	$ (6.16)	$ (14.87)
Diluted – net loss	$ (3.74)	$ (15.19)
Diluted - deemed dividend related to warrant inducement	(2.42)	-
Diluted – attributable to common stockholders	$ (6.16)	$ (15.19)
Weighted average common shares outstanding:		
Basic	2,773,518	741,250
Diluted	2,773,518	744,782

The accompanying notes are an integral part of these consolidated financial statements.

SINTX Technologies, Inc.
Consolidated Statements of Stockholders' Equity
(in thousands, except share data)

	Preferred Stock		Common Stock		Treasury	Paid-In	Accumulated	Total
	Shares	Amount	Shares	Amount	Stock	Capital	Deficit	Equity
Balance as of December 31, 2023	256	$ -	26,603	$ -	$ -	$ 279,486	$ (270,714)	$ 8,772
Stock based compensation	-	-	14	-	-	82	-	82
Common stock issued for cash, net of fees	-	-	1,119,357	11	-	5,644	-	5,655
Prefunded warrants issued for cash, net of fees	-	-	-	-	-	406	-	406
Extinguishment of derivative liabilities upon exercise of warrants	-	-	-	-	-	1	-	1
Issuance of common stock from the exercise of prefunded warrants for cash	-	-	63,079	1	-	1	-	2
Redemption of preferred stock	(7)	-	1,833	-	-	-	-	-
Round up of shares issued in reverse stock split	-	-	131,967	1	-	(1)	-	-
Net loss	-	-	-	-	-	-	(11,024)	(11,024)
Balance as of December 31, 2024	249	$ -	1,342,853	$ 13	$ -	$ 285,619	$ (281,738)	$ 3,894
Stock based compensation	-	-	330,332	3	-	1,993	-	1,996
Common stock issued for cash, net of fees	-	-	1,171,189	12	-	4,368	-	4,380
Issuance of common stock in connection with ATM, net of fees	-	-	86,887	1	-	328	-	329
Issuance of common stock from the cashless exercise of warrants	-	-	148,933	2	-	(2)	-	-
Common stock and warrants issued for cash, net of fees	-	-	724,649	7	-	2,138	-	2,145
Issuance of common stock for business acquisition	-	-	216,450	2	-	680	-	682
Deemed dividend related to warrant inducement	-	-	-	-	-	(6,719)	-	(6,719)
Warrants issued for warrant inducement	-	-	-	-	-	6,719	-	6,719
Purchase of common stock into Treasury	-	-	-	-	(133)	-	-	(133)
Net loss	-	-	-	-	-	-	(10,364)	(10,364)
Balance of as December 31, 2025	249	$ -	4,021,293	$ 40	$ (133)	$ 295,124	$ (292,102)	$ 2,929

The accompanying notes are an integral part of these consolidated financial statements.

SINTX Technologies, Inc.
Consolidated Statements of Cash Flows
(in thousands)

	Years Ended December 31,	
	2025	**2024**
Cash flow from operating activities		
Net loss	$ (10,364)	$ (11,024)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	319	842
Amortization of right of use asset	324	537
Amortization of intangible assets	19	5
Loss on disposal of subsidiary	25	-
Impairment of Armor	64	4,602
Stock based compensation – Employee	1,390	82
Stock based compensation – Non-employee	606	-
Change in fair value of derivative liabilities	124	(3,475)
Loss (gain) on disposal of equipment	(352)	18
Bad debt expense (recoveries)	(3)	(1)
Changes in operating assets and liabilities:		
Account and other receivables	(69)	490
Prepaid expenses and other assets	(47)	482
Inventories	(85)	72
Accounts payable and accrued liabilities	(200)	(756)
Other liabilities	45	(2)
Payments on operating lease liability	(367)	(514)
Net cash used in operating activities	(8,571)	(8,642)
Cash flows from investing activities		
Purchase of property and equipment	(185)	(690)
Disposal of property and equipment, net of cash received	(4)	-
Proceeds from the sale of property and equipment	352	20
Proceeds from acquisition of Sinaptic Surgical	750	-
Proceeds from notes receivable, net of imputed interest	-	476
Net cash provided by (used in) investing activities	913	(194)
Cash flows from financing activities		
Proceeds from issuance of warrant derivative liabilities	-	3,366
Proceeds from issuance of common stock and prefunded warrants, net of cash fees	4,380	6,075
Proceeds from exercise of warrants, net of cash fees, and deposit for stock issuance (in other current liabilities)	3,624	-
Proceeds from issuance of common stock in connection with ATM, net of fees	329	-
Proceeds from issuance of warrants in connection with exercise of warrants	206	-
Purchase of common stock into treasury	(133)	-
Proceeds from issuance of common stock in connection with exercise of warrants	-	2
Principal payment on debt	(206)	(349)
Net cash provided by financing activities	8,200	9,094
Net increase in cash and cash equivalents	542	258
Cash and cash equivalents at beginning of year	3,598	3,340
Cash and cash equivalents at end of year	$ 4,140	$ 3,598

	Years Ended December 31,	
	2025	**2024**
Noncash investing and financing activities		
Reduction of derivative liability upon exercise of warrants	$ -	$ 1
Deemed dividend related to warrant inducement and issuance of warrants	6,719	-
Right of use asset for amended lease liability – decrease	-	307
Debt issued for prepaid insurance	180	335
Agent warrant offering cost allocated to equity	-	13
Supplemental cash flow information		
Cash paid for interest	$ 52	$ 29

The accompanying notes are an integral part of these consolidated financial statements.

1. Organization and Summary of Significant Accounting Policies

The consolidated financial statements include the accounts of SINTX Technologies, Inc. ("SINTX") and its wholly-owned subsidiaries, SINTX Armor, Inc. ("SINTX Armor"), SINTX Agribiotech, Inc., Sinaptic Surgical, LLC, and Technology Assessment and Transfer, Inc. (TA&T) through February 19, 2025 (see Note 1), which are collectively referred to as "we" or the "Company." SINTX Technologies is an advanced ceramics company formed in December 1996 that develops and commercializes materials, components, and technologies for medical, industrial 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 October 2025, SINTX received U.S. Food and Drug Administration (FDA) 510(k) clearance for the SiNAPTIC® Foot & Ankle Osteotomy Wedge System, enabling SINTX's commercial entry into reconstructive foot and ankle surgery in the United States.

Antipathogenic Applications: 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. 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 AS9100D certified. The Company's products are primarily sold in the United States.

Basis of Presentation and Principles of Consolidation

These consolidated financial statements have been prepared by management in accordance with the rules and regulations of the United States Securities and Exchange Commission ("SEC") and include all assets and liabilities of the Company.

Operating Segments

The Company operates as one operating segment. Operating segments are defined as components of an entity for which separate financial information is regularly evaluated by the chief operating decision maker ("CODM"), which is the Company's Chief Executive Officer, in deciding how to allocate resources and assess performance. The Company's CODM evaluates financial information and resources and assesses the performance of these resources on a consolidated basis. There is no expense or asset information that is supplemental to information disclosed within the consolidated financial statements, that is regularly provided to the CODM. The allocation of resources and assessment of performance of the operating segment is based on consolidated net loss and functional expenses as reported on our consolidated statements of operations. Because the Company operates as one operating segment, financial segment information, including expense and asset information, can be found in the consolidated financial statements.

Reclassification

Certain other prior period balances have been reclassified to conform to the current period presentation, including the reclassification of $250,000 from prepaid expenses and other current assets to other long-term assets, with no effect on previously reported total assets, stockholders' equity, or results of operations.

Reverse Stock Split

On May 28, 2024, the Company effected a 1 for 200 reverse stock split of the Company's common stock. The par value and the authorized shares of the common and preferred stock were not adjusted as a result of the reverse stock split. All common stock shares, equivalents, and per-share amounts for all periods presented in these consolidated financial statements have been adjusted retroactively to reflect the reverse stock split.

Liquidity and Capital Resources

The consolidated financial statements have been prepared assuming the Company will continue to operate as a going concern. To date, the Company's operations have been principally financed from proceeds from the issuance of preferred and common stock and, to a lesser extent, cash generated from product sales. It is anticipated that the Company will continue to generate operating losses and use cash in operations. The Company's continuation as a going concern is dependent upon its ability to increase sales, decrease expenses and raise additional funding. We continue to seek opportunities to raise additional funding through equity and/or debt financing. However, such funding is not guaranteed and may not be available to the Company on favorable terms and may involve restrictive covenants. If the Company is not able to obtain additional debt or equity financing, the impact on the Company will be material and adverse.

The board of directors, together with management, remains focused on advancing the Company's business strategy and focus. We are concentrating our resources on high-growth areas within the healthcare sector where our proprietary materials and technologies—such as silicon nitride—provide a distinct competitive advantage due to their unique strength, durability, and biocompatibility. Through this transformation, as demonstrated by the recent FDA 510(k) clearance of our SiNAPTIC® Foot & Ankle Osteotomy Wedge System, our aim is to deliver meaningful innovations to the medical community. By focusing on partnerships and collaborations with healthcare institutions and industry leaders, SINTX is positioned to expand its footprint in the medical device sector and drive shareholder value through sustainable, high-impact innovations.

On August 8, 2024, the board of directors approved a plan to implement a Company-wide reduction in the workforce. This decision was part of the Company's ongoing strategic review of its operations aimed at improving operational efficiency and reducing costs.

On August 12, 2024, the board of directors approved a plan to cease efforts to make the armor plant operational. This decision was made to streamline operations and focus on core business areas that align with the Company's long-term strategic goals. The armor plant had not been fully operational since the acquisition of the armor equipment in July 2021 and had been completely shut down since October 2023.

As discussed in Note 1 to the consolidated financial statements, on February 19, 2025, the Company sold to Tethon all the issued and outstanding shares of TA&T in exchange for the assumption by Tethon of the outstanding liabilities of TA&T.

As discussed in further detail above, in October 2025, the Company received FDA 510(k) clearance for a new foot and ankle osteotomy wedge system, enabling SINTX's commercial entry into reconstructive foot and ankle surgery in the United States. Revenue is expected to begin during the first half of 2026.

As discussed in Note 8 to the consolidated financial statements, in October 2025, the Company entered into the 2025 ATM Agreement to sell shares of its common stock from time to time, through an "at the market offering" program, having an aggregate offering price of $6.4 million.

As discussed in Note 13 to the consolidated financial statements, in October 2025, the Company entered into a sublease agreement to lease the SINTX armor facility to a third party, that is expected to save the Company approximately $1.0 million over the sublease term.

While management has implemented plans intended to mitigate these conditions, management has concluded that substantial doubt exists about the Company's ability to continue as a going concern for 12 months from the date these consolidated financial statements are issued. The consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the period. Actual results could differ from those estimates. As of December 31, 2025, the most significant estimate relates to derivative liabilities relating to common stock warrants.

Concentrations of Credit Risk and Significant Customers

Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, and notes receivable. Because the financial institution that the Company currently uses does not participate in the Certificate of Deposit Account Registry Service ("CDARS"), the Company does not presently have a program to limit its exposure to credit loss. The Company's deposits, at times, may exceed federally insured limits.

As of and for the year ended December 31, 2025, five commercial customers and government agencies represent 72% of the Company's total revenues and 80% of the Company's total accounts receivable.

Revenue Recognition

The Company derived its product revenue primarily from the sale of aerospace components and spinal fusion products. The aerospace components are key ceramic aircraft engine components sold to a leading manufacturer of aerospace components and systems by which the Company has entered into a 10-year, long-term agreement. The spinal fusion products are used in the treatment of spine disorders and sold to CTL Medical, with whom the Company signed a 10-year exclusive sales agreement in October 2018. The Company also records revenue from grants, contracts, and awards provided by government agencies. The Company is currently pursuing other sales opportunities for silicon nitride outside the spinal fusion application.

Revenue is recognized when control of the goods or services promised under the contract is transferred to the customer either at a point in time (e.g., upon delivery) or over time (e.g., as performed under the contract). The Company accounts for a contract when it has approval and commitment from both parties, the rights and payment terms of the parties are identified, the contract has commercial substance and collectability of consideration is probable. Contracts are reviewed to determine whether the contract contains one or multiple performance obligations. A performance obligation is a promise to transfer a distinct good or service to a customer and represents the unit of accounting for revenue recognition. For contracts with multiple performance obligations, the expected consideration, or the transaction price, is allocated to each performance obligation identified in the contract based on the relative standalone selling price of each performance obligation. Revenue is then recognized for the transaction price allocated to the performance obligation when control of the promised goods or services underlying the performance obligation is transferred. Contract consideration is not adjusted for the effects of a significant financing component when, at contract inception, the period between when control transfers and when the customer will pay for that good or service is one year or less. Contact modifications that add distinct goods or services at the standalone selling price are accounted for as separate contracts. The transaction price for our contracts reflects our estimate of returns, rebates and discounts, which historically have not been significant. Amounts billed to customers for shipping and handling are included in the transaction price and generally are not treated as separate performance obligations as these costs fulfill a promise to transfer the product to the customer. The Company employs salespeople to actively seek additional customers; there are no incremental costs for obtaining customers that need to be capitalized.

The Company recognizes revenue from sales of products at the time the product is shipped.

Revenues from grants, contracts, and awards provided by governmental agencies are recorded based upon the terms of the specific agreements, which generally provide that revenue is earned when the allowable costs specified in the applicable agreement have been incurred or a milestone has been met. Cash received from federal grants, contracts, and awards can be subject to audit by the grantor and, if the examination results in a disallowance of any expenditure, repayment could be required. The duration of the government grants, contracts, and awards varies by government entity as well as phase level. The general duration period during 2025 is approximately one year.

Grant, contract, and award receivables relate to allowable amounts expended or otherwise incurred or earned in connection with the terms of a grant, contract, or award and for which reimbursement has not yet taken place. As of December 31, 2025, government grants, contracts, and awards accounted for approximately $11,000 in accounts receivable. To be eligible to receive moneys from government agencies the Company must meet commitments as outlined in the grant, contract, and award agreements.

