UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

Form 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020

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 number: 000-52024

ALPHATEC HOLDINGS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**20-2463898**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
1950 Camino Vida Roble, Carlsbad, California	**92008**
(Address of Principal Executive Offices)	**(Zip Code)**

(760) 431-9286
(Registrant's Telephone Number, Including Area Code)

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, par value $0.0001 per share	**ATEC**	**The NASDAQ Global Select Market**

Securities registered pursuant to Section 12(g) of the Exchange 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 15(d) of the Exchange 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 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 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. ☒

Indicate by a 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 registrant's common stock held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate) computed by reference to the price at which the common stock was last sold as of the last business day of the registrant's most recently completed second fiscal quarter (June 30, 2020), was approximately $208.5 million.

The number of outstanding shares of the registrant's common stock, par value $0.0001 per share, as of March 1, 2021 was 95,149,633.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents (or parts thereof) are incorporated by reference into the following parts of this Form 10-K: Certain information required in Part III of this Annual Report on Form 10-K is incorporated from the Registrant's Proxy Statement for the 2021 Annual Meeting of Stockholders.

ALPHATEC HOLDINGS, INC.

FORM 10-K—ANNUAL REPORT
For the Fiscal Year Ended December 31, 2020

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In this Annual Report on Form 10-K, the terms "we," "us," "our," "Alphatec Holdings" and "Alphatec" mean Alphatec Holdings, Inc., our subsidiaries and their subsidiaries. "Alphatec Spine" refers to our wholly-owned operating subsidiary Alphatec Spine, Inc. "SafeOp" refers to our wholly owned operating subsidiary SafeOp Surgical, Inc.

PART I

Item 1. Business

We are a medical technology company focused on the design, development, and advancement of technology for better surgical treatment of spinal disorders. Through our wholly owned subsidiaries, Alphatec Spine, Inc. and SafeOp Surgical, Inc., our mission is to revolutionize the approach to spine surgery through clinical distinction. We are focused on developing new approaches that integrate seamlessly with the Alpha InformatiX™ System to provide real-time, objective nerve information that can enhance the safety and reproducibility of spine surgery.

We have a broad product portfolio designed to address the majority of spinal disorders. We have driven nine consecutive quarters of double-digit growth by exploiting our collective spine experience and investing in research and development to continually differentiate our solutions and improve spine surgery. Revenue from U.S. products was $141.1 million for the year ended December 31, 2020, compared to $108.2 million for the year ended December 31, 2019, representing an increase of $32.9 million, or 30%. We believe our future success will be fueled by introducing market-shifting innovation to the spine market, and we believe that we are well-positioned to capitalize on current spine market dynamics.

Recent Developments

EOS Acquisition

On December 16, 2020, we entered into an agreement to acquire EOS imaging, SA, or EOS. Based in Paris, EOS has developed and commercialized imaging systems (the EOS and EOSedge systems) that provide a full-body, calibrated evaluation of the patient in a standing (weight-bearing) position. The evaluation factors into a holistic approach to the development of customized surgical plans, which can then integrate seamlessly into the operating room.

EOS is globally recognized for its rapid, low dose, biplanar full-body imaging and 3D modeling capabilities. EOS imaging technology informs the entire surgical process and enables precise measurement of anatomical angles and dimensions. The imaging created can improve surgical outcomes by driving a more accurate understanding of patient alignment during diagnosis, characterizing bone quality, elevating the likelihood of surgical goal fulfillment through integration of a fully informed plan into surgery, and supporting a postoperative assessment against the original surgical plan. Additionally, the precise pre-surgical planning capabilities that EOS affords are expected to improve our inventory efficiency, reducing the inventory required to support surgery.

Once closed, the transaction is expected to expand our revenue base through the addition of EOS's revenue run rate and the monetization of information through incremental pull-through and cross-selling opportunities. We expect the acquisition to be accretive to revenue, revenue growth, adjusted EBITDA and free cash flow in the first full year of operations following the transaction close.

On March 5, 2021, we filed a draft offer with the *Autorité des marchés financiers* ("AMF") related to our Tender Offer Agreement (the "Tender Offer Agreement") with EOS to purchase all of the issued and outstanding ordinary shares ("EOS Shares") and outstanding convertible bonds ("OCEANEs") of EOS. The Tender Offer Agreement is subject to clearance by the French Ministry of the Economy and Finance and AMF and will consist of a cash tender offer price of €2.45 (or approximately $2.99) per EOS Share and €7.01 (or approximately $8.55) per OCEANE for a total purchase price of approximately $117.9 million.

In connection with the proposed acquisition of EOS, we announced in December 2020 a definitive securities purchase agreement to raise $138.0 million in a private placement of common stock at a price of $11.11 per share. The private placement, which closed on March 1, 2021, generated net proceeds of approximately $132.0 million, net of fees related to the private placement.

Strategy

Our vision is to be the standard bearer in spine. By leveraging our team's extensive spine experience to create clinically distinct solutions that improve surgical outcomes, we believe that we are positioned to take a greater share of the U.S. spine market, becoming the partner of choice for spine surgeons, hospitals, healthcare systems, and payors.

To achieve our vision and build long-term value, we are committed to attracting, engaging, and retaining the best talent in the industry. We are also driving an organizational transformation by prioritizing the following vital initiatives:

Create Clinical Distinction

We are committed to the development, launch, and promotion of technologies intended to simplify surgical procedures, provide enhanced information for surgeons, and improve patient outcomes. We offer a broad portfolio of products that address the core spine pathologies.

We continue to make investments to advance the clinical distinction of our product portfolio and accelerate revenue growth. During the year ended December 31, 2020 we launched a total of 11 new products and procedures, including the first installment of our novel prone transpsoas procedure ("PTP"), in the fourth quarter. Our comprehensive portfolio now offers over 70 products across our various product categories, of which over 30 were launched between July 2018 and December 2020.

With the expansion of our product portfolio, we continue to see year-over-year increases in revenue contributions from our new product pipeline as product categories per case, average revenue per case, and revenue per surgeon continue to increase. For the year ended December 31, 2020, revenue contribution from products represented approximately 67% of U.S. revenue compared to 37% for the year ended December 31, 2019.

We believe surgeons yearn for expanded intraoperative information that can beget objective decision-making, improved patient outcomes and surgical success. To address this, we have developed, and continue to seek to develop, next-generation access systems, implants, biologics and advanced neuromonitoring, imaging and image guidance and surgical planning technologies that provide seamless integration and enable minimally disruptive spine access that achieves clinical success over a wide range of surgical approaches.

We expect our revenue mix to continue to shift toward newly developed solutions as we continue to bring next generation products to market. Looking to 2021 and beyond, we intend to continue to be a pioneer of industry innovation. As such, we expect continued growth as new solutions compel surgeon adoption of our procedures, increasing the number of our products sold into each clinical procedure.

Compel Surgeon Adoption

An integral part of our strategy is to compel surgeon adoption of the innovative products that we have and will continue to introduce. A key component of our drive to inspire surgeon interest is the "ATEC Experience". The ATEC Experience is an outcome-based educational program for visiting surgeons, and is facilitated at our headquarters in Carlsbad, CA. The program provides an interactive learning environment tailored to surgeon needs through both a peer-to-peer and subject matter-expert approach. We leverage our state-of-the-art lab to enable visiting surgeons to gain deep practical experience in our procedural solutions, which are designed to improve outcomes for surgeons and their patients. Our customers hear first-hand about our role in shaping innovation in spine surgery through executive dialogue and frequent interaction.

The surgeon relationships we are creating through our educational program continue to drive strong growth, evidenced by the increase in surgeon partnerships and surgeon participation in the program, as well as the continued growth of surgeon adoption. Average revenue per surgeon grew 15% in 2020, and revenue attributable to new surgeon customers has continued to outpace overall revenue growth.

Revitalize the Sales Channel

We market and sell our products in the U.S. through a network of independent distributors and direct sales representatives. An objective of our leadership team is to deliver increasingly consistent, predictable growth. To accomplish this, we are strategically partnering with new and existing distributors to create a more dedicated and loyal sales channel for the future. To expand future growth, we have added, and intend to continue to add, higher-volume, clinically adept distributors. We believe the growing footprint will allow us to reach an untapped market of surgeons, hospitals, and national accounts across the U.S., as well as better penetrate existing accounts and territories.

Since 2017, we have made significant changes to drive towards a more strategic and exclusive sales channel, which we believe will continue to position us for durable above-market growth. As part of the changes to our sales channel, we have committed to cease business with non-core legacy distributors, including non-strategic, stocking, and physician-owned distributors, which represented more than $30.0 million of our annualized revenue prior to 2017. We believe that these changes and our shift to a more strategic and exclusive sales channel has eliminated the historic culture of underperformance and refocused our Company on a path to long-term and sustainable growth. While the termination of non-dedicated distribution relationships that do not serve our long-term vision or strategy clouded overall growth metrics in 2017 and 2018, revenue from our strategic sales channel grew by more than 37% in 2020 as compared to 2019.