Costs of Revenue

The expenses that are included in costs of revenue associated with product sales include all raw material and in-house manufacturing costs for the products we manufacture.

Cash and Cash Equivalents

The Company considers all cash on deposit, money market accounts and highly-liquid debt instruments purchased with original maturities of three months or less to be cash and cash equivalents.

Inventories

Inventories are stated at the lower of cost or net realizable value, with cost for manufactured inventory determined under the standard costs, which approximate actual costs, determined on the first-in first-out ("FIFO") method. Manufactured inventory consists of raw material, direct labor and manufacturing overhead cost components. The Company reviews the carrying value of inventory on a periodic basis for excess or obsolete items, and records any write-down as a cost of revenue, as necessary. Inventory that is not expected to be utilized within 12 months of December 31, 2025, and 2024, respectively is recorded as long term.

Property and Equipment

Property and equipment, including leasehold improvements, are stated at cost, less accumulated depreciation and amortization. Property and equipment are depreciated using the straight-line method over the estimated useful lives of the assets, which range from three to five years. Leasehold improvements are amortized over the shorter of their estimated useful lives or the related lease term, generally five years.

The Company reviews the carrying value of the Company's property and equipment that are held and used in the Company's operations for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of these assets is determined based upon expected undiscounted future net cash flows from the operations to which the assets relate, utilizing management's best estimate, assumptions, and projections at the time. If the carrying value is determined to be unrecoverable from future operating cash flows, the asset is deemed impaired, and an impairment charge would be recognized to the extent the carrying value exceeded the estimated fair value of the asset. The Company estimates the fair value of assets based on the estimated future discounted cash flows of the asset.

Leases

The Company determines if an arrangement is a lease at inception. Operating leases are in operating lease right of use asset and operating lease liability in our consolidated balance sheet. Finance leases, if any, are included in property and equipment in our consolidated balance sheet. Leases with an initial term of 12 months or less are not presented on the consolidated balance sheet. The Company accounts for lease payments separately from non-lease components. The depreciable life of the asset and leasehold improvement are limited by the expected lease term.

Account and Other Receivables and Allowance for Credit Losses

Financial assets, which potentially subject the Company to credit losses, consist primarily of receivables. We measure expected credit losses of financial assets based on historical loss and other information available to management using type of receivable (commercial, grants or contracts, retainage, or other) and different aging categories (less than 90 days past due, over 90 days past due, over 180 days past due, and financially troubled customers). These expected losses are recorded to an allowance for credit losses valuation account that is deducted from receivables to present the net amount expected to be collected on the financial asset on the consolidated balance sheet. Management believes that the historical loss information it has compiled is a reasonable basis on which to determine expected credit losses for trade receivables held as of December 31, 2025, because the composition of the trade receivables as of that date is consistent with that used in developing the historical credit-loss percentages (i.e., the similar risk characteristics of its customers and its lending practices have not changed significantly over time).

Long Lived Intangible Assets

The Company evaluates the carrying value of intangibles when events or changes in circumstances indicate that the carrying value may not be recoverable. Factors the Company considers important which could trigger an impairment review include, but are not limited to, significant under-performance relative to historical or projected future operating results, significant changes in the manner of its use of acquired assets or its overall business strategy, and significant industry or economic trends. The Company amortizes definite-lived intangible assets on a straight-line basis over their useful lives. The Company recorded no impairment loss for definite-lived intangible assets during the year ended December 31, 2025.

Derivative Liabilities

Derivative liabilities include the fair value of certain common stock warrants, which are initially recorded at fair value and are required to be re-measured to fair value at each reporting period. The change in fair value of the instruments is recognized as a component of other income (expense) in the Company's consolidated statements of operations until the instruments settle, expire or are no longer classified as derivative liabilities. The Company estimates the fair value of these instruments primarily using Monte-Carlo valuation models. The significant assumptions used in estimating the fair value include the exercise price, volatility of the stock underlying the instrument, risk-free interest rate, estimated fair value of the stock underlying the instrument and the estimated life of the instrument.

Research and Development

All research and development costs, including those funded by third parties, are expensed as incurred. Research and development costs consist of engineering, product development, test-part manufacturing, testing, developing and validating the manufacturing process, and regulatory related costs. Research and development expenses also include employee compensation, employee and nonemployee stock-based compensation, supplies and materials, consultant services, and travel and facilities expenses related to research activities.

We expect to incur additional research and development costs as we continue to develop new biomedical and antipathogenic products.

Advertising Costs

Advertising costs are expensed as incurred. The primary component of the Company's advertising expenses is advertising in trade periodicals. Advertising costs were not significant for each of the years ended December 31, 2025 and 2024.

Income Taxes

The Company recognizes deferred tax assets and liabilities for the future tax consequences attributable to the differences between the financial statement carrying value of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the fiscal year in which those temporary differences are expected to be recovered or settled. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company operates in various tax jurisdictions and is subject to audit by various tax authorities. The Company provides for tax contingencies whenever it is deemed probable that a tax asset has been impaired, or a tax liability has been incurred for events such as tax claims or changes in tax laws. Tax contingencies are based upon their technical merits relative tax law and the specific facts and circumstances as of each reporting period. Changes in facts and circumstances could result in material changes to the amounts recorded for such tax contingencies.

The Company recognizes uncertain income tax positions taken on income tax returns at the largest amount that is more-likely than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained.

The Company's policy for recording interest and penalties associated with uncertain tax positions is to record such items as a component of our income tax provision. For the years ended December 31, 2025 and 2024, the Company did not record any material interest income, interest expense or penalties related to uncertain tax positions or the settlement of audits for prior periods.

Stock-Based Compensation

The Company measures stock-based compensation expense related to employee stock-based awards based on the estimated fair value of the awards as determined on the date of grant and is recognized as expense over the remaining requisite service period. The Company utilizes the Black-Scholes-Merton option pricing model to estimate the fair value of employee stock options. The Black-Scholes-Merton model requires the input of subjective assumptions, including the estimated fair value of the Company's common stock on the date of grant, the expected term of the stock option, and the expected volatility of the Company's common stock over the period equal to the expected term of the grant. The Company estimates forfeitures at the date of grant and revises the estimates, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company accounts for stock options to purchase shares of stock that are issued to non-employees based on the estimated fair value of such instruments using the Black-Scholes-Merton option pricing model.

Disposition of TA&T

On February 19, 2025, the Company entered into an Entity Acquisition Agreement (the "Agreement") with Tethon Corporation ("Tethon"), pursuant to which the Company sold to Tethon all the issued and outstanding shares of TA&T in exchange for the assumption by Tethon of the outstanding liabilities of TA&T. The disposal did not represent a strategic shift that will have a major effect on the Company's operations and financials and, therefore, did not qualify for discontinued operations treatment under ASC 205-20.

The following table summarizes the carrying amounts of the major classes of assets and liabilities of TA&T at the date of sale that were transferred to the Tethon (in thousands):

	February 19, 2025
Cash and cash equivalents	$ 4
Inventories	8
Accounts receivable	91
Right of use asset	376
Property and equipment, net	248
Other assets	16
Total assets sold	743
Accounts payable	(26)
Accrued expenses	(275)
Operating lease liability	(384)
Other liabilities	(34)
Total liabilities assumed	(719)
Net assets sold	$ 24

No consideration was paid other than the assumption by Tethon of the above liabilities. No significant transaction costs were incurred. No earnout or other contingent consideration arrangements were included in the Agreement.

Business Combination

On July 1, 2025, the Company entered into an Asset Purchase Agreement with Sinaptic Surgical, LLC ("Sinaptic Surgical") and Sinaptic Holdings, LLC ("Holdings"), pursuant to which the Company agreed to purchase substantially all the assets and assume certain liabilities of Sinaptic Surgical. As consideration for the purchase of the assets under the Asset Purchase Agreement, the Company agreed to issue to Sinaptic Surgical warrants to purchase 325,000 shares of the Company's common stock (the "Warrants"). The Warrants expire five years from the date of issue and have an exercise price of $6.30 per share. The Warrants will become exercisable upon the achievement of certain milestones prior to the expiration of the Warrants. In connection with the Asset Purchase Agreement, Sinaptic Surgical purchased 216,450 shares of the Company's common stock at a purchase price of $3.465 per share in a private placement.

The fair value for the acquired intangible asset was estimated utilizing the income approach, which involves the use of significant estimates and assumptions including projected revenue growth rates, projected earnings, and discount rates.

The following table summarizes the consideration transferred, the estimated fair value of the assets acquired, and liabilities assumed, at the acquisition date (in thousands):

	Amounts recognized as of the acquisition date
Fair value of consideration transferred	
Common stock private placement	$ 682
Warrants (included in derivative liabilities)	495
Total consideration transferred	$ 1,177
Recognized amounts of identifiable assets acquired and liabilities assumed	
Cash	$ 750
Intangibles	145
Total assets acquired	895
Accounts payable and other accrued expenses	(20)
Total identifiable net assets	$ 875
Goodwill	$ 302

The Company recognized goodwill of $302,000, which reflects the future benefits of certain synergies, and regulatory and commercialization strategies. Acquired intangible assets are being amortized over the estimated useful life of five years on a straight-line basis.

Net Loss Per Share – Basic and Diluted

Basic net income (loss) per share is calculated by dividing the net income (loss) by the weighted-average number of shares of common stock outstanding for the period, without consideration for common stock equivalents. Diluted net loss per share is calculated by dividing the net loss by the weighted-average number of shares of common stock equivalents outstanding for the period that are determined to be dilutive. Common stock equivalents are primarily comprised of preferred stock, options and warrants for the purchase of common stock The Company had potentially dilutive securities, totaling approximately 3.3 million and 0.2 million shares of common stock as of December 31, 2025 and 2024, respectively.

Below are basic and diluted loss per share data for the year ended December 31, 2025, which are in thousands except for share and per share data:

	Basic Calculation	Effect of Dilutive Warrant Securities	Diluted Calculation
Numerator:			
Net loss	$ (10,364)	$ -	$ (10,364)
Deemed dividend related to inducement warrants	(6,719)	-	(6,719)
Net loss attributable to common stockholders	$ (17,083)	$ -	$ (17,083)
Denominator:			
Number of shares used in per common share calculations:	2,773,518	-	2,773,518
Net loss per common share:			
Net loss	$ (3.74)	$ -	$ (3.74)
Deemed dividend related to inducement warrants	(2.42)	-	(2.42)
Net loss attributable to common stockholders	$ (6.16)	$ -	$ (6.16)

Below are basic and diluted loss per share data for the year ended December 31, 2024, which are in thousands except for share and per share data:

	Basic Calculation	Effect of Dilutive Warrant Securities	Diluted Calculation
Numerator:			
Net loss	$ (11,024)	$ (291)	$ (11,315)
Deemed dividend related to inducement warrants	-	-	-
Net loss attributable to common stockholders	$ (11,024)	$ (291)	$ (11,315)
Denominator:			
Number of shares used in per common share calculations:	741,250	3,532	744,782
Net loss per common share:			
Net loss	$ (14.87)	$ (82.39)	$ (15.19)
Deemed dividend related to inducement warrants	-	-	-
Net loss attributable to common stockholders	$ (14.87)	$ (82.39)	$ (15.19)

Recent Accounting Pronouncements

ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures

In December 2023, the FASB issued ASU 2023-09 "Income Taxes (Topic 740): Improvements to Income Tax Disclosures" on the topic of income taxes. The standard requires additional disclosure for income taxes. These requirements include: (i) requiring a public entity to disclose specific categories in the rate reconciliation; (ii) disclosure of additional information for reconciling items that meet a quantitative threshold (if the effect of those reconciling items is equal to or greater than 5% of the amount computed by multiplying pretax income or loss by the applicable statutory income tax rate); (iii) annual disclosure of the amount of income taxes paid (net of refunds received) disaggregated by federal (national), state, and foreign taxes; (iv) annual disclosure of the amount of income taxes paid (net of refunds received) disaggregated by individual jurisdictions in which income taxes paid (net of refunds received) is equal to or greater than 5% of total income taxes paid (net of refunds received); (v) annual disclosure of income (or loss) from continuing operations before income tax expense (or benefit) disaggregated between domestic and foreign; and (vi) annual disclosure of income tax expense (or benefit) from continuing operations disaggregated by federal (national), state, and foreign. For public entities, the guidance is effective for annual periods beginning after December 15, 2024. The Company prospectively adopted this guidance in fiscal 2025, requiring updates to the related disclosures, yet with no material effect on the consolidated financial statements.

ASU 2024-03, Income Statement—Reporting Comprehensive Income (Topic 220): Disaggregation of Income Statement Expenses

In November 2024, the FASB issued ASU No. 2024-03, "Income Statement—Reporting Comprehensive Income (Topic 220): Disaggregation of Income Statement Expenses," which requires public business entities, such as the Company, to provide disaggregated disclosure of specific natural expense categories underlying certain income statement expense line items in the notes to the financial statements. The standard identifies five required natural expense categories for disaggregation—employee compensation, depreciation, amortization, inventory expense, and other manufacturing expenses—along with a residual "other" category for remaining amounts within relevant expense captions (e.g., cost of sales, selling, general and administrative expenses). ASU 2024-03 does not alter the expense captions presented on the face of the income statement but enhances footnote disclosures to improve transparency. The standard is effective for annual periods beginning after December 15, 2026, with early adoption permitted, and must be applied prospectively, though retrospective application is optional. An update in ASU 2025-01 clarified that interim period disclosures are not required until annual periods beginning after December 15, 2027. The Company is in the process of evaluating the impact of ASU 2024-03 on its consolidated financial statements. We expect adoption to necessitate modifications to our financial reporting processes and systems to capture and disclose the required disaggregated expense information in the footnotes. Management anticipates that this will enhance the granularity of expense disclosures but does not expect a material effect on our reported financial position or results of operations. We are reviewing our current expense classification practices and data collection capabilities to ensure compliance with the new requirements upon adoption.

The Company has determined that recently issued accounting standards, other than the above discussed, will not have a material impact on its consolidated financial position, results of operations or cash flows.