We intend to continue to drive toward an exclusive network of independent and direct sales agents. Consolidation in the industry is facilitating this process, as large, seasoned agents seek opportunities to partner with spine-focused companies that have innovative and growing product portfolios.

Distributors. Currently, we market and sell our products in the U.S. through a network of independent distributors and direct sales representatives. We have built a more sustainable business by increasing our mix of strategic distribution partners, while simultaneously reducing our reliance on legacy, non-strategic distributors, which are typically non-exclusive partners who desire to continue selling competitive products. We have and will continue to actively transition non-strategic distributors who do not represent our long-term vision out of our sales channel. We believe these efforts will continue to enhance the quality and profile of our distribution channel, allowing us to reach new surgeons and hospitals across the U.S., as well as more effectively penetrate and serve existing territories. During 2020, the percentage of U.S. commercial revenue driven by strategic distributors increased to 92% of our U.S. revenue, up from 88% in 2019, 80% in 2018 and approximately 60% in 2017.

National Accounts. We employ a national accounts team that is responsible for securing access at hospitals and group purchasing organizations ("GPOs"), across the U.S. We have been very successful securing access to hospitals and GPOs, and a majority of our business is achieved through these accounts. We will continue to focus on developing and maintaining relationships with key GPOs and hospital networks to secure favorable contracts and develop strategies to convert or grow business within these existing accounts.

Sales Training and Education. We are also enhancing our sales training and education programs for independent distributors and direct sales representatives to optimize sales productivity.

Spine Anatomy

The spine is the core of the human skeleton and provides important structural support and alignment while remaining flexible to allow movement. The spine is a column of 33 bones that protects the spinal cord and provides the main support for the body. Each bony segment of the spine is referred to as a vertebra (two or more are called vertebrae). The spine has five regions containing groups of similar bones, listed from top to bottom: seven cervical vertebrae in the neck, twelve thoracic vertebrae in the mid-back (each attached to a rib), five lumbar vertebrae in the lower back, five sacral vertebrae fused together to form one bone called the sacrum, which sits in the pelvis, and four coccygeal bones fused together that form the tailbone. At the front of each vertebra is a block of bone called the vertebral body. Vertebrae are stacked on top of each other and separated from each other through a cushioning intervertebral disc in the front, and bony joints in the back, which create the stability and mobility needed for sitting, standing, and walking. Strong muscles and bones, flexible tendons and ligaments and sensitive nerves contribute to a healthy spine. Pain can be caused when any of these structures is affected by strain, injury, or disease.

The Alphatec Solution

Our principal procedural offerings include a wide variety of Approach Technologies designed to achieve clinical success in conditions from degenerative to complex deformity and trauma. Our Approach Technologies comprise intraoperative information and neuromonitoring technologies, access systems, interbody implants, fixation systems, and various biologics offerings; all designed to improve patient outcomes by achieving the three tenets of spine surgery: (1) decompression, (2) stabilization, and (3) alignment.

Over the past 18 months, we have executed our communicated product strategy, leveraging both internal and external resources to provide the sales channel with a differentiated portfolio of new products (11 in 2020 and 12 in 2019) and a strong pipeline of 8-10 annually going forward. Integrated new surgical approaches such as PTP™, advanced technologies such as our SafeOp™ Neural InformatiX System™, and innovations like IdentiTi™, a differentiated portfolio of titanium interbody cages, and Invictus™, a next-generation pedicle screw system, all continue to gain traction and are delivering on management's goal of driving above-market revenue growth. While new products launched since new management took over in late 2017 accounted for less than 10% of total revenue in 2018, that percentage increased to 75% in the fourth quarter of 2020, with a full year of 2020 U.S. product revenue growth of 30%, which substantially outpaces growth-rates seen in today's U.S. spine market.

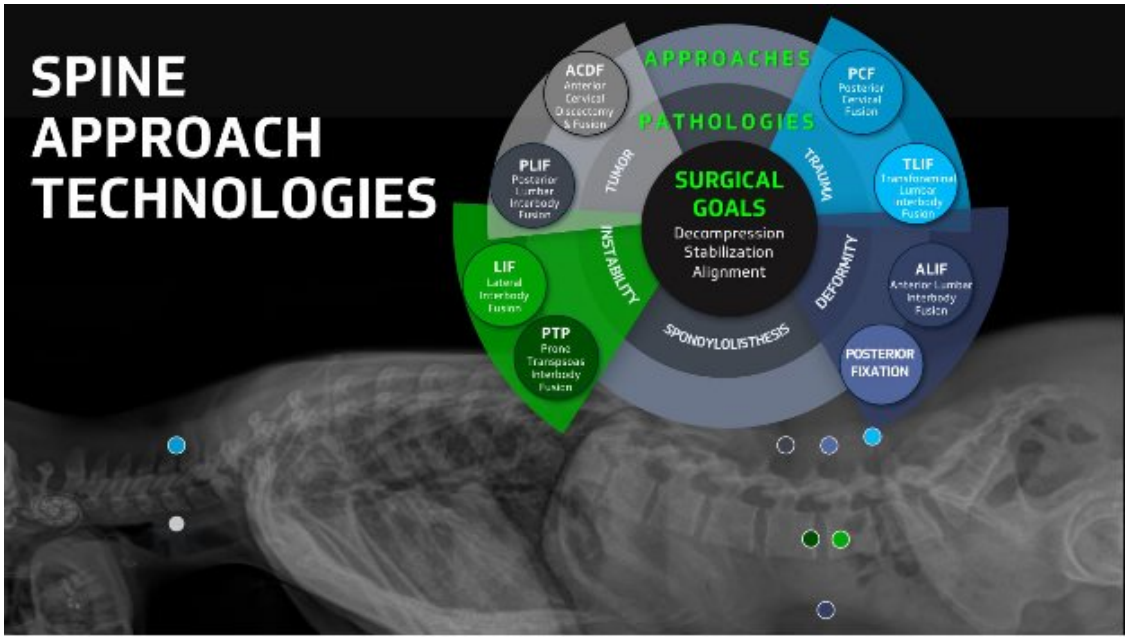

Figure 1: Our portfolio of access systems, implants, technologies and biologics are designed to seamlessly integrate and enhance clinical outcomes across multiple pathologies, regardless of a surgeon's preferred surgical approach.

PTP was designed by the team that created the lateral approach for spinal fusion and is a technique that leverages the benefits achieved via lateral spinal fusion procedures while treating a wide range of patient pathologies. The principal difference PTP has from a standard lateral procedure lies in the patient positioning, where during a PTP procedure the patient is in a prone (face down) position, which allows for a more streamlined and orthogonal approach and provides surgeons a better ability to address many of the challenges associated with the limited adoption of the lateral spinal fusion procedure. More specifically, the PTP technique minimizes unnecessary patient repositioning, enhances time efficiencies, provides surgeons with increased optionality, and more achieves spinal alignment objectives at a higher reproducible rate. To date, our surgeons have performed over 1,000 PTP procedures.

The SafeOp Neural InformatiX System, which is the first advanced technology installment launched from our Alpha InformatiX product platform, delivers real-time, objective and actionable nerve location and health information to surgeons. Integration of real-time nerve location and health information with our advanced access and implant technologies enables ATEC to provide surgeons with procedural solutions that enhance safety and efficiency, while also providing more consistently reproducible results. Based upon adoption rates in both 2019 and 2020, SafeOp has demonstrated its intended clinical value to surgeons by providing consistent improvements the operative experience.

Current Product Portfolio

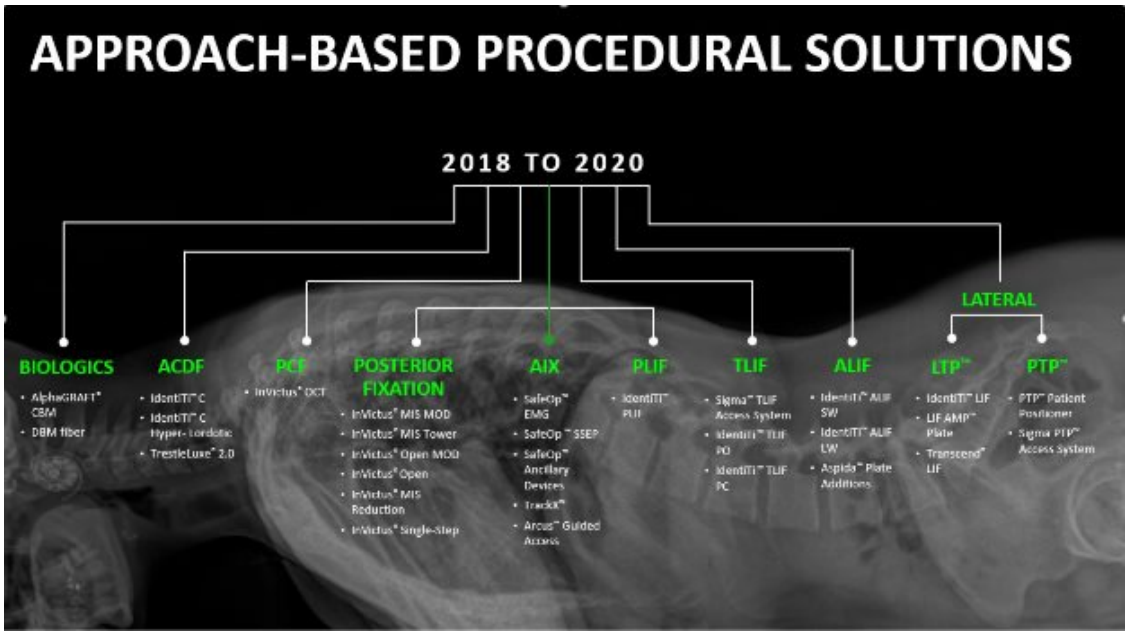

Figure 2: We are creating clinical distinction with our portfolio of procedurally integrated approach-based products and technologies.

Alpha InformatiX

The ***SafeOp Neural InformatiX System*** launched in November 2019 and is the first installment from our Alpha InformatiX product platform. Our Alpha InformatiX product platform is an advanced neuromonitoring solution, which is designed to reduce the risk of intraoperative nerve injury. SafeOp is our patented next-generation technology which automates somatosensory evoked potential ("SSEP") monitoring and is designed to provide surgeons with objective, real-time feedback on an easy-to-use mobile platform, while providing increased intraoperative information that monitors nerve health during a surgical procedure.

Key features of the SafeOp Neural InformatiX System include:

- Proprietary peripheral devices designed to integrate critical neural information into our approaches
- Real-time triggered electromyography ("tEMG") nerve detection designed to provide reliable information regarding the location, direction, and proximity of relevant neural anatomy
- Validated Response Thresholding ("VRT") algorithm designed to deliver industry-leading tEMG nerve detection while reducing the incidence of false positive responses due to electrical noise
- Dynamic tEMG technology which provides real-time feedback during pedicle preparation and screw placement, and is designed to reduce the risk of pedicle breach and neural impingement

- Advance signal processing which provides an unparalleled ability to monitor femoral nerve health throughout lateral approach procedures
- Seamless integration of critical neural information into our Invictus™ posterior fixation instruments, like SingleStep™

We have partnered with TrackX® Technology, Inc. ("TrackX") to further enhance our procedural solutions as well as further increase efficiencies in the operating room while reducing radiation exposure to the surgeon, patient and entire operating room staff. The ***TrackX Instrument Tracking System*** is an intuitive and user-friendly instrument-tracking system that enables precise, real-time imaging feedback for instrument and implant placement. TrackX simulates live fluoroscopy (medical imaging) to aid in localizing anatomy and adjusting surgical tools. Split-screen functionality allows for visualization in lateral, anterior, and posterior views with the use of a single C-arm. With the use of TrackX, imaging guesswork is virtually eliminated, and as a result radiation exposure to the patient, surgeon and surgical team is reduced. Comprised of a small disposable snap, camera, collar, cap and cart, the TrackX Instrument Tracking System can integrate into existing surgical workflows, including our PTP and posterior fixation procedures, all while decreasing radiation exposure and time spent in the operating room.[1]

Access Systems

The ***Sigma™-TLIF Pedicle-based Access System*** provides direct visualization of key anatomical landmarks to help create a reproducible transforaminal lumbar interbody fusion ("TLIF") approach. Key features include:

- Vertebral body distraction which facilitates access to a collapsed disc space
- Integrated fiber-optic light source designed to improve illumination
- Modular shank and blade help provide direct visualization of facet, pars, and lamina
- Independent cranial and caudal retraction which enable customized exposure
- Surgeon-guided medial blade to help support differing patient pathologies
- Quick-connect engagement which provides for a more streamlined assembly

The ***Sigma PTP Access System*** was developed specifically for the PTP procedure and is designed to maximize efficiency and help achieve alignment through increased rigidity, customizable exposure, and intuitive orthogonality. Key features include:

- Singular titanium construct designed to maximize rigidity and reduce weight
- Independent anterior and posterior retraction mechanisms designed to enable customized exposure
- Intuitive fluoroscopic indicators that provide reinforced orthogonality
- Low-profile rounded blade design to enhance fluoroscopic visibility to the disc space
- Contoured blade tips help establish optimal psoas retraction
- Integrated fiber-optic light source designed to provide improved illumination of the exposure site
- A quick-connect articulating arm post for more streamlined engagement

[1] Wang TY, Hamouda F, Sankey EW, Mehta VA, Yarbrough CK, Abd-El-Barr MM. Computer-assisted instrument navigation versus conventional C-arm fluoroscopy for surgical instrumentation: Accuracy, radiation time, and radiation exposure. *Am J Roentgenol* 2019;213(3):651–658. doi: 10.2214/ajr.18.20788

The ***PTP Patient Positioning System*** was developed specifically for the PTP procedure as an adjunct to the Sigma-PTP Access System. Designed to maximize the positional effects of having the patient in a prone position while streamlining operating room setup and provide a fully integrated rigid construct, the system's key features include:

- Ultra-radiolucent carbon fiber frame to help enhance fluoroscopic visibility
- Bi-lateral structural support to minimize patient movement
- Adjustable side paddle position to accommodate varying patient habitus
- Coronal bending mechanism to create reproducible access to L4-5 and upper lumbar regions
- Integrated nylon straps to eliminate need for taping patient to the table
- Integrated bed-rail system which enables fixation of the Sigma-PTP Access System to facilitate a singular rigid construct
- Compatibility with Jackson frame to help simplify pre-operational setup

The ***Squadron Lateral Retractor*** is designed to maximize patient outcomes during lateral-approach surgery with the patient in the lateral decubitus position. The retractor offers multiple features to accommodate a variety of surgical techniques, as well as more quickly establish access, leading to minimized retraction times. Key features include:

- Robust construction that provides a stable corridor with the ability to replace blades in-situ
- Independent cranial and caudal blade movement which enables more precise surgical aperture
- Telescoping blades and a fourth blade articulation that allows surgeons to traverse challenging anatomy
- LevelToe™ mechanics that provide a parallel toe up to 15° to reduce tissue creep

Fixation Systems

The ***Invictus® Spinal Fixation Systems (Open and MIS)***, which were introduced in 2019, are comprehensive thoracolumbar fixation systems that are designed to treat a range of pathologies. Fully integrated with our SafeOp electromyography ("EMG technology"), Invictus assists surgeons with intraoperative adaptability and surgical efficiency through a variety of surgical approaches including open, minimally invasive ("MIS") or hybrid approaches. Key system features include:

- Helical Flange®: construct confidence provided by the Invictus thread form designed to reduce the potential to cross-thread and eliminate tulip splay
- Adaptability to surgical needs with a variety of implants designed to accept multiple rod diameters and materials
- Instrumentation designed to provide more predictable surgical outcomes in the most challenging or complex procedural scenarios

The ***Invictus MIS SingleStep™ System*** is an extension of the Invictus platform, which offers a simplified approach to traditional minimally invasive pedicle screw placement through utilization of an all-in-one driver which is designed to improve surgical efficiency without compromising accuracy. SingleStep eliminates guidewire management and targeting needles, while reducing instrument passes, procedural steps, screw insertion time, and reliance on fluoroscopy.[2] Key features include:

- Integrated, steerable stylet which enables robust pedicle targeting
- Surgeon-controlled stylet advancement with visual indication of stylet depth

[2] Data on file – LIT-17021

- Robust, low-profile, extended tab design to accommodate complex manipulations
- Quick-connect ratcheting handle which inserts the screw over the stylet
- Leverages screws with Invictus thread form designed to reduce cross-threading and tulip splay
- Serrated, self-starting screw tip which is intended to eliminate the need for tapping
- When combined with SafeOp automated EMG technology, the SingleStep approach offers a real-time trajectory and placement confirmation during stylet and screw insertion, helping to reinforce confidence of safe screw placement

The *Invictus Modular Fixation Systems (Open and MIS)* are extensions of the Invictus platform and are designed to enhance adaptability with the power of screw modularity. Key features include:

- Screws with Invictus thread designed to help form reduced cross-threading and tulip splay
- Modular tulip interconnection strength which is 4.5x greater than the average pull-out strength of pedicle screws[3,4]
- Robust instruments and customizable modular implants designed to accept multiple rod diameters and materials to adapt intraoperatively to surgical techniques
- Guidewire-less SingleStep technique designed to advance the standard of modular fixation to deliver modular shank and Sigma blade with one instrument pass
- Integrates with SafeOp Neural InformatiX System and is intended to provide surgeons with more predictable real-time and actionable information which helps detect and monitor the health of at-risk nerves during posterior fixation procedures
- Audible, tactile and visual confirmations of tulip-to-shank attachment designed to instill confidence

The ***Invictus OsseoScrew® System*** is an expandable screw system used in conjunction with the Invictus platform, and as an alternative to the use of cemented fenestrated screws. OsseoScrew is designed to restore the integrity of the spinal column in the absence of fusion (for a limited period) in patients with advanced stage tumors involving the thoracic and lumbar spine, and whose life expectancy is of insufficient duration to permit achievement of fusion. Key features include:

- 29% greater pull-out strength over conventional pedicle screws[5]
- Expansion zone location which is designed to optimize pedicle fixation
- Stabilization in patients with compromised bone structures

The ***Arsenal™ Spinal Fixation System*** is a comprehensive thoracolumbar fixation platform with components to support procedures aimed to fix a range of degenerative to deformity pathologies and both primary and revision surgical procedures. The Arsenal Spinal Fixation System also contains thread forms to accommodate both traditional and medialized (cortical) trajectories. Key features include:

- Ergonomically designed instrumentation
- Multiple instrument options designed to accommodate anatomical and pathological diversity
- Multiple screw options which include polyaxial, uniplanar, monoaxial, reduction, and sacral screws

3 Liljenqvist U, Hackenberg L, Link T, Halm H. Pullout strength of pedicle screws versus pedicle and laminar hooks in the thoracic spine. Acta Orthop Belg. 2001;67(2):157-63.