2. Inventories

The components of inventory were as follows (in thousands):

	As of December 31,	
	2025	**2024**
Raw materials	$ 402	$ 629
WIP	296	182
Finished goods	346	156
	$ 1,044	$ 967

Impairment of Armor inventories of $0.2 million was recorded during 2024 related to Armor exit costs, and is included in Armor exit costs in the statement of operations.

3. Property and Equipment

The following is a summary of the components of property and equipment (in thousands):

	As of December 31,	
	2025	2024
Manufacturing and lab equipment	$ 1,783	$ 2,220
Leasehold improvements	989	968
Software and computer equipment	674	664
Furniture and equipment	82	118
	3,528	3,970
Less: accumulated depreciation	(3,052)	(3,048)
	$ 476	$ 922

Depreciation expense for 2025 and 2024 was $0.3 million and $0.8 million, respectively. Impairment of property and equipment of $3.7 million was recorded during 2024 related to Armor exit costs, and is included in Armor exit costs in the statement of operations.

4. Intangible Assets

Intangible assets consisted of the following (in thousands):

	As of December 31,	
	2025	2024
Trademarks and other patent related intangible assets	$ 195	$ 50
Less: accumulated amortization	(53)	(34)
	$ 142	$ 16

Amortization expense for 2025 and 2024 was $19 thousand and $5 thousand, respectively.

5. Fair Value Measurements

Financial Instruments Measured and Recorded at Fair Value on a Recurring Basis

The Company has issued certain warrants to purchase shares of common stock, which are considered mark-to-market liabilities and are re-measured to fair value at each reporting period in accordance with accounting guidance. Fair value is based on the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, under a three-tier fair value hierarchy which prioritizes the inputs used in measuring fair value as follows:

Level 1 - quoted market prices for identical assets or liabilities in active markets.

Level 2 - observable prices that are based on inputs not quoted on active markets but corroborated by market data.

Level 3 - unobservable inputs reflecting management’s assumptions, consistent with reasonably available assumptions made by other market participants. These valuations require significant judgment.

The Company classifies assets and liabilities measured at fair value in their entirety based on the lowest level of input that is significant to their fair value measurement. No financial assets were measured on a recurring basis as of December 31, 2025 and 2024. The following tables set forth the financial liabilities measured at fair value on a recurring basis by level within the fair value hierarchy as of December 31, 2025 and 2024.

	Fair Value Measurements as of December 31, 2025 (in thousands)			
Description	**Level 1**	**Level 2**	**Level 3**	**Total**
Derivative liabilities				
Common stock warrants	$ -	$ -	$ 827	$ 827

	Fair Value Measurements as of December 31, 2024 (in thousands)			
Description	**Level 1**	**Level 2**	**Level 3**	**Total**
Derivative liabilities				
Common stock warrants	$ -	$ -	$ 208	$ 208

The Company did not have any transfers of assets and liabilities between Level 1 and Level 2 of the fair value measurement hierarchy during the years ended December 31, 2025 and 2024. The following table presents a reconciliation of the derivative liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during the years ended December 31, 2025 and 2024 (in thousands):

	Common Stock Warrants
Balance as of December 31, 2023	$ 304
Issuance of derivatives	3,366
Exercise of warrants	(1)
Change in fair value	(3,475)
Other	14
Balance as of December 31, 2024	$ 208
Issuance of derivatives	495
Change in fair value	124
Balance as of December 31, 2025	$ 827

Common Stock Warrants

The Company has issued certain warrants to purchase shares of common stock, which are considered derivative liabilities because they have registration rights which could require a cash settlement and are re-measured to fair value at each reporting period in accordance with accounting guidance. As of December 31, 2025, and 2024, the derivative liability was calculated using the Monte Carlo Simulation valuation.

The assumptions used in estimating the common stock warrant liability using the Monte Carlo simulation valuation model as of December 31, 2025 and 2024 were as follows:

	December 31, 2025	December 31, 2024
Weighted-average risk-free interest rate	3.42-3.65%	4.12-4.35%
Weighted-average expected life (in years)	0.11-4.48	0.10-4.09
Expected dividend yield	-%	-%
Weighted average expected volatility	115.0-175.0%	140.0%-210.0%

Other Financial Instruments

The Company's recorded values of cash and cash equivalents, account and other receivables, accounts payable and accrued liabilities approximate their fair values based on their short-term nature. The recorded value of notes payable approximates the fair value as the interest rate approximates market interest rates.

6. Accrued Liabilities

Accrued liabilities consisted of the following (in thousands):

	As of December 31,	
	2025	**2024**
Payroll and related expenses	$ 120	$ 400
Accrued payables	50	178
Other	252	408
	$ 422	$ 986

Other current liabilities consisted of deposits for stock issuance of $1.7 million. The stock issuance is related to the 2025 Warrant Inducement (see Note 8), and the stock is held in abeyance, as of December 31, 2025.

7. Debt

Insurance Premium Finance Arrangements

In June 2024, in connection with securing commercial liability insurance, the Company entered into a Premium Finance Arrangement to extend the premium payment out for a period of 10 months. The Company paid a total of $26,000 up front toward the insurance premium and financed approximately $117,000. The Company made 10 equal payments under the terms of the Premium Finance Agreement. The Premium Finance Agreement bears interest at an annual percentage rate of 8.75%. The loan was paid in full during the first quarter of 2025.

In March 2025, in connection with securing Director and Officer professional liability insurance, the Company entered into a Premium Finance Arrangement to extend the premium payment out for a period of 10 months. The Company paid a total of $26,000 up front toward the insurance premium and financed approximately $145,000. The Company will make 10 equal payments under the terms of the Premium Finance Agreement. The Premium Finance Agreement bears interest at an annual percentage rate of 7.45%. The loan was paid in full during 2025.

In May 2025, in connection with securing general liability insurance, the Company entered into a Premium Finance Arrangement to extend the premium payment out for a period of 5 months. The Company paid a total of $14,000 up front toward the insurance premium and financed approximately $21,000. The Company will make 3 equal payments under the terms of the Premium Finance Agreement. The Premium Finance Agreement bears interest at an annual percentage rate of 11.15%. The outstanding balance totaled $7,000 as of December 31, 2025.

8. Equity

2025 ATM Agreement

On October 3, 2025, the Company entered into an At The Market Offering Agreement (the "2025 ATM Agreement") with H.C. Wainwright & Co., LLC, as sales agent ("Wainwright"), to sell shares of its common stock, par value $0.01 per share (the "2025 ATM Shares") from time to time, through an "at the market offering" program under which Wainwright will act as sales agent. The sales, if any, of the 2025 ATM Shares made under the 2025 ATM Agreement will be made by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including, without limitation, sales made directly on or through the Nasdaq Capital Market or on any other existing trading market for the Company's common stock. The 2025 ATM Shares will be issued pursuant to the Company's shelf registration statement on Form S-3 (File No. 333-274951) initially filed by the Company with the SEC on October 12, 2023, and declared effective by the SEC on November 27, 2023, and related prospectus supplements to be prepared and filed pursuant to Rule 424(b) from time to time in connection with the offer and sale of the Shares. A prospectus supplement, dated October 3, 2025, covering the offer and sale of the 2025 ATM Shares having an aggregate offering price of $6,413,876 was filed with the SEC.

2025 Warrant Inducement

On September 8, 2025, the Company entered into an inducement agreement (the "Inducement Letter") with certain holders of certain of the Company's existing warrants to purchase up to an aggregate of 1,099,431 shares of the Company's common stock originally issued on February 25, 2025, with a five and one-half (5.5) years term at an exercise price of $3.32 per share.

Pursuant to the Inducement Letter, the warrant holders agreed to exercise for cash the existing warrants to purchase an aggregate of 1,099,431 shares of the Company's common stock at an exercise price of $3.32 per share in consideration of the Company's agreement to issue new common stock purchase warrants to purchase up to an aggregate of 1,649,147 shares of the Company's common stock at an exercise price of $4.79 per share. In addition, the warrant holders agreed to pay $0.125 per new warrant as consideration for the issuance of the new warrants. The Company received aggregate gross proceeds of approximately $3.8 million from the exercise of the existing warrants by the warrant holder, before deducting placement agent fees and other offering expenses payable by the Company.

The Company estimated the fair value of each warrant on the issuance date using the Black-Scholes-Merton valuation model. The aggregate fair value of the new warrants issued as part of the inducement was $6.7 million, which is presented as a deemed dividend on the consolidated statements of operations and the consolidated statements of stockholders' equity.

2025 Capital Raise and Registration of Shares

On February 20, 2025, the Company entered into a Securities Purchase Agreement (the "Purchase Agreement") under which it sold securities to certain institutional and accredited investors for aggregate gross proceeds of $5.0 million, before deducting fees to the placement agent and other expenses payable by the Company in connection with the private placement. As part of the Private Placement, the Company issued (i) 1,171,189 shares of the Company's common stock, (ii) pre-funded warrants to purchase 278,098 shares of common stock (the "Pre-Funded Warrants") with an exercise price of $0.0001 per share, and (iii) warrants to purchase 1,449,287 shares of common stock (the "Common Warrants") with an exercise price of $3.32 per share. The purchase price per share of common stock and the associated Common Warrant was $3.45 and the purchase price per Pre-Funded Warrant and associated Common Warrant was $3.4499. The Common Warrants are exercisable immediately and expire five-and one-half years from issuance. The Pre-Funded Warrants are exercisable immediately and terminate when exercised in full. The Company filed a Registration Statement on Form S-3 registering the resale of the above-mentioned Securities, which was declared effective by the SEC on March 27, 2025.

2024 April Registered Offering

On April 5, 2024, the Company closed on a public offering 358,000 shares of the Company's common stock, (the "Offering"). Each Share was sold at a public offering price of $4.20. The aggregate proceeds to the Company from the Offering were approximately $1.5 million before deducting placement agent fees and other estimated offering expenses payable by the Company.

2024 March Registered Offering

On March 26, 2024, the Company closed on a public offering of 142,000 shares of the Company's common stock, (the "Offering"). Each Share was sold at a public offering price of $9.40. The aggregate proceeds to the Company from the Offering were approximately $1.3 million before deducting placement agent fees and other estimated offering expenses payable by the Company.

2024 February Registered Offering

On February 2, 2024, the "Company closed on the public offering of 80,000 units consisting of (a)(i) 17,000 units (the "Common Units") to purchase shares (the "Unit Shares") of the Company's Common Stock, par value $0.01 per share (the "Common Stock") and (ii) 63,000 units (the "Pre-Funded Warrant Units" and together with the Common Units, the "Units") to purchase pre-funded warrants (the "Pre-Funded Warrants and each share of Common Stock underlying a Pre-Funded Warrant, a "Pre-Funded Warrant Share") to purchase up to 63,000 shares of Common Stock, (b) accompanying Class E warrants to purchase 80,000 shares of the Company's Common Stock (the "Class E Warrants"), and (c) accompanying Class F warrants to purchase 80,000 shares of the Company's Common Stock (the "Class F Warrants"). The aggregate proceeds to the Company from the Offering were approximately $4.0 million before deducting placement agent fees and other offering expenses payable by the Company. The offering was made pursuant to a securities purchase agreement (the "Purchase Agreement") with certain investors (the "Purchasers"), and a placement agency agreement dated as of January 31, 2024 (the "PAA") with Maxim Group LLC (the "Placement Agent"). Each Common Unit was sold at a public offering price of $50.00 and each Pre-Funded Warrant Unit was sold at a public offering price of $49.98. The Class E Warrants and the Class F Warrants are immediately exercisable (subject to the beneficial ownership cap at 4.99% or 9.99%) for one share of the Company's Common Stock at an exercise price of $50.00 per share. The Class E Warrants will expire five years from the date of issuance, and the Class F Warrants will expire 18 months from the date of issuance. Each Pre-Funded Warrant is exercisable for one share of the Company's Common Stock at an exercise price of $0.0001 per share. The Pre-Funded Warrants are immediately exercisable (subject to the beneficial ownership cap at 4.99% or 9.99%) and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full. The Company engaged Maxim Group LLC as the Company's sole placement agent for the Offering pursuant to the PAA. Pursuant to the PAA, the Company agreed to pay the Placement Agent a cash placement fee equal to 7.0% of the gross proceeds of the Offering, plus reimbursement of certain expenses and legal fees up to $100,000. The Company also agreed to issue up to 3,200 Common Stock purchase warrants to the Placement Agent (the "Placement Agent Warrants"). The Placement Agent Warrants are exercisable at an exercise price of $55.00. The Placement Agent Warrants will be exercisable beginning July 31, 2024, and will expire five years after the commencement of sales in the offering.

9. Stock-Based Compensation

A summary of the Company's outstanding stock option activity for the years ended December 31, 2025 and 2024 is as follows:

	December 31, 2025			
	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Intrinsic Value
As of December 31, 2024	35	$ 18,872	5.5	-
Granted	170,000	3.65	9.4	-
Exercised	-	-	-	-
Forfeited	-	-	-	-
Expired	(9)	17,540	-	-
As of December 31, 2025	170,026	$ 6.65	9.4	$ 77,600
Exercisable at December 31, 2025	170,026	$ 6.65	9.4	$ 77,600
Vested and expected to vest at December 31, 2025	170,026	$ 6.65	9.4	$ 77,600

	December 31, 2024			
	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Intrinsic Value
As of December 31, 2023	60	$ 21,954	6.9	-
Granted	-	-	-	-
Exercised	-	-	-	-
Forfeited	(24)	3,861,275	-	-
Expired	(1)	891,768,343	-	-
As of December 31, 2024	35	$ 18,872	5.5	$ -
Exercisable at December 31, 2024	35	$ 24,292	6.1	$ -
Vested and expected to vest at December 31, 2024	10	$ 38,168	5.5	$ -

The Company estimates the fair value of each stock option on the grant date using the Black-Scholes-Merton valuation model, which requires several estimates including an estimate of the fair value of the underlying common stock on grant date. The expected volatility was based on an average of the historical volatility of the Company. The expected term was contractual life of option. The risk-free interest rate was based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the option.