4 Data on file TR-101078

5 *Vishnubhotla S, McGarry WB, Mahar AT, et al. A titanium expandable pedicle screw improves initial pullout strength as compared with standard pedicle screws.* Spine J *2011;11:777-81.*

- Multiple pelvic fixation options
- Low-profile, dual-lead screws
- Color-coded shanks

The ***Aspida® Anterior Lumbar Plating System*** is a fixation system for anterior lumbar interbody fusion ("ALIF") and consists of specifically designed lumbar and lumbo-sacral anterior plates and dual-lead self-drilling and self-tapping screws. Its intuitive instrument design, which is complemented by the AnchorMax™ locking mechanism is designed to provide efficient and effective anterior plating. Key features include:

- Consistent 3.5 mm thickness which provide a low-profile design for reduced risk of vascular interference
- An integrated passive locking mechanism
- Dual-lead self-drilling and self-tapping screws for improved surgical efficiency
- Intuitive instrumentation

The ***AMP Anti-Migration Plate*** is a plating system designed to be used with our lateral interbody spacer system and is designed to provide integrated fixation for lateral lumbar interbody fusion ("LIF") constructs. Key features include:

- Lean 4 mm profile
- One and Two-screw plate options
- Zero-step screw locking with audible, tactile, and visible indicators
- Divergent screw angulation of 25°
- Convergent screw angulation of 5°
- Compatibility with IdentiTi and Transcend lateral implants
- Ability to implant as assembled with or after placement of the interbody implant

Solanas Posterior Cervico/Thoracic Fixation System and Avalon Occipital Plate consist of rods, polyaxial screws, hooks, and connectors that provide a solution for posterior cervico/thoracic fusion procedures. The Solanas Posterior Cervico/Thoracic System is designed to be used in combination with Zodiac Degenerative Spinal Fixation System and Avalon Occipital Plate, thereby providing surgeons with a solution for occipito-cervico-thoracic fixation. The Avalon Occipital Plate has a unique buttress design for optimal bone graft placement and fusion, including three points of plate rotation and translation, which is designed to ease the placement of the plate.

The ***Invictus OCT Spinal Fixation System*** is an extension of the Invictus platform with implant solutions to span the occipital-cervical-thoracic regions and is compatible with our Arsenal® and Invictus Spinal Fixation Systems using various rod-to-rod connectors and/or transitional rods.

The ***Trestle Luxe Anterior Cervical Plate System*** is a fixation system used in anterior cervical discectomy and fusion procedures ("ACDF"). Key features include:

- Low-profile design intended to reduce the irritation of the tissue adjacent to the plate following surgery
- Large window design intended to enable enhanced graft site and end plate visualization, which ease plate placement
- Self-retaining screw-locking mechanism which provides quick and easy plate locking
- Flush profile upon screw insertion

The ***Insignia Anterior Cervical Plate System*** is our next-generation ACDF fixation system. Key features include:

- Industry leading screw angle and trajectory capabilities with a full range of screw and plate options to meet varied clinical requirements
- Low-profile, attached active locking mechanism which allows for visual and tactile confirmation of secure blocker locking as well as compatible bone screw drivers which minimize the number of passes into a surgical site
- Locking screwdriver that allows for improved axial retention of the screw when compared to traditional tapered drivers and simplified usability when compared to traditional threaded driver and screw interfaces
- A single level plate technique, which allows for single-pass placement of plate and cage into surgical site as well as selection of optimized plate length, reproducible screw placement and optimized plate alignment

Interbody Systems

IdentiTi Porous Ti Interbody Implants are designed to provide the biological, biomechanical, and imaging characteristics that surgeons seek in a fusion construct. The subtractive process used to manufacture each IdentiTi Implant results in more predictable mechanical performance and enhanced imaging characteristics. IdentiTi implants take advantage of bone's affinity for titanium and because of their porosity, have a surface roughness that enhances stability.[6] Key features include:

- Commercially pure titanium
- Multiple lordosis and footprint options to accommodate varying surgical requirements across all interbody fusion procedures including ACDF, ALIF, LIF, PLIF, and TLIF
- Fully interconnected porosity to promote bony on-growth and in-growth (as seen in animal model)[7,8]
- 60% porosity which provides for reduced density and designed to enhance intraoperative and postoperative imaging
- Porous titanium has a bone-like stiffness[9]

Transcend Lateral Interbody Implants are PEEK interbody spacers for use in LIF procedures. Transcend and IdentiTi Lateral Implants are designed to function with the same instrumentation, providing surgeons with a more seamless experience regardless of implant material. The Transcend implant offering provides continuity in lordotic options with a refined design to meet a surgeon's lateral needs. Key features include:

- Quick-connect inserter feature which is designed to eliminate point loading
- Bulleted distal tip which helps provide smooth disc-space insertion
- Directional anti-migration teeth to help resist expulsion
- Tantalum markers designed to enhance imaging via fluoroscopy

6 *Data on file – LIT-84895*
7 *Data on file – LIT-84895*
8 *Data on file – LIT-84894*
9 *Data on file – LIT-84890*
10 *Data on file – LIT-84898*

Battalion Posterior Interbody Implants combine a PEEK body with our patented TiTec™ (titanium) coating technology to take advantage of the characteristics of both materials. The PEEK material allows surgeons to assess fusion through the implant while the titanium-coating provides initial stability due to the roughened surface. Key features include:

- Straight ("PS") and curved ("PC") options to accommodate PLIF and TLIF surgical approaches
- Multiple length options to accommodate varying surgical requirements
- Patented TiTec coating helps improve expulsion strength when compared to PEEK[10]
- TiTec coating combines visualization and stiffness benefits of PEEK with the initial stability characteristics of titanium
- Uncoated nose structured to help combat delamination and wear debris issues

Novel is a PEEK intervertebral body fusion system consisting of varying lengths, widths, and heights to accommodate individual patient anatomies and procedural approaches. Key features include:

- Various size and shape options to accommodate different surgical approaches including PLIF, TLIF, ALIF, ACDF
- Bulleted nose designed to facilitate easy insertion and matches anatomy
- Multiple footprint options to accommodate different anatomy and surgical procedures
- Tooth pattern helps to prevent migration and adds stability
- Large contact area intended to increase subsidence resistance
- PEEK radiographic markers which ease visual assessment of implant placement and fusion process
- Color-coded titanium color-coding by size to help simplify identification

Biologics

Cervical Structural Allograft Spacers consist of our portfolio of allograft spacers which are available in a range of shapes and sizes, each with corresponding instrumentation, and are intended for use in the cervical spine.

3D ProFuse Demineralized Bone Scaffold consists of a sponge-like demineralized bone matrix that has been pre-cut into sizes to fit within a spinal spacer. The 3D ProFuse Demineralized Bone Scaffold provides a natural scaffold derived entirely from bone that can be placed into a void within a spinal spacer or on top of a spinal spacer. The sponge-like qualities of the scaffold allow a surgeon to compress the scaffold and place it into a small space. Following placement, the scaffold expands for maximum contact between the spinal spacer and the endplate of the vertebral body and is designed to promote fusion.

Neocore Osteoconductive Matrix is designed to provide an effective core environment for bone growth through a synthetic scaffold. When hydrated with patient bone marrow aspirate ("BMA"), Neocore becomes a complete bone graft, which possesses all the necessary components of bone growth. Engineered to perform like natural bone, Neocore's composition and porosity provide the benefits of rapid revascularization throughout graft and supports replacement of three-dimensional matrix with healthy new bone growth. Offering excellent handling characteristics, these pre-formed strips are flexible to conform to adjacent structures, compressible, and moldable.

AlphaGRAFT Demineralized Bone Matrix (DBM) consists of demineralized human tissue that is mixed with a bioabsorbable carrier and intended for use in surgery for bone grafting and is available in gel, putty, and fiber forms. AlphaGRAFT DBM Fibers combine the regenerative capacity of interconnected fibers with the maximum availability of growth factors endogenous to bone. Composed of 100% demineralized fibers, AlphaGRAFT DBM Fibers offer moldable, cohesive handling characteristics and provide an osteoconductive scaffold for the delivery of autologous stem cells.

6 *Data on file: LIT-84701*

AlphaGRAFT Cellular Bone Matrix is our most recent addition to this family of products and is a growth factor-enriched cellular bone matrix ("CBM") with two differentiating technologies. Cellular activity via retention of endogenous mesenchymal stem cells and osteoprogenitor cells; and intracellular growth factors from the bone and bone marrow stroma contribute to amplify growth factors bound to the extracellular matrix of the bone, resulting in a product that exhibits the angiogenic, osteoinductive, and mitogenic growth factors necessary for bone growth. AlphaGRAFT CBM may be delivered bound to allograft bone in granular, fiber, or structural form.

Amnioshield Amniotic Tissue Barrier is an allograft for spinal surgical barrier applications. The composite amniotic membrane reduces inflammation and enhances healing at the surgical site, reduces scar tissue formation and provides an excellent dissection plane.

Products and Technologies Under Development

Internally Developed Products and Technologies

We are expanding our portfolio of products and technologies to enhance clinical outcomes across multiple pathologies, regardless of a surgeon's preferred surgical approach. We expect to launch 8-10 new products during 2021.

EOS imaging

We recently announced an agreement to acquire EOS Imaging, S.A ("EOS"). EOS is a leader in outcome-improving orthopedic medical imaging and software solutions, and is globally recognized for its rapid, low dose, biplanar full-body imaging and 3D modeling capabilities. The EOS technology is designed to inform the entire surgical process by capturing a calibrated, full-body image in a standing (weight-bearing) position, enabling precise measurement of anatomical angles and dimensions. The resulting imaging is intended to drive a more accurate understanding of patient alignment during diagnosis, elevate the likelihood of surgical goal fulfillment by integrating a fully informed plan into surgery and enable a postoperative assessment against the original surgical plan.

Utilizing advanced predictive analytics, we believe that EOS technology is uniquely capable of correlating preoperative and postoperative imaging to assist, from the operating room, the achievement of alignment, the most prognostic factor of long-term successful surgical outcomes. Compared to the conventional spine-imaging modalities, X-ray and CT, we believe that the EOS systems significantly reduce radiation doses and exam times, producing unstitched, full-body, biplanar, high-quality images at lower cost.

Key Features of the EOS portfolio are as follows:

- Head-to-toe biplanar exams in the weight-bearing position are designed to provide accurate assessment of factors causing pain and disability to better guide treatment and surgical decisions. Surgical planning from a standing position is expected to enable alignment parameters that more closely match functional posture.
- Driven by the ALARA[11] principle, we believe that the EOS or EOSedge exam delivers a minimal dose of radiation to reduce the long-term impact of repeated imaging.

[7] *ALARA (As Low As Reasonably Achievable) is a safety principle designed to minimize radiation doses and releases of radioactive materials.*

- Patient-specific measurements, dimensions and angles are intended to allow informed clinical decisions at all stages of care.
- EOSapps and EOSlink is preoperative planning software designed to anticipate surgical results and select components for spine surgery pairs with surgical technologies for precise execution with EOSlink.

We expect the acquisition of EOS to close in the second quarter of 2021.

Research and Development

Our research and development team seeks to continually improve our core product offerings and introduce new products to increase our penetration of the U.S. spine market. We are focused on developing technology platforms and products that span the largest market segments addressing degenerative and deformity spine pathologies. We have transformed our development process by focusing our development programs and leveraging integrated teams to reduce the time frame from product concept to market commercialization. We also collaborate with our surgeon partners to design products to enhance the surgeon experience, simplify surgical techniques, and reduce overall costs, while improving patient outcomes. Most of our product development efforts are fully integrated in one facility, allowing us to bring products from concept to market rapidly responding to surgeon and patient needs. Our resources include a technology advancement cell for rapid prototyping, a cadaveric lab, and mechanical testing laboratory.

Sales and Marketing

We market and sell our products through a sales force consisting of dedicated and non-dedicated independent distributors and dedicated employee direct sales representatives. We employ a team of area vice-presidents ("AVPs"), and regional business managers ("RBMs"), who are responsible for overseeing the overall sales channel process in their territories. Although surgeons in the U.S. typically make the ultimate decision to use our products, we generally bill the hospital for the products that are used and pay commissions to the sales representative or the sales agent based on payment received from the hospital. We compensate our direct sales employees, AVP's and RBMs through salaries and incentive bonuses based on performance measures.

We are currently in the process of making significant changes to drive a more dedicated and loyal sales channel, including; (i) eliminating our traditional stocking distributors; (ii) moving many of our existing distributor relationships to more dedicated partnerships; and (iii) attracting new, high-quality dedicated distributors. We believe these changes will enhance future growth as we secure more dedicated, clinically adept distribution partners that can further penetrate existing and new geographic markets.

We evaluate and select our distribution partners and sales employees based upon their expertise in selling spinal devices, reputation within the surgeon community, geographical coverage and established sales network.

We also employ a national accounts team that is responsible for securing access at hospitals and GPOs, across the U.S. We have had strong success with securing access to hospitals and GPOs. We believe this access is a key differentiator for us and much of our current business is achieved through these accounts. We will continue to focus our efforts and investment on developing and maintaining relationships with key GPOs and hospital networks to secure favorable contracts and develop strategies to convert or grow business within existing accounts.

We market our products at various industry conferences, organized surgical training courses, and in industry trade journals and periodicals.

Surgeon Training and Education

We focus our surgeon training efforts on delivering critical technical skills needed to perform the entire spinal fusion procedure through a peer-to-peer approach for qualified surgeon customers. Well-timed surgeon education programs drive customer conversion and loyalty through leadership and excellence by focusing on delivering value through improved clinical outcomes. We devote significant resources to training and education and are committed to a culture of scientific excellence and ethics.

We believe that one of the most effective ways to introduce and build market demand for our products is by training and educating spine surgeons, independent distributors, and direct sales representatives to the benefits and use of our products. Sales training programs will be a platform for learning and organizational development, ensuring the sales force is clinically competitive and considered an essential resource to all stakeholders. We focus on cross-functional collaboration and alignment to deliver timely and relevant programs to meet surgeon and representative needs and positively impact the business.

Our training and education programs are designed to support new product introductions to the market as well as ongoing portfolio advancement. Our resources are nimble and responsive and include field-based engagements to supplement our core curriculum. We believe this is an effective way to increase overall surgeon adoption of our new products.

We believe that surgeons, independent distributors, and direct sales representatives will become exposed to the merits and distinguishing features of our products through our training and education programs, and that such exposure will increase the use and promotion of our products. With a focus on the entire procedure, we expect to build awareness of the breadth of our product offering. We are conscientious in the pursuit of delivering value to all stakeholders. Our goal is to provide surgeon education programs, coupled with a growing and comprehensive sales training platform that create a sustainable competitive advantage for our organization.

Manufacture and Supply

We rely on third-party suppliers for the manufacture of all our implants and instruments. Outsourcing implant manufacturing reduces our need for capital investment and reduces operational expense. Additionally, outsourcing provides expertise and capacity necessary to scale up or down based on demand for our products. We select our suppliers to ensure that all of our products are safe, effective, adhere to all applicable regulations, are of the highest quality, and meet our supply needs. We employ a rigorous supplier assessment, qualification, and selection process targeted to suppliers that meet the requirements of the U.S. Food and Drug Administration (FDA), and International Organization for Standardization ("ISO"), and quality standards supported by internal policies and procedures. Our quality assurance process monitors and maintains supplier performance through qualification and periodic supplier reviews and audits.

The raw materials used in the manufacture of our non-biologic products are principally titanium, titanium alloys, stainless steel, cobalt chrome, ceramic, allograft, and PEEK. With the exception of PEEK, none of our raw material requirements is limited to any significant extent by critical supply. We are subject to the risk that Invibio, one of a limited number of PEEK suppliers, will be unable to supply PEEK in adequate amounts and in a timely manner. We believe our supplier relationships and quality processes will support our potential capacity needs for the foreseeable future.

With respect to biologics products, we are FDA-registered and licensed in the states of California, New York, and Florida, the only states that currently require licenses. Our facility and the facilities of the third-party suppliers we use are subject to periodic unannounced inspections by regulatory authorities and may undergo compliance inspections conducted by the FDA and corresponding state and foreign agencies. Because our biologics products are processed from human tissue, maintaining a steady supply can sometimes be challenging. We have not experienced significant difficulty in locating and obtaining the materials necessary to fulfill our production requirements, and we have not experienced a meaningful disruption to sales orders.

In connection with the sale of our international business to Globus Medical Ireland, Ltd, a subsidiary of Globus Medical, Inc. and its affiliated entities (collectively "Globus"), in September 2016, we and Globus entered into a product manufacture and supply agreement (the "Supply Agreement"), pursuant to which, at agreed-upon prices, we agreed to supply to Globus certain of our legacy implants and instruments that at the time were being offered for sale by us outside of the United States. Pursuant to the Supply Agreement, we are responsible for ensuring that all of the products delivered to Globus meet all agreed-upon specifications for such products. We have agreed to not market and sell spinal implant products outside of the United States for a period ending two years following the termination of the Supply Agreement. The initial term of the Supply Agreement expired in September 2019, at which point, Globus had the option to extend the term for up to two additional twelve-month periods subject to Globus meeting specified purchase requirements. Globus has exercised its options to extend the agreement through August 2021, at which time we expect that the Supply Agreement will expire and revenue from Globus will discontinue.