Unrecognized stock-based compensation as of December 31, 2025 is as follows (in thousands):

	Unrecognized Stock-Based Compensation	Weighted Average Remaining of Recognition (in years)
Stock options	$ -	0.0
Stock grants	$ 1,497	0.9

10. Income Taxes

Taxes based on income were as follows:

	December 31,	
	2025	2024
Current:	$ -	$ -
U.S. federal tax	-	-
State taxes	$ -	$ -
Deferred:		
U.S. federal tax	$ -	$ -
State tax	-	-
	$ -	$ -
Provision for income taxes	$ -	$ -

Deferred taxes reflect the temporary differences between the amounts at which assets and liabilities are recorded for financial reporting purposes and the amounts utilized for tax purposes. The primary components of the temporary differences that gave rise to our deferred tax assets and liabilities were as follows:

	December 31,	
	2025	2024
Deferred tax assets:		
Net operating loss carryforwards	$ 59,358	$ 57,763
Stock-based compensation	3,690	3,192
Federal R&D credit	2,120	2,222
Impairment	1,146	1,148
Accrued expenses	-	53
Capitalized research expenses	2,217	3,145
Intangibles	186	237
Right of use asset/liabilities	32	32
Depreciation	243	-
Other	1	15
Total deferred tax assets	68,993	67,807
Deferred tax liabilities:		
Depreciation	-	(431)
Total deferred tax liabilities	-	(431)
Less valuation allowance	(68,993)	(67,376)
Net deferred tax liability	$ -	$ -

We assess available positive and negative evidence to estimate if sufficient future taxable income is expected to be generated to use existing deferred tax assets. On the basis of our assessment, we record valuation allowances with respect to the portion of the deferred tax asset that is not more-likely-than-not to be realized. Our assessment of the future realizability of our deferred tax assets relies on our forecasted earnings in certain jurisdictions determined by the manner in which we operate our business and the relevant carryforward period. As a result of all available evidence, the Company believes that it is more likely than not that its net deferred tax assets will not be realized and has established a valuation allowance of $69.0 million and $67.4 million, respectively, against its net deferred tax assets as of December 31, 2025 and December 31, 2024.

U.S. federal net operating loss carryforwards at December 31, 2025 and December 31, 2024 were $237.9 million and 231.5 million, respectively. U.S. federal tax credit carryforwards at December 31, 2025 and December 31, 2024 totaled $2.1 million and $2.2 million, respectively. If unused, net operating losses and tax credit carryforwards will expire as follows:

(in millions)	Operating Losses	Tax Credits
Year of expiry:		
2026	$ 5.1	$ 0.2
2027	11.5	0.2
2028	15.3	0.5
2029	15.9	0.3
2030-2037	114.8	0.9
Indefinite life / no expiry	75.3	0.0
Total	$ 237.9	$ 2.1

State net operating loss carryforwards totaled approximately $237.9 million at December 31, 2025. State net operating losses in certain jurisdictions begin to expire in 2033 and continue through 2045, while net operating losses in other jurisdictions may be carried forward indefinitely.

The principal items accounting for the difference between taxes computed at the U.S. federal statutory rate and taxes recorded were as follows (in thousands) after the adoption of ASU 2023-09:

	Year Ended December 31, 2025	
	Amount	Percent
U.S. federal statutory tax rate	$ (2,176)	(21.00)%
State and local income taxes, net of federal income tax effect	-	0.00%
Foreign tax effects	-	0.00%
Effect of changes in tax laws or rates enacted in the current period	-	0.00%
Effect of cross-border tax laws	-	0.00%
Tax credits:		
Research and development tax credits	102	0.99%
Changes in valuation allowances	1,617	15.60%
Nontaxable or nondeductible items:		
Change in value – warrants	26	0.25%
Other	6	0.06%
Changes in unrecognized tax benefits	-	0.00%
Other adjustments	425	4.10%
Effective tax rate	$ -	-

The principal items accounting for the difference between taxes computed at the U.S. federal statutory rate and taxes recorded were as follows (in thousands) for the year prior to the adoption of ASU 2023-09:

	Year Ended December 31, 2024
Pre-tax book income tax at statutory rate	$ (2,315)
State taxes, net of federal benefit	(482)
Return to provision	-
Equity related expenses	(614)
Deferred adjustments	-
Expiration of R&D credits	-
Change in valuation allowance	3,409
Other	2
Total income tax expense	$ -

The following is a reconciliation of the expected statutory federal income tax rate to the actual effective tax rate (in thousands):

	Year Ended December 31, 2024
Federal statutory rate	(21.0)%
State taxes, net of federal benefit	(4.3)%
Return to provision	0.0%
Equity related expenses	(5.6)%
Deferred adjustments	0.0%
Expiration of R&D credits	0.0%
Change in valuation allowance	30.9%
Total income tax expense	0.0%

Our 2025 provision for income taxes included i) $0.02 million of tax charge for equity related expenses; ii) $0.42 million of tax charge for certain deferred tax adjustments; iii) $1.62 million of tax charge from changes in valuation allowances; iv) $.10 million tax charge for expiration of R&D credits; and v) $0.006 million of tax charge related to other permanent differences.

Our 2024 provision for income taxes included i) $0.48 million state tax benefit net of federal affect; ii) $0.61 million of tax benefit for equity related expenses; iii) $3.41 million of tax charge from valuation allowances due to the uncertainty of the realization of certain deferred tax assets; and iv) $0.002 million of tax charge related to other permanent differences.

Income/(loss) before taxes from our U.S. operations was follows:

	2025	2024
U.S.	$ (10,364)	$ (11,024)
Foreign	-	-
Income before taxes	$ (10,364)	$ (11,024)

Our effective tax rate was 0.00% and 0.00% for fiscal years 2025 and 2024, respectively.

The Company files income tax returns in the U.S. federal and certain state jurisdictions. During the periods ended December 31, 2025 and December 31, 2024, the Company has not recorded a liability for uncertain income tax positions or any related interest or penalties. As such, our unrecognized tax benefits for 2025 and 2024 totaled $0.00 million and $0.00 million, respectively. With limited exceptions, we are no longer subject to income tax examinations by tax authorities for years prior to 2021.

The amount of income taxes paid (net of refunds received) were as follows (in thousands):

	Year Ended December 31, 2025
Federal	$ -
State and local	-
Foreign	-
Total income taxes paid (net of refunds received)	$ -

Amounts represent taxes paid during 2025 based on the company's tax provision. The 2025 income tax returns have not been filed. For the years ended December 31, 2024 and 2023, gross income taxes paid (in thousands) were $0 and $0, respectively.

11. Commitment and Contingencies

The Company has executed agreements with certain executive officers of the Company which, upon the occurrence of certain events related to a change in control, call for payments to the executives up to three times their annual salary and accelerated vesting of previously granted stock options.

From time to time, the Company is subject to various claims and legal proceedings covering matters that arise in the ordinary course of its business activities. Management believes any liability that may ultimately result from the resolution of these matters will not have a material adverse effect on the Company's consolidated financial position, operating results or cash flows.

12. 401(k) Plan

Effective June 1, 2004, the Company adopted a defined contribution retirement plan under Section 401(k) of the Internal Revenue Code. The plan covers substantially all employees. Eligible employees may contribute amounts to the plan, via payroll withholdings, subject to certain limitations. The plan permits, but does not require, additional matching contributions to the plan by the Company on behalf of the participants in the plan. The Company incurred approximately $0.1 million relating to retirement contributions for each of the years ended December 31, 2025 and 2024.

13. Leases

The Company has entered into multiple operating leases from which it conducts its business.

SINTX

The Company leases 30,764 square feet of office, warehouse and manufacturing space under a single operating lease. This lease expires in October 2031. The lease has one five-year extension option.

SINTX Armor

The Company, on behalf of SINTX Armor, leases approximately 10,936 square feet of office and manufacturing space from which SINTX Armor conducted its operations. This lease expires in October 2031. Impairment of operating lease right-of-use assets of $0.7 million was recorded during 2024 related to Armor exit costs. In October 2025, the Company entered into a sublease agreement (the "Sublease") with Hayes Performance Systems, Inc., a Delaware corporation ("Hayes"), pursuant to which the Company agreed to sublease to Hayes all of the premises the Company currently leases under its Industrial Lease Agreement dated August 19, 2021 with SLS Industrial Portfolio Owner SLCP, LLC (the "Prime Lease"). The Sublease term commenced on November 1, 2025, and expires on October 31, 2031, unless earlier terminated in accordance with the Sublease or upon termination of the Prime Lease. Under the Sublease, Hayes will pay the Company base rent ranging from approximately $9,700 per month during the first year of the Sublease to approximately $11,300 per month during the final year of the term, plus its proportionate share of operating expenses and taxes, currently estimated at $0.25 per rentable square foot per month. The Sublease provides for a three-month rent deferral totaling approximately $29,200, which will be repaid in six equal monthly installments beginning February 1, 2026. The Sublease is structured as a triple-net arrangement under which Hayes will be responsible for substantially all costs associated with the Subleased Premises, including utilities, maintenance, and insurance.

TA&T

In connection with the disposition of TA&T, the lease facilities, including right of use assets and lease liabilities, were transferred to Tethon (see Note 1).

Leases with an initial term of 12 months or less are not recorded on the balance sheet. Lease expense is recognized on a straight-line basis over the term of the lease. The Company accounts for lease components separately from the non-lease components. The depreciable life of the assets and leasehold improvements are limited by the expected lease term.

As of December 31, 2025, the operating lease right-of-use assets totaled approximately $2.5 million, and the operating lease liability totaled approximately $3.2 million. Amortization of right-of-use asset during the year ended December 31, 2025, totaled approximately $0.3 million. As of December 31, 2025, the weighted-average discount rate for the Company's operating lease was 8.8%.

Operating lease future minimum payments together with the present values as of December 31, 2025, are summarized as follows:

Years Ending December 31,	**Amount**
2026	$ 668
2027	688
2028	709
2029	730
2030	752
Thereafter	643
Total future minimum lease payments	4,190
Less amounts representing interests	(948)
Present value of lease liability	3,242
Current portion of operating lease liability	398
Long-term portion operating lease liability	$ 2,844

14. Related Party Transactions

During the year ended December 31, 2025, the Company entered into a Research Collaboration Agreement ("Research Agreement") with a company that is majority owned by a shareholder of the Company. The Company paid $500,000 to fund the Research Agreement. As of December 31, 2025, there was no remaining balance.

EXHIBIT 4.19

DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES
EXCHANGE ACT OF 1934

SINTX Technologies, Inc. ("SINTX," "we," "our," or "us") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: our common stock.

Authorized Shares of Capital Stock

Our Restated Certificate of Incorporation authorizes us to issue 250,000,000 shares of common stock, par value $0.01 per share, and 130,000,000 shares of preferred stock, par value $0.01 per share. The following is a summary of the rights of our common stock and some of the provisions of our Restated Certificate of Incorporation and Restated Bylaws, and the Delaware General Corporation Law. Because it is only a summary, it does not contain all the information that may be important to you and is subject to and qualified in its entirety by our Restated Certificate of Incorporation and our Restated Bylaws.

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

Common Stock

Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, and do not have cumulative voting rights. Accordingly, the holders of a majority of the shares of our common stock entitled to vote can elect all of the directors standing for election. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for dividend payments. All outstanding shares of our common stock are fully paid and nonassessable. 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 Equiniti Trust Company, LLC. The transfer agent and the registrar's address is 59 Maiden Lane, New York, New York 10038.

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

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

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

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

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

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

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

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

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

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

Potential Effects of Authorized but Unissued Stock

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

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

Exhibit 10.21

EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT ("**Agreement**") is made as of May 5, 2025 (the "**Effective Date**"), by and between SINTX Technologies, Inc. (together with its successors and assigns, the "**Company**"), and Eric Olson ("**Executive**").

RECITALS

WHEREAS, the Company desires to employ Executive, and Executive desires to be employed by the Company, as the Company's President and Chief Executive Officer.

WHEREAS, the Company and Executive have previously entered into an Executive Employment Agreement dated September 20, 2024 and amended on October 29, 2024 (together the "2024 Employment Agreement") and a Change in Control Agreement dated October 31, 2024 and amended on December 12, 2024 (together the "Change in Control Agreement").

WHEREAS, Company and Executive now desire to enter into this Agreement for the express purpose of replacing and superseding in their entirety both the 2024 Employment Agreement and the Change in Control Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual covenants and conditions herein, and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereby agree as follows:

AGREEMENT

1. **Employment and Term.** The Company hereby agrees to employ Executive, and Executive hereby accepts employment by the Company, on the terms and conditions hereinafter set forth. Executive's term of employment by the Company under this Agreement (the "**Term**") shall commence on the Effective Date and end on the second anniversary thereof, subject to automatic renewal of the Term for additional one-year periods unless either the Company or Executive gives the other party written notice of intent not to renew the Term not less than ninety days before the date on which the Term otherwise would automatically renew. Notwithstanding the foregoing, the Term may be terminated earlier in accordance with Section 5.

2. **Position, Duties and Responsibilities, Location, and Commuting.**

   (a) **Position and Duties.** During the Term, the Company shall employ Executive as Chief Executive Officer and President. Executive shall report directly to the Company's Board of Directors (the "Board"). Executive shall have general overall authority and responsibility as commensurate with his position and as set forth in the Company's Amended and Restated By-laws (the "Bylaws").

   (b) **Exclusive Services and Efforts.** Executive agrees to devote his or her or their efforts, energies, and skill to the discharge of the duties and responsibilities attributable to his or her or their position and, except as set forth herein, agrees to devote substantially all of his or her or their professional time and attention to the business and affairs of the Company. Notwithstanding the foregoing, Executive shall be entitled to engage in (a) service on the board of directors of for-profit and not-for-profit companies, organizations, businesses or trade organizations at any time during the Term; provided that Executive shall not serve on the board of any entity that materially competes with the Company (b) other charitable activities and community affairs, and (c) management of his or her or their personal and family investments and affairs, in each case to the extent such activities do not, either individually or in the aggregate, materially interfere with the performance of his or her or their duties and responsibilities to the Company.