Competition

Although we believe that our current broad product portfolio and development pipeline is differentiated and has numerous competitive advantages, the spinal implant industry is highly competitive, subject to rapid technological change, and significantly affected by new product introductions. We believe that the principal competitive factors in our market include:

- improved outcomes for spine pathology procedures
- ease of use, quality and reliability of product portfolio
- effective and efficient sales, marketing and distribution
- quality service and an educated and knowledgeable sales network
- technical leadership and superiority
- surgeon services, such as training and education
- responsiveness to the needs of surgeons
- acceptance by spine surgeons
- product price and qualification for reimbursement; and
- speed to market.

Both our currently marketed products and any future products we commercialize are subject to intense competition. We believe that our most significant competitors are Medtronic (Sofamor Danek), Johnson & Johnson (DePuy Spine), Stryker, NuVasive, Zimmer Biomet, Globus, SeaSpine Holdings Corp., and others, many of which have substantially greater financial resources than we do. In addition, these companies may have more established distribution networks, entrenched relationships with physicians and greater experience in developing, launching, marketing, distributing and selling spinal implant products.

Some of our competitors also provide non-operative therapies for spine disorder conditions. While these non-operative treatments are considered to be an alternative to surgery, surgery is typically performed in the event that non-operative treatments are unsuccessful. We believe that, to date, these non-operative treatments have not caused a material reduction in the demand for surgical treatment of spinal disorders.

Intellectual Property

We rely on a combination of patent, trademark, copyright, trade secret and other intellectual property laws, nondisclosure agreements, proprietary information ownership agreements and other measures to protect our intellectual property rights. We believe that in order to have a competitive advantage, we must develop, maintain and enforce the proprietary aspects of our technologies. We require our employees, consultants, co-developers, distributors and advisors to execute agreements governing the ownership of proprietary information and use and disclosure of confidential information in connection with their relationship with us. In general, these agreements require these individuals and entities to agree to disclose and assign to us all inventions that were conceived on our behalf or which relate to our property or business and to keep our confidential information confidential and only use such confidential information in connection with our business.

Patents. As of December 31, 2020, we and our affiliates owned, or we exclusively owned 162 issued U.S. patents, 40 pending U.S. patent applications and 148 issued or pending foreign patents. We own multiple patents relating to unique aspects and improvements for several of our products. We do not believe that the expiration of any single patent is likely to significantly affect our intellectual property position.

Trademarks. As of December 31, 2020, we and our affiliates owned 25 registered U.S. trademarks and 10 registered trademarks outside of the U.S.

Government Regulation

Our products are subject to extensive regulation by the FDA and other U.S. federal and state regulatory bodies and comparable authorities in other countries. Our products are subject to regulation under the Federal Food, Drug and Cosmetic Act ("FDCA"), and in the case of our tissue products, also under the Public Health Service Act ("PHSA"). To ensure that our products are safe and effective for their intended use, the FDA regulates, among other things, the following activities that we or our partners perform and will continue to perform:

- product design and development;
- product testing;
- non-clinical and clinical research;
- product manufacturing;
- product labeling;
- product storage;
- premarket clearance or approval;
- advertising and promotion;
- product marketing, sales and distribution;
- import and export; and
- post-market surveillance, including reporting deaths or serious injuries related to products and certain product malfunctions.

Government Regulation—Medical Devices

FDA's Premarket Clearance and Approval Requirements. Unless an exemption applies, each medical device we wish to commercially distribute in the United States will require either FDA clearance of a premarket notification requesting permission for commercial distribution under Section 510(k) of the FDCA, also referred to as a 510(k) clearance, or approval of a premarket approval application, ("PMA"). 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. Under the FDCA medical devices are classified into one of three classes -Class I, Class II or Class III-depending on the degree of risk associated with the use of the device and the extent of manufacturer and regulatory controls deemed to be necessary by the FDA to reasonably ensure their safety and effectiveness.

Class I devices are those with the lowest risk to the patient for which safety and effectiveness can be reasonably assured by adherence to a set of regulations, referred to as General Controls, which require compliance with the applicable portions of the FDA's Quality System Regulation ("QSR"), facility registration and product listing, reporting of adverse events and malfunctions, and appropriate, truthful and non-misleading labeling and promotional materials. Some Class I devices also require 510(k) clearance by the FDA, though most Class I devices are exempt from the premarket notification requirements. Class II devices are those that are subject to the General Controls, as well as Special Controls, which can include performance standards, product-specific guidance documents and post-market surveillance. Manufacturers of most Class II devices are required to submit to the FDA a premarket notification under Section 510(k) of the FDCA. Class III devices include devices deemed by the FDA to pose the greatest risk such as life-supporting or life-sustaining devices, or implantable devices, in addition to those deemed not substantially equivalent following the 510(k) process. The safety and effectiveness of Class III devices cannot be reasonably assured solely by compliance with the General Controls and Special Controls described above. Therefore, these devices must be the subject of an approved PMA. Both 510(k)s and PMAs are subject to the payment of user fees at the time of submission for FDA review.

If the FDA determines that the device is not "substantially equivalent" to a predicate device following submission and review of a 510(k) premarket notification, or if the manufacturer is unable to identify an appropriate predicate device and the new device or new use of the device presents a moderate or low risk, the device sponsor

may either pursue a PMA approval or seek reclassification of the device through the de novo process. Our current products on the market in the U.S. are Class II devices marketed under FDA 510(k) premarket clearance.

510(k) Clearance Pathway. To obtain 510(k) clearance, we must submit a premarket notification demonstrating that the proposed device is substantially equivalent to a device legally marketed in the United States. A predicate device is a legally marketed device that is not subject to premarket approval, i.e., a device that was legally marketed prior to May 28, 1976 (pre-amendments device) and for which a PMA is not required, a device that has been reclassified from Class III to Class II or I, or a device that was found substantially equivalent through the 510(k) process. To be "substantially equivalent," the proposed device must have the same intended use as the predicate device, and either have the same technological characteristics as the predicate device or have different technological characteristics and not raise different questions of safety or effectiveness than the predicate device. Clinical data is sometimes required to support substantial equivalence.

The FDA's goal is to review and act on each 510(k) within 90 days of submission, but the process usually takes from nine to 12 months, and it may take longer if the FDA requests additional information. Most 510(k)s do not require supporting data from clinical trials, but the FDA may request such data. If the FDA agrees that the device is substantially equivalent, it will grant clearance to commercially market the device.

After a device receives 510(k) clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a new or major change in its intended use, will require a new 510(k) clearance or, depending on the modification, require premarket approval. The FDA requires each manufacturer to determine whether the proposed change requires the submission of a 510(k) or PMA, but the FDA can review any such decision and can disagree with a manufacturer's determination. If the FDA disagrees with a manufacturer's determination, the FDA can require the manufacturer to cease marketing and/or recall the modified device until 510(k) clearance or PMA is obtained. If the FDA requires us to seek a new 510(k) clearance or PMA for any modifications to a previously cleared product, we may be required to cease marketing or recall the modified device until we obtain this clearance or approval. Also, in these circumstances, we may be subject to significant fines or penalties. We have made and plan to continue to make enhancements to our products for which we have not submitted 510(k)s or PMAs, and we will consider on a case-by-case basis whether a new 510(k) or PMA is necessary.

The FDA began to consider proposals to reform its 510(k) marketing clearance process in 2011, and such proposals could include increased requirements for clinical data and a longer review period. Specifically, in response to industry and healthcare provider concerns regarding the predictability, consistency and rigor of the 510(k) regulatory pathway, the FDA initiated an evaluation of the 510(k) program, and as part of the Food and Drug Administration Safety and Innovation Act ("FDASIA"), Congress reauthorized the Medical Device User Fee Amendments with various FDA performance goal commitments and enacted several "Medical Device Regulatory Improvements" and miscellaneous reforms, which are further intended to clarify and improve medical device regulation both pre- and post-clearance and approval. Further, in December 2016, the 21st Century Cures Act ("Cures Act"), was signed into law. The Cures Act, among other things, is intended to modernize the regulation of devices and spur innovation, but its ultimate implementation is unclear.

Premarket Approval Pathway. Class III devices require PMA approval before they can be marketed, although some pre-amendment Class III devices for which the FDA has not yet required a PMA are cleared through the 510(k) process. The PMA process is generally more complex, costly and time consuming than the 510(k) process. A PMA must be supported by extensive data including, but not limited to, extensive technical information regarding device design and development, preclinical and clinical trials, manufacturing and labeling information to demonstrate to the FDA's satisfaction the safety and effectiveness of the device for its intended use. The PMA application must provide valid scientific evidence that demonstrates to the FDA's satisfaction reasonable assurance of the safety and effectiveness of the device for its intended use. Following receipt of a PMA, the FDA determines whether the application is sufficiently complete to permit a substantive review. If the FDA accepts the application for review, it has 180 days under the FDCA to complete its review of the PMA, although in practice, the FDA's review often takes significantly longer, and can take up to several years. During this review period, the FDA may request additional information or clarification of information already provided, and the FDA may issue a major deficiency letter to the applicant, requesting the applicant's response to deficiencies communicated by the FDA. Also during the review period, an advisory panel of experts from outside the FDA may be convened to review and

evaluate the application and provide recommendations to the FDA as to the approvability of the device. The FDA may or may not accept the panel's recommendation. In addition, the FDA will conduct a preapproval inspection of the manufacturing facility to ensure compliance with quality system regulation (QSR). The PMA process can be expensive, uncertain and lengthy, and a number of devices for which FDA approval has been sought by other companies have never been approved by the FDA for marketing.

Clinical Trials. Clinical trials are almost always required to support a PMA and are sometimes required for a 510(k). All clinical investigations of investigational devices to determine safety and effectiveness must be conducted in accordance with the FDA's investigational device exemption ("IDE"), regulations which govern investigational device labeling, prohibit promotion of the investigational device, and specify an array of recordkeeping, reporting and monitoring *responsibilities* of study sponsors and study investigators. If the device is determined to present a "significant risk" to human health, the manufacturer may not begin a clinical trial until it submits an IDE application 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, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. In addition, the study must be approved by, and conducted under the oversight of, an Institutional Review Board ("IRB"), for each clinical site. The IRB is responsible for the initial and continuing review of the IDE, and may pose additional requirements for the conduct of the study. If an IDE application is approved by the FDA and one or more IRBs, human clinical trials may begin at a specific number of investigational sites with a specific number of patients, as approved by the FDA. If the device presents a non-significant risk to the patient, a sponsor may begin the clinical trial after obtaining approval for the trial by one or more IRBs without separate approval from the FDA, but must still follow abbreviated IDE requirements, such as monitoring the investigation, ensuring that the investigators obtain informed consent, and labeling and record-keeping requirements. A clinical trial may be suspended by FDA, the sponsor or an IRB 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 efficacy of a device to the satisfaction of the FDA, or may be equivocal or otherwise not be sufficient to obtain approval of a device.

Pervasive and Continuing FDA Regulation. After a device is placed on the market, numerous FDA and other regulatory requirements continue to apply. These include:

- registration and listing requirements, which require manufacturers to register all manufacturing facilities and list all medical devices placed into commercial distribution;
- the QSR, which requires manufacturers, including third-party contract manufacturers, to follow stringent design, testing, control, supplier/contractor selection, documentation, record maintenance and other quality assurance controls, during all aspects of the manufacturing process and to maintain and investigate complaints;
- labeling regulations and unique device identification requirements;
- advertising and promotion requirements;
- restrictions on sale, distribution or use of a device;
- FDA prohibitions against the promotion of products for uncleared or unapproved "off-label" uses;
- medical device reporting obligations, which require that manufacturers submit reports to the FDA of device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if it were to reoccur;
- medical device correction and removal reporting regulations, which require that manufacturers report to the FDA field corrections and product recalls or removals if undertaken to reduce a risk to health posed by the device or to remedy a violation of the FDCA that may present a risk to health;
- device tracking requirements; and
- other post-market surveillance requirements, which apply when necessary to protect the public health or to provide additional safety and effectiveness data for the device.

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

- warning letters and untitled letters;
- fines, injunctions, consent decrees, and civil penalties;
- recalls, withdrawals, administrative detention, or seizure of products;
- operating restrictions, partial suspension or total shutdown of production;
- withdrawals of 510(k) clearances or PMA approvals that have already been granted;
- refusal to grant 510(k) clearance or PMA approvals of new products; and/or
- criminal prosecution.

Our facilities, records and manufacturing processes are subject to periodic announced and unannounced inspections by the FDA to evaluate compliance with applicable regulatory requirements.

Regulation of Human Cells, Tissues, and Cellular and Tissue-based Products. Certain of our products are regulated as human cells, tissues, and cellular and tissue-based products ("HCT/Ps"). Section 361 of the PHSA authorizes the FDA to issue regulations to prevent the introduction, transmission or spread of communicable disease. HCT/Ps regulated as "361" HCT/Ps are subject to requirements relating to registering facilities and listing products with the FDA, screening and testing for tissue donor eligibility, or Good Tissue Practice, when processing, storing, labeling, and distributing HCT/Ps, including required labeling information, *stringent* record keeping, and adverse event reporting, among other applicable requirements and laws. If the HCT/P is minimally manipulated, is intended for homologous use only and meets other requirements, the HCT/P will not require 510(k) clearance, PMA approval, a Biologics License Applications, or other premarket authorization from the FDA before marketing.

Environmental Matters

Our facilities and operations are subject to extensive federal, state, and local environmental and occupational health and safety laws and regulations. These laws and regulations govern, among other things, air emissions; wastewater discharges; the generation, storage, handling, use and transportation of hazardous materials; the handling and disposal of hazardous wastes; the cleanup of contamination; and the health and safety of our employees. Under such laws and regulations, we are required to obtain permits from governmental authorities for some of our operations. If we violate or fail to comply with these laws, regulations or permits, we could be fined or otherwise sanctioned by regulators. We could also be held responsible for costs and damages arising from any contamination at our past or present facilities or at third-party waste disposal sites. We cannot completely eliminate the risk of contamination or injury resulting from hazardous materials, and we may incur material liability as a result of any contamination or injury.

Compliance with Certain Applicable Statutes

We are subject to various federal and state laws pertaining to healthcare fraud and abuse, including anti-kickback laws, false claims laws, criminal health care fraud laws, physician payment transparency laws, data privacy and security laws and foreign corrupt practice laws. Violations of these laws are punishable by criminal and/or civil sanctions, including, in some instances, fines, imprisonment and, within the United States, exclusion from participation in government healthcare programs, including Medicare, Medicaid and Veterans Administration health programs. These laws are administered by, among others, the U.S. Department of Justice, the Office of Inspector General of the Department of Health and Human Services and state attorneys general. Many of these agencies have increased their enforcement activities with respect to medical device manufacturers in recent years.

The federal Anti-Kickback Statute, prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing, arranging for or recommending a good or service, for which payment may be made in whole or part under federal healthcare programs, such as the Medicare and Medicaid programs. The Anti-Kickback Statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. For example, the definition of "remuneration" has been broadly interpreted to include anything of value, including, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payments, ownership interests and providing anything at less than its fair market value. In addition, the

Patient Protection and Affordable Health Care Act, which, as amended by the Health Care and Education Reconciliation Act, and collectively referred to as ACA. ACA, among other things, amends the intent requirement of the federal Anti-Kickback Statute. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. In addition, ACA provides that the government may assert that a claim including items or services resulting from a violation of the Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act.

In implementing the Anti-Kickback Statute, the Department of Health and Human Services Office of Inspector General ("OIG"), has issued a series of regulations, known as the safe harbors, which began in July 1991. These safe harbors set forth provisions that, in circumstances where all the applicable requirements are met, will assure healthcare providers and other parties that they will not be prosecuted under the Anti-Kickback Statute. The failure of a transaction or arrangement to fit precisely within one or more safe harbors does not necessarily mean that it is illegal or that prosecution will be pursued. However, conduct and business arrangements that do not fully satisfy all requirements of an applicable safe harbor may result in increased scrutiny by government enforcement authorities such as the OIG. Penalties for violations of the Anti-Kickback Statute include criminal penalties and civil sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other federal healthcare programs. Many states have antikickback laws that are similar to the federal law, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, and may also result in penalties, fines, sanctions for violations, and exclusions from state or commercial programs.

We have entered into various agreements with certain surgeons that perform services for us, including some who make clinical decisions to use our products. Some of our referring surgeons own our stock, which they received from us as consideration for services performed. We frequently review these arrangements to determine whether they are in compliance with applicable laws and regulations. In addition, physician-owned distribution companies ("PODs"), have become decreasingly involved in the sale and distribution of medical devices, including products for the surgical treatment of spine disorders. In many cases, these distribution companies enter into arrangements with hospitals that bill Medicare or Medicaid for the furnishing of medical services, and the physician-owners are among the physicians who refer patients to the hospitals for surgery. On March 26, 2013 the OIG issued a Special Fraud Alert entitled "Physician-Owned Entities", (the "Fraud Alert"), in which the OIG concluded, among other things, that PODs are "inherently suspect under the anti-kickback statute" and that PODs present "substantial fraud and abuse risk and pose dangers of patient safety." Since 2013, the OIG has further increased its scrutiny of PODs and the Department of Justice has brought several high-profile cases against physician owners.