(c) **Compliance with Company Policies.** To the extent not inconsistent with the terms and conditions of this Agreement and with due regard for his or her or their position, Executive shall be subject to the Bylaws, policies, practices, procedures, and rules of the Company, including those policies and procedures set forth in the Company's Code of Conduct and Ethics and Employee Handbook, but in no event shall anything in such documents be construed to expand the definition of Cause hereunder.

(d) **Location of Employment.** Retroactive to August 1, 2024, the executive's principal office and principal place of employment ("home base"), shall be in Washington County, Utah; provided that Executive may be required under business circumstances to travel outside of such location in connection with performing his or her duties under this Agreement.

3. Compensation.

(a) **Base Salary.** During the first year of the Term, the Company shall pay to Executive an annual salary of $375,000.00 ("**Base Salary**"). Thereafter, the Compensation Committee of the Board (the "**Committee**") shall consider increases in Base Salary for subsequent years in connection with performance and a review of compensation provided at peer companies, which companies shall be subject to review on a continuing basis (the "**Peer Group**"), taking into account Company and individual performance objectives. Executive's Base Salary shall not be decreased (including after any increases pursuant to this Section 3(a)) without Executive's written consent.

(b) **Annual Cash Bonus.** During the Term, Executive shall have an annual target cash bonus opportunity of 40% of one year's Base Salary. The Committee shall award Executive's annual cash bonus based on an evaluation of performance and Peer Group compensation practices, taking into account Company and individual performance objectives. In its sole discretion, the Committee may award an annual cash bonus in excess of the annual cash bonus opportunity. Notwithstanding the foregoing, the Committee may grant a special bonus at any time. Annual cash bonuses shall be deemed "earned" if Executive is employed on the last day of the year to which the bonus relates and shall be paid no later than March 15th of the year immediately following the year to which the annual bonus relates.

(c) **Annual Long-Term Incentive Award.** During the Term, Executive will be eligible for an annual target long-term incentive award opportunity as determined by the Committee based on an evaluation of performance and Peer Group compensation practices, taking into account Company and individual performance objectives. Notwithstanding the foregoing, the Committee may grant a special long-term incentive award at any time. Awards granted under the Equity Incentive Plan shall be subject to the terms and conditions of such plan and the award agreement.

(d) **RSU Award.** Executive shall be granted an award of 55,000 restricted stock units ("RSUs") effective May 2, 2025. The RSUs shall vest as follows: 25% of the award is immediately vested with the balance vesting at the rate of 25% on May 2, 2026, 25% on May 2, 2027 and 25% on May 2, 2028.

4. Employee Benefits and Perquisites.

(a) **Benefits.** Executive shall be entitled to participate in such health, group insurance, welfare, pension, and other employee benefit plans, programs, and arrangements as are made generally available from time to time to senior executives of the Company (which shall include customary health, life insurance, and disability plans), such participation in each case to be on terms and conditions no less favorable to Executive than to other senior executives of the Company generally.

(b) **Fringe Benefits, Perquisites, and Paid Time Off.** During the Term, Executive shall be entitled to participate in all fringe benefits and perquisites made available to other senior executives of the Company, such participation to be at levels, and on terms and conditions, that are commensurate with his or her or their position and responsibilities at the Company and that are no less favorable than those applicable to other senior executives of the Company. In addition, Executive shall be eligible for twenty days of paid time off ("**PTO**") per calendar year in accordance with the Company's vacation and PTO policy, inclusive of vacation days and sick days and excluding standard paid Company holidays, in the same manner as PTO days for employees of the Company generally accrue. Accrued and unused PTO days may be carried over to the following calendar year.

(c) **Reimbursement of Expenses.** The Company shall reimburse Executive for all reasonable business and travel expenses incurred in the performance of his or her or their job duties and the promotion of the Company's business, promptly upon presentation of appropriate supporting documentation and otherwise in accordance with the expense reimbursement policy of the Company.

5. Termination; Change in Control.

(a) **General.** The Company may terminate Executive's employment for Cause. Executive may terminate his or her or their employment at any time for any reason other than Good Reason. The Company may terminate Executive's employment without Cause, or Executive may terminate Executive's employment with Good Reason, in each case, upon providing the other party at least thirty days' written notice thereof. Upon termination of Executive's employment, Executive shall be entitled to the compensation and benefits described in this Section 5 to the extent applicable and shall have no further rights to any compensation or benefits from the Company. For purposes of this Agreement, the following terms have the following meanings:

(i) "**Accrued Benefits**" shall mean: (i) accrued but unpaid Base Salary through the Termination Date, payable within thirty days following the Termination Date; (ii) any annual cash bonus earned but unpaid with respect to the year preceding the year in which the Termination Date occurs, payable in accordance with Section 3(b) above; (iii) any long-term incentive award earned but unpaid with respect to performance periods that ended in the year preceding the year in which Termination Date occurs, payable in accordance with Section 3(c) above; (iv) reimbursement for any unreimbursed business expenses incurred through the Termination Date and any expenses incurred through the Termination Date under Section 4(c) above, payable within thirty days following the Termination Date; (v) accrued but unused PTO days; and (vi) all other payments, benefits, or fringe benefits to which Executive shall be entitled as of the Termination Date under the terms of this Agreement or any other applicable compensation arrangement or benefit, equity, or fringe benefit plan or program or grant.

(ii) "**Cause**" shall mean: (i) the Executive's commission of a felony (other than through vicarious liability or through a motor vehicle offense); (ii) intentional misconduct that causes material harm to the Company, provided that such misconduct is not rectifiable or remains uncorrected after written notice and a 30-day cure period.; (iii) the commission by the Executive of an act of fraud, embezzlement or misappropriation of funds; (iv) a material breach by the Executive of any material provision of this Agreement or any other agreement to which the Executive and the Company are party, which breach is not cured within thirty (30) days after delivery to the Executive by the Company of written notice of such breach; or (v) the Executive's refusal to carry out a lawful written directive from the Board which is within Executive's normal Company duties. Any determination of Cause will need to be made by the full Board voting on such determination.

(iii) "**Good Reason**" shall mean any of the following that has not been approved in writing in advance by Executive: (i) a diminution of Executive's titles, duties, responsibilities, or authorities as set forth in this Agreement; (ii) a reduction in Executive's Base Salary, annual cash bonus opportunity, or annual long-term incentive award opportunity, or failure to pay earned compensation; (iii) relocation of the Company's offices to a location more than thirty miles from Salt Lake County, UT; (iv) a material breach by the Company of this Agreement or any equity award agreement; or (v) a material change in the Executive's compensation or authority, functions, duties or responsibilities, which would cause his position with the Company to become of less responsibility, importance or scope than his position on the date of this Agreement or as of any subsequent date prior to a Change in Control, provided, however, that such material change is not in connection with the termination of the Executive's employment by the Company for any reason.. A termination of employment by Executive during the one-year period following the occurrence of an event or circumstance constituting Good Reason shall be deemed a termination for Good Reason under this Agreement. In addition, any termination of employment by Executive during the one-year period following a Change in Control shall be deemed to be a termination for Good Reason under this Agreement.

(iv) "**Change in Control**" means (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Act")) becomes the "beneficial owner" (as defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities (excluding for this purpose the Company or its Affiliates or any employee benefit plan of the Company) pursuant to a transaction or a series of related transactions of which the Board does not approve; (ii) a merger or consolidation of the Company, whether or not approved by the Board, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or the parent of such corporation) at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity or parent of such corporation outstanding immediately after such merger or consolidation; (iii) the stockholders of the Company approve an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; or a change in the composition of the Board of Directors whereby individuals who were members of the Board immediately prior to the agreement cease to constitute a majority of the Board. For purposes of this Agreement, "Change in Control" shall be interpreted in a manner, and limited to the extent necessary, so that it will not cause adverse tax consequences for either party with respect to Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), and the treasury regulations issued thereunder or any guidance issued by the IRS concerning the interpretation or applicability of Section 409A of the Code.

(v) "**Change-in-Control Severance Payments**" shall mean (i) a pro-rated annual cash bonus for the year in which the Termination Date occurs (calculated based on the annual target cash bonus opportunity for the year of termination), payable when bonuses are paid to other executives of the Company in the year following the year of the Termination Date; (ii) a lump sum cash payment, payable on the Termination Date, equal to three times the sum of the following: (x) one year's Base Salary at the annualized rate then in effect (or the rate that should be in effect but for any Base Salary diminution), and, (y) the greater of the annual target cash bonus opportunity for the year of termination or the highest actual annual cash bonus paid during the three preceding completed years; (iii) Medical Payment Amounts, payable each month, commencing on the first day of the month following the Termination Date and continuing until the earlier of thirty-six months following the Termination Date or the date on which Executive becomes employed by a third party and becomes eligible to participate in such third party's group health plan; and (iv) to the extent permissible under applicable law and under any insurance policy insuring the Company's health plan (if any), access to continued coverage under the Company's health plan with the full cost payable by Executive for a period of up to thirty-six months commencing on the first day of the month following the Termination Date. Executive shall be entitled to the Change-in-Control Severance Payment should Executive's employment be terminated, other than for Cause, within one year of the occurrence of a Change-in-Control.

(vi) "**Disability**" shall mean that Executive has been unable, with or without reasonable accommodation and due to physical or mental incapacity, to substantially perform his or her or their duties and responsibilities hereunder for 120 consecutive days.

(vii) "**Medical Payment Amounts**" shall mean an amount, payable on a monthly basis commencing on the first day of the month following the Termination Date, equal to (i) the monthly amount of the Consolidated Omnibus Budget Reconciliation Act continuation coverage premium for such month under the Company's group medical plans for executives of the Company less the monthly amount of Executive's portion of the premium for such month as if Executive was still an active employee, plus (ii) a tax gross-up payment so Executive shall have no after-tax consequences with respect to the monthly amount described in clause (i) or the related tax gross-up.

(viii) "**Severance Payments**" shall mean (i) a lump sum cash payment, payable on the Termination Date, equal to one times the sum of the following: (x) one year's Base Salary at the annualized rate then in effect (or the rate that should be in effect but for any Base Salary diminution), (y) the greater of (I) the annual target cash bonus opportunity for the year of termination or (II) the average annual cash bonus for the three preceding completed years (provided, however, that if Executive has not been employed for at least three years in which an annual cash bonus was paid, such calculation will assume that an annual cash bonus equal to the target annual cash bonus opportunity was paid in the missing years); (ii) Medical Payment Amounts payable each month and continuing until the earlier of twelve months following the Termination Date or the date on which Executive becomes employed by a third party and becomes eligible to participate in such third party's group health plan; and (iii) to the extent permissible under applicable law and under any insurance policy insuring the Company's health plan (if any), access to continued coverage under the Company's health plan with the full cost payable by Executive for a period of up to twenty-four months commencing on the first day of the month following the Termination Date.

(ix) "**Termination Date**" shall mean the date on which Executive's employment hereunder terminates in accordance with this Agreement (which, in the case of a notice of non-renewal of the Term in accordance with Section 1 hereof, shall mean the date on which the Term expires).

(b) **Termination Without Cause or Termination by Executive for Good Reason.** In the event that Executive's employment hereunder is terminated by the Company without Cause or by Executive for Good Reason, Executive shall be entitled to receive the Accrued Benefits and the Severance Payments, except as otherwise provided pursuant to Section 5(d).

(c) **Termination Without Cause or Termination by Executive for Good Reason Due to a Change in Control.** In the event that Executive's employment hereunder is terminated by the Company without Cause or by Executive for Good Reason within one year following or six months prior to a Change in Control, Executive shall receive the benefits described in Section 5(b), except that Executive shall receive the Change-in-Control Severance Payments in lieu of the Severance Payments.

(d) **Termination Due to Death or Disability.** In the event that Executive's employment hereunder is terminated due to Executive's death or Disability, Executive shall receive the Accrued Benefits.

(e) **Return of Company Property.** Upon termination of Executive's employment for any reason or under any circumstances, Executive shall promptly return any and all of the property of the Company and any Affiliates (including, without limitation, all computers, keys, credit cards, identification tags, documents, data, confidential information, work product, and other proprietary materials), and other materials. Executive may retain Executive's rolodex and similar address books provided that such items only include contact information.

(f) **Post-Termination Reasonable Cooperation.** Executive agrees and covenants that, following the Term, Executive shall, to the extent reasonably requested by the Company, cooperate in good faith with the Company to assist the Company in the pursuit or defense of (except if Executive is adverse with respect to) any claim, administrative charge, or cause of action by or against the Company as to which Executive, by virtue of his or her or their employment with the Company or any other position that Executive holds that is affiliated with or was held at the request of the Company or its Affiliates, has relevant knowledge or information, including by acting as the Company's representative in any such proceeding and, without the necessity of a subpoena, providing truthful testimony in any jurisdiction or forum. The Company shall reimburse Executive for his or her or their reasonable out-of-pocket expenses incurred in compliance with this Section 5(g), including any reasonable travel expenses and reasonable attorneys' fees incurred by Executive and, in the event that Executive is required to spend substantial time on such matters, the Company shall compensate Executive at an hourly rate to be agreed to. The Company shall use reasonable business efforts to provide Executive with reasonable advance written notice of its need for Executive's reasonable cooperation and shall attempt to coordinate with Executive the time and place at which Executive's reasonable cooperation shall be provided with the goal of minimizing the impact of such reasonable cooperation on any other material pre-scheduled business commitment that Executive may have. Executive's cooperation described in this Section 5(g) shall be subject to the maintenance of the indemnification and D&O insurance policy provided under Sections 6(a) and (b) hereof.

(g) **Mutual Release.** Payment of any Change-in-Control Severance Payments and Severance Payments shall be conditioned upon the execution, non-revocation, and delivery of a general mutual release of claims by Executive, in a form reasonably satisfactory to the Company. In the event that Executive fails to timely execute and deliver such a release, the Company shall have no obligation to pay Change-in-Control Severance Payments or Severance Payments under this Agreement.

6. Indemnification; D&O Insurance.

(a) **Indemnification.** If Executive is made a party, is threatened to be made a party, or reasonably anticipates being made a party, to any Proceeding (as hereinafter defined) by reason of the fact that Executive is or was a director, officer, shareholder, employee, agent, trustee, consultant, or representative of the Company or any of its Affiliates or is or was serving at the request of the Company or any of its Affiliates, or in connection with his or her or their service hereunder as a director, officer, shareholder, employee, agent, trustee, consultant, or representative of another Person, or if any Claim (as hereinafter defined) is made, is threatened to be made, or is reasonably anticipated to be made, that arises out of or relates to Executive's service in any of the foregoing capacities, then Executive shall promptly be indemnified and held harmless to the fullest extent permitted or authorized by any Company arrangement, or if greater, by applicable law, against any and all costs, expenses, liabilities, and losses (including, without limitation, advancement and payment of attorney's and other professional fees and charges, judgments, interest, expenses of investigation, penalties, fines, ERISA excise taxes or penalties, and amounts paid or to be paid in settlement, with such legal fees advanced to the maximum extent permitted by law) incurred or suffered by Executive in connection therewith or in connection with seeking to enforce his or her or their rights under this Section 6(a), and such indemnification shall continue even if Executive has ceased to be a director, officer, shareholder, employee, agent, trustee, consultant, or representative of the Company or other Person and shall inure to the benefit of his or her or their heirs, executors, and administrators. This benefit shall be in addition to the provisions of any Indemnity Agreement entered into between Executive and Company.

(b) **D&O Insurance.** A directors' and officers' liability insurance policy (or policies) shall be kept in place, during the Term and thereafter until the sixth anniversary of the Termination Date, providing coverage to Executive that is no less favorable to Executive in any respect than the coverage then being provided to any other current or former director or officer of the Company.

(c) **Definitions.** For purposes of this Agreement, the following terms shall have the following meanings: "**Affiliate**" of a Person shall mean any Person that directly or indirectly controls, is controlled by, or is under common control with, such Person; "**Claim**" shall mean any claim, demand, request, investigation, dispute, controversy, threat, discovery request, or request for testimony or information; "**Person**" shall mean any individual, corporation, partnership, limited liability company, joint venture, trust, estate, board, committee, agency, body, employee benefit plan, or other person or entity; and "**Proceeding**" shall mean any threatened or actual action, suit, or proceeding, whether civil, criminal, administrative, investigative, appellate, formal, informal, or other.

7. Other Tax Matters.

(a) **Withholding.** The Company shall withhold all applicable federal, state, and local taxes, social security, and workers' compensation contributions and other amounts as may be required by law with respect to compensation payable to Executive pursuant to this Agreement.

(b) **Section 409A.** Notwithstanding anything herein to the contrary, this Agreement is intended to be interpreted and applied so that the payment of the benefits set forth herein shall either be exempt from, or in the alternative, comply with, the requirements of Section 409A of the Internal Revenue Code of 1986, as amended (the "**Code**"), and the published guidance thereunder ("**Section 409A**"). A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits upon or following a termination of employment that are considered "nonqualified deferred compensation" under Section 409A unless such termination is also a "separation from service" within the meaning of Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "Termination Date" or like terms shall mean "separation from service." Notwithstanding any provision of this Agreement to the contrary, if Executive is a "specified employee" within the meaning of Section 409A on the date of Executive's "separation from service," any payments or arrangements due upon a termination of Executive's employment under any arrangement that constitutes a "nonqualified deferral of compensation" within the meaning of Section 409A and which do not otherwise qualify under the exemptions under Treas. Regs. Section 1.409A-1 (including without limitation, the short-term deferral exemption or the permitted payments under Treas. Regs. Section 1.409A-1(b)(9)(iii)(A)), shall be delayed and paid or provided on the earlier of (a) the date which is six months after Executive's "separation from service" for any reason other than death, or (b) the date of Executive's death. All tax gross-up payments provided under this Agreement or any other agreement with Executive shall be made or provided by the end of Executive's taxable year next following Executive's taxable year in which Executive remits the related taxes, in accordance with the requirements of Section 409A.

(c) **Separation from Service.** After any Termination Date, Executive shall have no duties or responsibilities that are inconsistent with having a "separation from service" within the meaning of Section 409A as of the Termination Date and, notwithstanding anything in the Agreement to the contrary, distributions upon termination of employment of nonqualified deferred compensation may only be made upon a "separation from service" as determined under Section 409A and such date shall be the Termination Date for purposes of this Agreement. Each payment under this Agreement or otherwise shall be treated as a separate payment for purposes of Section 409A. In no event may Executive, directly or indirectly, designate the calendar year of any payment to be made under this Agreement which constitutes a "nonqualified deferral of compensation" within the meaning of Section 409A and to the extent an amount is payable within a time period, the time during which such amount is paid shall be in the discretion of the Company.

(d) **Reimbursements.** All reimbursements and in-kind benefits provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A. To the extent that any reimbursements are taxable to Executive, such reimbursements shall be paid to Executive on or before the last day of Executive's taxable year following the taxable year in which the related expense was incurred. Reimbursements shall not be subject to liquidation or exchange for another benefit and the amount of such reimbursements that Executive receives in one taxable year shall not affect the amount of such reimbursements that Executive receives in any other taxable year.

(e) **Parachute Payments.** If any payment, benefit, or distribution of any type to or for the benefit of Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Parachute Payments") would (as determined by the Company) subject Executive to the excise tax imposed under Section 4999 of the Code (the "Excise Tax"), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar less than the amount which would cause the Parachute Payments to be subject to the Excise Tax. The Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating any cash Parachute Payments that do not constitute deferred compensation within the meaning of Section 409A, then by reducing or eliminating any other Parachute Payments that do not constitute deferred compensation within the meaning of Section 409A, then by reducing or eliminating all other Parachute Payments that do constitute deferred compensation within the meaning of Section 409A, beginning with those payments last to be paid, subject to and in accordance with all applicable requirements of Section 409A.

8. **Notices.** Except as otherwise specifically provided herein, any notice, consent, demand, or other communication to be given under or in connection with this Agreement shall be in writing and shall be deemed duly given when delivered personally, when transmitted by facsimile transmission, one day after being deposited with Federal Express or other nationally recognized overnight delivery service, or four days after being mailed by first class mail, charges or postage prepaid, properly addressed, if to the Company, at its principal office, and, if to Executive, at Executive's address set forth following Executive's signature below. Either party may change such address from time to time by notice to the other.

9. **Governing Law; Forum; Attorneys' Fees and Costs.** This Agreement shall be governed by and construed and interpreted in accordance with the laws of Utah, without giving effect to any choice of law rules or other conflicting provision or rule that would cause the laws of any jurisdiction to be applied. The parties each submit to the exclusive jurisdiction of the federal courts (or state courts if federal jurisdiction is lacking) located within Salt Lake County. In the event of a lawsuit or other legal proceeding arising out of or related to this Agreement in which Executive prevails (as determined by the deciding court), the Company shall reimburse Executive for Executive's reasonable attorneys' fees and costs incurred in connection with such lawsuit or legal proceeding, in addition to any other relief to which Executive may be entitled.

10. **Amendments; Waivers.** This Agreement may not be modified or amended or terminated except by an instrument in writing, signed by Executive and a duly-authorized officer of the Company (other than Executive). By an instrument in writing similarly executed (and not by any other means), either party may waive compliance by the other party with any provision of this Agreement that such other party was or is obligated to comply with or perform; provided, however, that such waiver shall not operate as a waiver of, or estoppel with respect to, any other or subsequent failure. No failure to exercise and no delay in exercising any right, remedy, or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right, remedy, or power hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, or power provided herein or by law or in equity. To be effective, any written waiver must specifically refer to the condition(s) or provision(s) of this Agreement being waived.

11. **Inconsistencies.** In the event of any inconsistency between any provision of this Agreement and any provision of any Company arrangement, the provisions of this Agreement shall control, unless Executive and the Company otherwise agree in a writing that expressly refers to the provision of this Agreement that is being waived.

12. **Assignment.** Except as otherwise specifically provided herein, neither party shall assign or transfer this Agreement nor any rights hereunder without the consent of the other party, and any attempted or purported assignment without such consent shall be void; provided, however, that any assignment or transfer pursuant to a merger or consolidation, or the sale or liquidation of all or substantially all of the business and assets of the Company shall be valid, so long as the assignee or transferee (a) is the successor to all or substantially all of the business and assets of the Company, and (b) assumes the liabilities, obligations and duties of the Company, as contained in this Agreement, either contractually or as a matter of law. Executive's consent shall be required for any such transaction. This Agreement shall otherwise bind and inure to the benefit of the parties hereto and their respective successors, penalties, assigns, heirs, legatees, devisees, executors, administrators, and legal representatives.

13. **Voluntary Execution; Representations.** Executive acknowledges that (a) Executive has consulted with or has had the opportunity to consult with independent counsel of their own choosing concerning this Agreement and has been advised to do so by the Company, and (b) Executive has read and understands this Agreement, is competent and of sound mind to execute this Agreement, is fully aware of the legal effect of this Agreement, and has entered into it freely based on Executive's own judgment and without duress. The Company represents and warrants that it is fully authorized, by any person or body whose authorization is required, to enter into this Agreement and to perform its obligations hereunder.

14. **Headings.** The headings of the Sections and subsections contained in this Agreement are for convenience only and shall not be deemed to control or affect the meaning or construction of any provision of this Agreement.

15. **Construction.** The language used in this Agreement shall be deemed to be the language chosen by the parties to express their mutual intent, and no rule of strict construction shall be applied against any party.

16. **Beneficiaries/References.** Executive shall be entitled, to the extent permitted under applicable law, to select and change a beneficiary or beneficiaries to receive any compensation or benefit hereunder following Executive's death by giving written notice thereof. In the event of Executive's death or a judicial determination of Executive's incompetence, references in this Agreement to Executive shall be deemed, where appropriate, to refer to Executive's beneficiary, estate, or other legal representative.

17. **Survivorship.** Except as otherwise set forth in this Agreement, the respective rights and obligations of the parties shall survive any termination of Executive's employment.

18. **Severability.** It is the desire and intent of the parties hereto that the provisions of this Agreement be enforced to the fullest extent permissible under the laws and public policies applied in each jurisdiction in which enforcement is sought. Accordingly, if any particular provision of this Agreement shall be adjudicated by a court of competent jurisdiction or arbitrator to be invalid, prohibited, or unenforceable for any reason, such provision, as to such jurisdiction, shall be ineffective, without invalidating the remaining provisions of this Agreement or affecting the validity or enforceability of such provision in any other jurisdiction. Notwithstanding the foregoing, if such provision could be more narrowly drawn so as not to be invalid, prohibited, or unenforceable in such jurisdiction, it shall, as to such jurisdiction, be so narrowly drawn, without invalidating the remaining provisions of this Agreement or affecting the validity or enforceability of such provision in any other jurisdiction.

19. **No Mitigation/No Offset.** Executive shall be under no obligation to seek other employment or to otherwise mitigate the obligations of the Company under this Agreement, and there shall be no offset against amounts or benefits due to Executive under this Agreement or otherwise on account of any claim (other than any preexisting debts then due in accordance with their terms) the Company may have against Executive or any remuneration or other benefit earned or received by Executive after such termination.

20. **Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all such counterparts shall together constitute one and the same instrument. Signatures delivered by facsimile or PDF shall be effective for all purposes.

21. **Entire Agreement.** This Agreement contains the entire agreement of the parties and supersedes all prior or contemporaneous negotiations, correspondence, understandings, and agreements between the parties, regarding the subject matter of this Agreement.

[Signature Page Follows]

SINTX TECHNOLOGIES, INC.

By: _____
Gregg Honigblum, Chief Investment Officer
Dated: _____

EXECUTIVE

By: _____
Eric Olson
Dated: _____

Address for Notices: [executive address]

Exhibit 10.22

EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT ("**Agreement**") is made as of May 5, 2025 (the "**Effective Date**"), by and between SINTX Technologies, Inc. (together with its successors and assigns, the "**Company**"), and Gregg Honigblum ("**Executive**").

RECITALS

WHEREAS, the Company desires to employ Executive, and Executive desires to be employed by the Company, as the Company's Chief Investment Officer.

WHEREAS, the Company and Executive have previously entered into an Executive Employment Agreement dated November 15, 2024, as amended (together the "2024 Employment Agreement") and a Change in Control Agreement dated December 12, 2024, as amended (together the "Change in Control Agreement").

WHEREAS, Company and Executive now desire to enter into this Agreement for the express purpose of replacing and superseding in their entirety both the 2024 Employment Agreement and the Change in Control Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual covenants and conditions herein, and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereby agree as follows:

AGREEMENT

1. **Employment and Term.** The Company hereby agrees to employ Executive, and Executive hereby accepts employment by the Company, on the terms and conditions hereinafter set forth. Executive's term of employment by the Company under this Agreement (the "**Term**") shall commence on the Effective Date and end on the second anniversary thereof, subject to automatic renewal of the Term for additional one-year periods unless either the Company or Executive gives the other party written notice of intent not to renew the Term not less than ninety days before the date on which the Term otherwise would automatically renew. Notwithstanding the foregoing, the Term may be terminated earlier in accordance with Section 5.

2. **Position, Duties and Responsibilities, Location, and Commuting.**

   (a) **Position and Duties.** During the Term, the Company shall employ Executive as Chief Investment Officer. Executive shall report directly to the Company's Chief Executive Officer and President (the "CEO"). Executive shall have general overall authority and responsibility as commensurate with his position as determined by the Board of Directors and the CEO and as may be set forth in the Company's Amended and Restated By-laws (the "Bylaws").

   (b) **Exclusive Services and Efforts.** Executive agrees to devote his or her or their efforts, energies, and skill to the discharge of the duties and responsibilities attributable to his or her or their position and, except as set forth herein, agrees to devote substantially all of his or her or their professional time and attention to the business and affairs of the Company. Notwithstanding the foregoing, Executive shall be entitled to engage in (a) service on the board of directors of for-profit and not-for-profit companies, organizations, businesses or trade organizations at any time during the Term; provided that Executive shall not serve on the board of any entity that materially competes with the Company (b) other charitable activities and community affairs, and (c) management of his or her or their personal and family investments and affairs, in each case to the extent such activities do not, either individually or in the aggregate, materially interfere with the performance of his or her or their duties and responsibilities to the Company.

(c) **Compliance with Company Policies.** To the extent not inconsistent with the terms and conditions of this Agreement and with due regard for his or her or their position, Executive shall be subject to the Bylaws, policies, practices, procedures, and rules of the Company, including those policies and procedures set forth in the Company's Code of Conduct and Ethics and Employee Handbook, but in no event shall anything in such documents be construed to expand the definition of Cause hereunder.

(d) **Location of Employment.** The Executive's principal office and principal place of employment ("home base"), shall be in Austin, Travis County, Texas; provided that Executive may be required under business circumstances to travel outside of such location in connection with performing his or her duties under this Agreement.

3. Compensation.

(a) **Base Salary.** During the first year of the Term, the Company shall pay to the Executive an annual salary of $325,000.00 ("**Base Salary**"). Thereafter, the Compensation Committee of the Board (the "**Committee**") shall consider increases in Base Salary for subsequent years in connection with performance and a review of compensation provided at peer companies, which companies shall be subject to review on a continuing basis (the "**Peer Group**"), taking into account Company and individual performance objectives. Executive's Base Salary shall not be decreased (including after any increases pursuant to this Section 3(a)) without Executive's written consent.

(b) **Annual Cash Bonus.** During the Term, Executive shall have an annual target cash bonus opportunity of 35% of one year's Base Salary. The Committee shall award Executive's annual cash bonus based on an evaluation of performance and Peer Group compensation practices, taking into account Company and individual performance objectives. In its sole discretion, the Committee may award an annual cash bonus in excess of the annual cash bonus opportunity. Notwithstanding the foregoing, the Committee may grant a special bonus at any time. Annual cash bonuses shall be deemed "earned" if Executive is employed on the last day of the year to which the bonus relates and shall be paid no later than March 15th of the year immediately following the year to which the annual bonus relates.

(c) **Annual Long-Term Incentive Award.** During the Term, Executive will be eligible for an annual target long-term incentive award opportunity as determined by the Committee based on an evaluation of performance and Peer Group compensation practices, taking into account Company and individual performance objectives. Notwithstanding the foregoing, the Committee may grant a special long-term incentive award at any time. Awards granted under the Equity Incentive Plan shall be subject to the terms and conditions of such plan and the award agreement.

(d) **RSU Award.** Executive shall be granted an award of 55,000 restricted stock units ("RSUs") effective May 2, 2025. The RSUs shall vest as follows: 25% of the award is immediately vested with the balance vesting at the rate of 25% on May 2, 2026, 25% on May 2, 2027 and 25% on May 2, 2028.

4. Employee Benefits and Perquisites.

(a) **Benefits.** Executive shall be entitled to participate in such health, group insurance, welfare, pension, and other employee benefit plans, programs, and arrangements as are made generally available from time to time to senior executives of the Company (which shall include customary health, life insurance, and disability plans), such participation in each case to be on terms and conditions no less favorable to Executive than to other senior executives of the Company generally.

(b) **Fringe Benefits, Perquisites, and Paid Time Off.** During the Term, Executive shall be entitled to participate in all fringe benefits and perquisites made available to other senior executives of the Company, such participation to be at levels, and on terms and conditions, that are commensurate with his or her or their position and responsibilities at the Company and that are no less favorable than those applicable to other senior executives of the Company. In addition, Executive shall be eligible for twenty days of paid time off ("**PTO**") per calendar year in accordance with the Company's vacation and PTO policy, inclusive of vacation days and sick days and excluding standard paid Company holidays, in the same manner as PTO days for employees of the Company generally accrue. Accrued and unused PTO days may be carried over to the following calendar year.

(c) **Reimbursement of Expenses.** The Company shall reimburse Executive for all reasonable business and travel expenses incurred in the performance of his or her or their job duties and the promotion of the Company's business, promptly upon presentation of appropriate supporting documentation and otherwise in accordance with the expense reimbursement policy of the Company.

5. Termination; Change in Control.

(a) **General.** The Company may terminate Executive's employment for Cause. Executive may terminate his or her or their employment at any time for any reason other than Good Reason. The Company may terminate Executive's employment without Cause, or Executive may terminate Executive's employment with Good Reason, in each case, upon providing the other party at least thirty days' written notice thereof. Upon termination of Executive's employment, Executive shall be entitled to the compensation and benefits described in this Section 5 to the extent applicable and shall have no further rights to any compensation or benefits from the Company. For purposes of this Agreement, the following terms have the following meanings:

(i) "**Accrued Benefits**" shall mean: (i) accrued but unpaid Base Salary through the Termination Date, payable within thirty days following the Termination Date; (ii) any annual cash bonus earned but unpaid with respect to the year preceding the year in which the Termination Date occurs, payable in accordance with Section 3(b) above; (iii) any long-term incentive award earned but unpaid with respect to performance periods that ended in the year preceding the year in which Termination Date occurs, payable in accordance with Section 3(c) above; (iv) reimbursement for any unreimbursed business expenses incurred through the Termination Date and any expenses incurred through the Termination Date under Section 4(c) above, payable within thirty days following the Termination Date; (v) accrued but unused PTO days; and (vi) all other payments, benefits, or fringe benefits to which Executive shall be entitled as of the Termination Date under the terms of this Agreement or any other applicable compensation arrangement or benefit, equity, or fringe benefit plan or program or grant.

(ii) "**Cause**" shall mean: (i) the Executive's commission of a felony (other than through vicarious liability or through a motor vehicle offense); (ii) intentional misconduct that causes material harm to the Company, provided that such misconduct is not rectifiable or remains uncorrected after written notice and a 30-day cure period.; (iii) the commission by the Executive of an act of fraud, embezzlement or misappropriation of funds; (iv) a material breach by the Executive of any material provision of this Agreement or any other agreement to which the Executive and the Company are party, which breach is not cured within thirty (30) days after delivery to the Executive by the Company of written notice of such breach; or (v) the Executive's refusal to carry out a lawful written directive from the Board which is within Executive's normal Company duties. Any determination of Cause will need to be made by the full Board voting on such determination.

(iii) "**Good Reason**" shall mean any of the following that has not been approved in writing in advance by Executive: (i) a diminution of Executive's titles, duties, responsibilities, or authorities as set forth in this Agreement; (ii) a reduction in Executive's Base Salary, annual cash bonus opportunity, or annual long-term incentive award opportunity, or failure to pay earned compensation; (iii) relocation of the Company's offices to a location more than thirty miles from Salt Lake County, UT; (iv) a material breach by the Company of this Agreement or any equity award agreement; or (v) a material change in the Executive's compensation or authority, functions, duties or responsibilities, which would cause his position with the Company to become of less responsibility, importance or scope than his position on the date of this Agreement or as of any subsequent date prior to a Change in Control, provided, however, that such material change is not in connection with the termination of the Executive's employment by the Company for any reason.. A termination of employment by Executive during the one-year period following the occurrence of an event or circumstance constituting Good Reason shall be deemed a termination for Good Reason under this Agreement. In addition, any termination of employment by Executive during the one-year period following a Change in Control shall be deemed to be a termination for Good Reason under this Agreement.

(iv) "**Change in Control**" means (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Act")) becomes the "beneficial owner" (as defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities (excluding for this purpose the Company or its Affiliates or any employee benefit plan of the Company) pursuant to a transaction or a series of related transactions of which the Board does not approve; (ii) a merger or consolidation of the Company, whether or not approved by the Board, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or the parent of such corporation) at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity or parent of such corporation outstanding immediately after such merger or consolidation; (iii) the stockholders of the Company approve an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; or a change in the composition of the Board of Directors whereby individuals who were members of the Board immediately prior to the agreement cease to constitute a majority of the Board. For purposes of this Agreement, "Change in Control" shall be interpreted in a manner, and limited to the extent necessary, so that it will not cause adverse tax consequences for either party with respect to Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), and the treasury regulations issued thereunder or any guidance issued by the IRS concerning the interpretation or applicability of Section 409A of the Code.

(v) "**Change-in-Control Severance Payments**" shall mean (i) a pro-rated annual cash bonus for the year in which the Termination Date occurs (calculated based on the annual target cash bonus opportunity for the year of termination), payable when bonuses are paid to other executives of the Company in the year following the year of the Termination Date; (ii) a lump sum cash payment, payable on the Termination Date, equal to three times the sum of the following: (x) one year's Base Salary at the annualized rate then in effect (or the rate that should be in effect but for any Base Salary diminution), and, (y) the greater of the annual target cash bonus opportunity for the year of termination or the highest actual annual cash bonus paid during the three preceding completed years; (iii) Medical Payment Amounts, payable each month, commencing on the first day of the month following the Termination Date and continuing until the earlier of thirty-six months following the Termination Date or the date on which Executive becomes employed by a third party and becomes eligible to participate in such third party's group health plan; and (iv) to the extent permissible under applicable law and under any insurance policy insuring the Company's health plan (if any), access to continued coverage under the Company's health plan with the full cost payable by Executive for a period of up to thirty-six months commencing on the first day of the month following the Termination Date. Executive shall be entitled to the Change-in-Control Severance Payment should Executive's employment be terminated, other than for Cause, within one year of the occurrence of a Change-in-Control.

(vi) "**Disability**" shall mean that Executive has been unable, with or without reasonable accommodation and due to physical or mental incapacity, to substantially perform his or her or their duties and responsibilities hereunder for 120 consecutive days.

(vii) "**Medical Payment Amounts**" shall mean an amount, payable on a monthly basis commencing on the first day of the month following the Termination Date, equal to (i) the monthly amount of the Consolidated Omnibus Budget Reconciliation Act continuation coverage premium for such month under the Company's group medical plans for executives of the Company less the monthly amount of Executive's portion of the premium for such month as if Executive was still an active employee, plus (ii) a tax gross-up payment so Executive shall have no after-tax consequences with respect to the monthly amount described in clause (i) or the related tax gross-up.

(viii) "**Severance Payments**" shall mean (i) a lump sum cash payment, payable on the Termination Date, equal to one times the sum of the following: (x) one year's Base Salary at the annualized rate then in effect (or the rate that should be in effect but for any Base Salary diminution), (y) the greater of (I) the annual target cash bonus opportunity for the year of termination or (II) the average annual cash bonus for the three preceding completed years (provided, however, that if Executive has not been employed for at least three years in which an annual cash bonus was paid, such calculation will assume that an annual cash bonus equal to the target annual cash bonus opportunity was paid in the missing years); (ii) Medical Payment Amounts payable each month and continuing until the earlier of twelve months following the Termination Date or the date on which Executive becomes employed by a third party and becomes eligible to participate in such third party's group health plan; and (iii) to the extent permissible under applicable law and under any insurance policy insuring the Company's health plan (if any), access to continued coverage under the Company's health plan with the full cost payable by Executive for a period of up to twenty-four months commencing on the first day of the month following the Termination Date.

(ix) "**Termination Date**" shall mean the date on which Executive's employment hereunder terminates in accordance with this Agreement (which, in the case of a notice of non-renewal of the Term in accordance with Section 1 hereof, shall mean the date on which the Term expires).

(b) **Termination Without Cause or Termination by Executive for Good Reason.** In the event that Executive's employment hereunder is terminated by the Company without Cause or by Executive for Good Reason, Executive shall be entitled to receive the Accrued Benefits and the Severance Payments, except as otherwise provided pursuant to Section 5(d).

(c) **Termination Without Cause or Termination by Executive for Good Reason Due to a Change in Control.** In the event that Executive's employment hereunder is terminated by the Company without Cause or by Executive for Good Reason within one year following or six months prior to a Change in Control, Executive shall receive the benefits described in Section 5(b), except that Executive shall receive the Change-in-Control Severance Payments in lieu of the Severance Payments.

(d) **Termination Due to Death or Disability.** In the event that Executive's employment hereunder is terminated due to Executive's death or Disability, Executive shall receive the Accrued Benefits.

(e) **Return of Company Property.** Upon termination of Executive's employment for any reason or under any circumstances, Executive shall promptly return any and all of the property of the Company and any Affiliates (including, without limitation, all computers, keys, credit cards, identification tags, documents, data, confidential information, work product, and other proprietary materials), and other materials. Executive may retain Executive's rolodex and similar address books provided that such items only include contact information.

(f) **Post-Termination Reasonable Cooperation.** Executive agrees and covenants that, following the Term, Executive shall, to the extent reasonably requested by the Company, cooperate in good faith with the Company to assist the Company in the pursuit or defense of (except if Executive is adverse with respect to) any claim, administrative charge, or cause of action by or against the Company as to which Executive, by virtue of his or her or their employment with the Company or any other position that Executive holds that is affiliated with or was held at the request of the Company or its Affiliates, has relevant knowledge or information, including by acting as the Company's representative in any such proceeding and, without the necessity of a subpoena, providing truthful testimony in any jurisdiction or forum. The Company shall reimburse Executive for his or her or their reasonable out-of-pocket expenses incurred in compliance with this Section 5(g), including any reasonable travel expenses and reasonable attorneys' fees incurred by Executive and, in the event that Executive is required to spend substantial time on such matters, the Company shall compensate Executive at an hourly rate to be agreed to. The Company shall use reasonable business efforts to provide Executive with reasonable advance written notice of its need for Executive's reasonable cooperation and shall attempt to coordinate with Executive the time and place at which Executive's reasonable cooperation shall be provided with the goal of minimizing the impact of such reasonable cooperation on any other material pre-scheduled business commitment that Executive may have. Executive's cooperation described in this Section 5(g) shall be subject to the maintenance of the indemnification and D&O insurance policy provided under Sections 6(a) and (b) hereof.

(g) **Mutual Release.** Payment of any Change-in-Control Severance Payments and Severance Payments shall be conditioned upon the execution, non-revocation, and delivery of a general mutual release of claims by Executive, in a form reasonably satisfactory to the Company. In the event that Executive fails to timely execute and deliver such a release, the Company shall have no obligation to pay Change-in-Control Severance Payments or Severance Payments under this Agreement.

6. Indemnification; D&O Insurance.

(a) **Indemnification.** If Executive is made a party, is threatened to be made a party, or reasonably anticipates being made a party, to any Proceeding (as hereinafter defined) by reason of the fact that Executive is or was a director, officer, shareholder, employee, agent, trustee, consultant, or representative of the Company or any of its Affiliates or is or was serving at the request of the Company or any of its Affiliates, or in connection with his or her or their service hereunder as a director, officer, shareholder, employee, agent, trustee, consultant, or representative of another Person, or if any Claim (as hereinafter defined) is made, is threatened to be made, or is reasonably anticipated to be made, that arises out of or relates to Executive's service in any of the foregoing capacities, then Executive shall promptly be indemnified and held harmless to the fullest extent permitted or authorized by any Company arrangement, or if greater, by applicable law, against any and all costs, expenses, liabilities, and losses (including, without limitation, advancement and payment of attorney's and other professional fees and charges, judgments, interest, expenses of investigation, penalties, fines, ERISA excise taxes or penalties, and amounts paid or to be paid in settlement, with such legal fees advanced to the maximum extent permitted by law) incurred or suffered by Executive in connection therewith or in connection with seeking to enforce his or her or their rights under this Section 6(a), and such indemnification shall continue even if Executive has ceased to be a director, officer, shareholder, employee, agent, trustee, consultant, or representative of the Company or other Person and shall inure to the benefit of his or her or their heirs, executors, and administrators. This benefit shall be in addition to the provisions of any Indemnity Agreement entered into between Executive and Company.

(b) **D&O Insurance.** A directors' and officers' liability insurance policy (or policies) shall be kept in place, during the Term and thereafter until the sixth anniversary of the Termination Date, providing coverage to Executive that is no less favorable to Executive in any respect than the coverage then being provided to any other current or former director or officer of the Company.

(c) **Definitions.** For purposes of this Agreement, the following terms shall have the following meanings: "**Affiliate**" of a Person shall mean any Person that directly or indirectly controls, is controlled by, or is under common control with, such Person; "**Claim**" shall mean any claim, demand, request, investigation, dispute, controversy, threat, discovery request, or request for testimony or information; "**Person**" shall mean any individual, corporation, partnership, limited liability company, joint venture, trust, estate, board, committee, agency, body, employee benefit plan, or other person or entity; and "**Proceeding**" shall mean any threatened or actual action, suit, or proceeding, whether civil, criminal, administrative, investigative, appellate, formal, informal, or other.

7. Other Tax Matters.

(a) **Withholding.** The Company shall withhold all applicable federal, state, and local taxes, social security, and workers' compensation contributions and other amounts as may be required by law with respect to compensation payable to Executive pursuant to this Agreement.

(b) **Section 409A.** Notwithstanding anything herein to the contrary, this Agreement is intended to be interpreted and applied so that the payment of the benefits set forth herein shall either be exempt from, or in the alternative, comply with, the requirements of Section 409A of the Internal Revenue Code of 1986, as amended (the "**Code**"), and the published guidance thereunder ("**Section 409A**"). A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits upon or following a termination of employment that are considered "nonqualified deferred compensation" under Section 409A unless such termination is also a "separation from service" within the meaning of Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "Termination Date" or like terms shall mean "separation from service." Notwithstanding any provision of this Agreement to the contrary, if Executive is a "specified employee" within the meaning of Section 409A on the date of Executive's "separation from service," any payments or arrangements due upon a termination of Executive's employment under any arrangement that constitutes a "nonqualified deferral of compensation" within the meaning of Section 409A and which do not otherwise qualify under the exemptions under Treas. Regs. Section 1.409A-1 (including without limitation, the short-term deferral exemption or the permitted payments under Treas. Regs. Section 1.409A-1(b)(9)(iii)(A)), shall be delayed and paid or provided on the earlier of (a) the date which is six months after Executive's "separation from service" for any reason other than death, or (b) the date of Executive's death. All tax gross-up payments provided under this Agreement or any other agreement with Executive shall be made or provided by the end of Executive's taxable year next following Executive's taxable year in which Executive remits the related taxes, in accordance with the requirements of Section 409A.

(c) **Separation from Service.** After any Termination Date, Executive shall have no duties or responsibilities that are inconsistent with having a "separation from service" within the meaning of Section 409A as of the Termination Date and, notwithstanding anything in the Agreement to the contrary, distributions upon termination of employment of nonqualified deferred compensation may only be made upon a "separation from service" as determined under Section 409A and such date shall be the Termination Date for purposes of this Agreement. Each payment under this Agreement or otherwise shall be treated as a separate payment for purposes of Section 409A. In no event may Executive, directly or indirectly, designate the calendar year of any payment to be made under this Agreement which constitutes a "nonqualified deferral of compensation" within the meaning of Section 409A and to the extent an amount is payable within a time period, the time during which such amount is paid shall be in the discretion of the Company.

(d) **Reimbursements.** All reimbursements and in-kind benefits provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A. To the extent that any reimbursements are taxable to Executive, such reimbursements shall be paid to Executive on or before the last day of Executive's taxable year following the taxable year in which the related expense was incurred. Reimbursements shall not be subject to liquidation or exchange for another benefit and the amount of such reimbursements that Executive receives in one taxable year shall not affect the amount of such reimbursements that Executive receives in any other taxable year.

(e) **Parachute Payments.** If any payment, benefit, or distribution of any type to or for the benefit of Executive, whether paid or payable, provided or to be provided, or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Parachute Payments") would (as determined by the Company) subject Executive to the excise tax imposed under Section 4999 of the Code (the "Excise Tax"), the Parachute Payments shall be reduced so that the maximum amount of the Parachute Payments (after reduction) shall be one dollar less than the amount which would cause the Parachute Payments to be subject to the Excise Tax. The Company shall reduce or eliminate the Parachute Payments by first reducing or eliminating any cash Parachute Payments that do not constitute deferred compensation within the meaning of Section 409A, then by reducing or eliminating any other Parachute Payments that do not constitute deferred compensation within the meaning of Section 409A, then by reducing or eliminating all other Parachute Payments that do constitute deferred compensation within the meaning of Section 409A, beginning with those payments last to be paid, subject to and in accordance with all applicable requirements of Section 409A.

8. **Notices.** Except as otherwise specifically provided herein, any notice, consent, demand, or other communication to be given under or in connection with this Agreement shall be in writing and shall be deemed duly given when delivered personally, when transmitted by facsimile transmission, one day after being deposited with Federal Express or other nationally recognized overnight delivery service, or four days after being mailed by first class mail, charges or postage prepaid, properly addressed, if to the Company, at its principal office, and, if to Executive, at Executive's address set forth following Executive's signature below. Either party may change such address from time to time by notice to the other.

9. **Governing Law; Forum; Attorneys' Fees and Costs.** This Agreement shall be governed by and construed and interpreted in accordance with the laws of Utah, without giving effect to any choice of law rules or other conflicting provision or rule that would cause the laws of any jurisdiction to be applied. The parties each submit to the exclusive jurisdiction of the federal courts (or state courts if federal jurisdiction is lacking) located within Salt Lake County. In the event of a lawsuit or other legal proceeding arising out of or related to this Agreement in which Executive prevails (as determined by the deciding court), the Company shall reimburse Executive for Executive's reasonable attorneys' fees and costs incurred in connection with such lawsuit or legal proceeding, in addition to any other relief to which Executive may be entitled.

10. **Amendments; Waivers.** This Agreement may not be modified or amended or terminated except by an instrument in writing, signed by Executive and a duly-authorized officer of the Company (other than Executive). By an instrument in writing similarly executed (and not by any other means), either party may waive compliance by the other party with any provision of this Agreement that such other party was or is obligated to comply with or perform; provided, however, that such waiver shall not operate as a waiver of, or estoppel with respect to, any other or subsequent failure. No failure to exercise and no delay in exercising any right, remedy, or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right, remedy, or power hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, or power provided herein or by law or in equity. To be effective, any written waiver must specifically refer to the condition(s) or provision(s) of this Agreement being waived.

11. **Inconsistencies.** In the event of any inconsistency between any provision of this Agreement and any provision of any Company arrangement, the provisions of this Agreement shall control, unless Executive and the Company otherwise agree in a writing that expressly refers to the provision of this Agreement that is being waived.

12. **Assignment.** Except as otherwise specifically provided herein, neither party shall assign or transfer this Agreement nor any rights hereunder without the consent of the other party, and any attempted or purported assignment without such consent shall be void; provided, however, that any assignment or transfer pursuant to a merger or consolidation, or the sale or liquidation of all or substantially all of the business and assets of the Company shall be valid, so long as the assignee or transferee (a) is the successor to all or substantially all of the business and assets of the Company, and (b) assumes the liabilities, obligations and duties of the Company, as contained in this Agreement, either contractually or as a matter of law. Executive's consent shall be required for any such transaction. This Agreement shall otherwise bind and inure to the benefit of the parties hereto and their respective successors, penalties, assigns, heirs, legatees, devisees, executors, administrators, and legal representatives.

13. **Voluntary Execution; Representations.** Executive acknowledges that (a) Executive has consulted with or has had the opportunity to consult with independent counsel of their own choosing concerning this Agreement and has been advised to do so by the Company, and (b) Executive has read and understands this Agreement, is competent and of sound mind to execute this Agreement, is fully aware of the legal effect of this Agreement, and has entered into it freely based on Executive's own judgment and without duress. The Company represents and warrants that it is fully authorized, by any person or body whose authorization is required, to enter into this Agreement and to perform its obligations hereunder.

14. **Headings.** The headings of the Sections and subsections contained in this Agreement are for convenience only and shall not be deemed to control or affect the meaning or construction of any provision of this Agreement.

15. **Construction.** The language used in this Agreement shall be deemed to be the language chosen by the parties to express their mutual intent, and no rule of strict construction shall be applied against any party.

16. **Beneficiaries/References.** Executive shall be entitled, to the extent permitted under applicable law, to select and change a beneficiary or beneficiaries to receive any compensation or benefit hereunder following Executive's death by giving written notice thereof. In the event of Executive's death or a judicial determination of Executive's incompetence, references in this Agreement to Executive shall be deemed, where appropriate, to refer to Executive's beneficiary, estate, or other legal representative.

17. **Survivorship.** Except as otherwise set forth in this Agreement, the respective rights and obligations of the parties shall survive any termination of Executive's employment.

18. **Severability.** It is the desire and intent of the parties hereto that the provisions of this Agreement be enforced to the fullest extent permissible under the laws and public policies applied in each jurisdiction in which enforcement is sought. Accordingly, if any particular provision of this Agreement shall be adjudicated by a court of competent jurisdiction or arbitrator to be invalid, prohibited, or unenforceable for any reason, such provision, as to such jurisdiction, shall be ineffective, without invalidating the remaining provisions of this Agreement or affecting the validity or enforceability of such provision in any other jurisdiction. Notwithstanding the foregoing, if such provision could be more narrowly drawn so as not to be invalid, prohibited, or unenforceable in such jurisdiction, it shall, as to such jurisdiction, be so narrowly drawn, without invalidating the remaining provisions of this Agreement or affecting the validity or enforceability of such provision in any other jurisdiction.

19. **No Mitigation/No Offset.** Executive shall be under no obligation to seek other employment or to otherwise mitigate the obligations of the Company under this Agreement, and there shall be no offset against amounts or benefits due to Executive under this Agreement or otherwise on account of any claim (other than any preexisting debts then due in accordance with their terms) the Company may have against Executive or any remuneration or other benefit earned or received by Executive after such termination.

20. **Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all such counterparts shall together constitute one and the same instrument. Signatures delivered by facsimile or PDF shall be effective for all purposes.

21. **Entire Agreement.** This Agreement contains the entire agreement of the parties and supersedes all prior or contemporaneous negotiations, correspondence, understandings, and agreements between the parties, regarding the subject matter of this Agreement.

[Signature Page Follows]

SINTX TECHNOLOGIES, INC.

By: _____
Eric Olson, CEO & President
Dated: _____

EXECUTIVE

By: _____
Gregg Honigblum
Dated: _____

Address for Notices: [executive address]

Exhibit 21.1

List of Subsidiaries

SINTX Armor, Inc., a Utah corporation.

SINTX Agribiotech, Inc., a Utah corporation.

SiNAPTIC Surgical, LLC, a Delaware limited liability company

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in Registration Statements on Form S-1 (Nos. 333-223032, 333-234438, 333-266070, 333-269475 and 333-275137) and Form S-3 (Nos. 333-274951, 333-285932, 333-290628 and 333-291037) and Form S-8 (Nos. 333-248846 and 333-290629) of SINTX Technologies, Inc. (the Company) of our report dated March 20, 2026, relating to our audit of the financial statements, which appears in this Annual Report on Form 10-K of SINTX Technologies, Inc. for the year ended December 31, 2025.

/s/ Tanner LLP

Lehi, UT
March 20, 2026

Exhibit 31.1 – CEO certification

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Eric Olson, certify that:

1. I have reviewed this annual report on Form 10-K of SINTX Technologies, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 20, 2026

By: */s/ Eric Olson*
Eric Olson
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2 – CFO certification

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

I, Kevin Trask, certify that:

1. I have reviewed this annual report on Form 10-K of SINTX Technologies, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 20, 2026

By: */s/ Kevin Trask*
Kevin Trask
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32

CERTIFICATIONS UNDER SECTION 906

Certifications Pursuant to 18 U.S.C. Section 1350

In connection with the Annual Report on Form 10-K of SINTX Technologies, Inc. (the "Company") for the year ended December 31, 2025, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officers of the Company hereby certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 20, 2026

By: */s/ Eric Olson*
Eric Olson
Chief Executive Officer
(Principal Executive Officer)

By: */s/ Kevin Trask*
Kevin Trask
Chief Financial Officer
(Principal Financial Officer)