The federal False Claims Act prohibits persons from knowingly filing or causing to be filed a false or fraudulent claim to, or the knowing use of false statements to obtain payment from, the federal government. Private suits filed under the False Claims Act, known as qui tam actions, can be brought by individuals on behalf of the government. These individuals, sometimes known as "relators" or, more commonly, as "whistleblowers," may share in any amounts paid by the entity to the government in fines or settlement. The number of filings of qui tam actions has increased significantly in recent years, causing more healthcare companies to have to defend a False Claim Act action. If an entity is determined to have violated the federal False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties of between $10,000 to $22,000 for each separate false claim and may be subject to exclusion from Medicare, Medicaid and other federal healthcare programs. Various states have also enacted similar laws modeled after the federal False Claims Act which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

The Health Insurance Portability and Accountability Act ("HIPAA"), created two new federal crimes: healthcare fraud and false statements relating to healthcare matters. The healthcare fraud statute prohibits knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private payors. The ACA changed the intent requirement of the healthcare fraud statute to such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. A violation of this statute is a felony and may result in fines, imprisonment or possible exclusion from Medicare, Medicaid and other federal healthcare programs. The false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. A violation of this statute is a felony and may result in similar sanctions.

ACA also includes various provisions designed to strengthen significantly fraud and abuse enforcement in addition to those changes discussed above. Among these additional provisions include increased funding for enforcement efforts and new "sunshine" provisions to require us to report and disclose to the Centers for Medicare and Medicaid Services ("CMS"), any payment or "transfer of value" made or distributed to physicians or teaching hospitals. These sunshine provisions also require certain group purchasing organizations, including physician-owned distributors, to disclose physician ownership information to CMS. We and other device manufacturers are required to collect and annually report specific data on payments and other transfers of value to physicians and teaching hospitals. There are various state laws and initiatives that require device manufacturers to disclose to the appropriate regulatory agency certain payments or other transfers of value made to physicians, and in certain cases prohibit some forms of these payments, with the risk of fines for any violation of such requirements.

HIPAA also includes privacy and security provisions designed to regulate the use and disclosure of "protected health information" ("PHI"), which is health information that identifies a patient and that is held by a health care provider, a health plan or health care clearinghouse. We are not directly regulated by HIPAA, but our ability to access PHI for purposes such as marketing, product development, clinical research or other uses is controlled by HIPAA and restrictions placed on health care providers and other covered entities. HIPAA was amended in 2009 by the Health Information Technology for Economic and Clinical Health Act ("HITECH") which strengthened the rule, increased penalties for violations and added a requirement for the disclosure of breaches to affected individuals, the government and in some cases the media. We must carefully structure any transaction involving PHI to avoid violation of HIPAA and HITECH requirements.

Almost all states have adopted data security laws protecting personal information including social security numbers, state issued identification numbers, credit card or financial account information coupled with individuals' names or initials. We must comply with all applicable state data security laws, even though they vary extensively, and must ensure that any breaches or accidental disclosures of personal information are promptly reported to affected individuals and responsible government entities. We must also ensure that we maintain compliant, written information security programs or run the risk of civil or even criminal sanctions for non-compliance as well as reputational harm for publicly reported breaches or violations.

If any of our operations are found to have violated or be in violation of any of the laws described above and other applicable state and federal fraud and abuse laws, we may be subject to penalties, among them being civil and criminal penalties, damages, fines, exclusion from government healthcare programs, and the curtailment or restructuring of our operations.

Third-Party Reimbursement

In the U.S., healthcare providers generally rely on third-party payors, principally private insurers and governmental payors such as Medicare and Medicaid, to cover and pay for all or part of the cost of a spine surgery in which our medical devices are used. We expect that sales volumes and prices of our products will depend in large part on the continued availability of reimbursement from such third-party payors. These third-party payors may deny reimbursement if they determine that a device used in a procedure was not medically necessary in accordance with cost-effective treatment methods, as determined by the third-party payor, or was used for an unapproved indication. Particularly in the U.S., third-party payors continue to carefully review, and increasingly challenge, the prices charged for procedures and medical products. Medicare coverage and reimbursement policies are developed by CMS, the federal agency responsible for administering the Medicare program, and its contractors. CMS establishes these Medicare policies for medical products and procedures and such policies are periodically reviewed and updated. While private payors vary in their coverage and payment policies, the Medicare program is viewed as a benchmark. Medicare payment rates for the same or similar procedures vary due to geographic location, nature of the facility in which the procedure is performed (i.e., teaching or community hospital) and other factors. We cannot assure you that government or private third-party payors will cover and provide adequate payment for the procedures in which our products are used. ACA and other reform proposals contain significant changes regarding Medicare, Medicaid and other third party payors.

Among these changes was the imposition of a 2.3% excise tax on domestic sales of medical devices that went into effect on January 1, 2013. This tax has resulted in a significant increase in the tax burden on our industry. In December 2015, the U.S. Congress adopted and President Obama signed into law the Consolidated Appropriations

Act of 2016. Among other things, this legislation put in place a two-year moratorium on the device tax through the end of 2017. Other elements of the ACA include numerous provisions to limit Medicare spending through reductions in various fee schedule payments and by instituting more sweeping payment reforms, such as bundled payments for episodes of care, the establishment of "accountable care organizations" under which hospitals and physicians will be able to share savings that result from cost control efforts, comparative effectiveness research, value-based purchasing, and the establishment of an independent payment advisory board.

We expect that political party control of the House of Representatives, the Senate and even State-level elections could shift the trajectory of current health policy, including potential to modify, repeal, or otherwise invalidate all, or certain provisions of, the ACA. Since its enactment, there have also been other judicial and Congressional challenges to certain aspects of the ACA. As a result, there have been delays in the implementation of, and action taken to repeal or replace, certain aspects of the ACA. In March 2017, the United States House of Representatives introduced legislation known as the American Health Care Act ("AHCA"), which, if enacted, would amend or repeal significant portions of the ACA. Among other changes, the AHCA, would repeal the medical device tax, eliminate penalties on individuals and employers that fail to maintain or provide minimum essential coverage and create refundable tax credits to assist individuals in buying health insurance. The AHCA would also make significant changes to Medicaid by, among other things, making Medicaid expansion optional for states, repealing the requirement that state Medicaid plans provide the same essential health benefits that are required by plans available on the exchanges, modifying federal funding, including implementing a per capita cap on federal payments to states, and changing certain eligibility requirements. Given recent changes of political party control of the House of Representatives, it is uncertain when or if the provisions in the AHCA will become law, or the extent to which any such changes may impact our business.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These changes include the Budget Control Act of 2011, which resulted in reductions to Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013 and will stay in effect through 2025 unless additional Congressional action is taken, as well as, the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several types of providers, including hospitals and imaging centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. An expansion in government's role in the U.S. healthcare industry may lower reimbursements for procedures using our products, reduce medical procedure volumes, and adversely affect our business and results of operations, possibly materially.

We believe that the overall escalating cost of medical products and services has led to, and will continue to lead to, increased pressures on the healthcare industry to reduce the costs of products and services. We cannot assure you that government or private third-party payors will cover and provide adequate payment for the procedures using our products. In addition, it is possible that future legislation, regulation, or reimbursement policies of third-party payors will adversely affect the demand for procedures using our products or our ability to sell our products on a profitable basis. The unavailability or inadequacy of third-party payor coverage or reimbursement could have a significant adverse effect on our business, operating results and financial condition.

Human Capital

As of December 31, 2020, we had 296 employees in the U.S., 231 of which were based in our Carlsbad, California headquarters, covering all of the following functional areas: sales, customer service, marketing, clinical education, advanced manufacturing, quality assurance, regulatory affairs, research and development, human resources, finance, legal, information technology and administration.

Our workforce is highly educated and diverse, which we believe is important for our continued success as a leading innovator in the medical device market. We employ a number of strategies to best enable us to attract, retain, and engage our team members. To build a steady and diverse pipeline of talent, we have a robust recruiting program, which is focused on attracting and retaining the talent we believe is necessary to help achieve our strategy and mission. Further, we employ recruiting processes that mitigate unconscious biases and promote diverse candidate pools. Our employee base is comprised of men, women, underrepresented individuals, individuals with disabilities, and protected veterans.

To attract and retain employees, we offer competitive, performance-based compensation and benefits, opportunities for discounted equity ownership, employee recognition programs, career development opportunities, and access to continual growth through in-house live trainings, as well as support and reimbursement for external trainings and educational programs. In addition, to further expand employee enrichment and engagement, we periodically survey our employees regarding their satisfaction levels. We use these survey results to determine how we can continue to create work environments that energize our employees and enable them to develop and maintain a positive working culture. We completed a survey in December 2020, in which over 98% of respondents indicated a willingness to recommend the Company to friends and family as a desirable place to work. High employee satisfaction is also reflected in our high employee engagement and extremely low undesired turnover, which was below 3% for 2020.

We also provide opportunities for our employees to participate in community volunteer and clean-up programs, as well as offer health and wellness programs to promote a healthy and active lifestyle for our employees and foster camaraderie within our employee base. In addition to our health and wellness program offerings, our new corporate headquarters includes indoor and outdoor workout spaces, to which our employees will be able to access throughout the day, as well as various fitness and workout classes that will also be accessible once we have transitioned from our current remote-work environment.

We have never experienced a work stoppage due to labor difficulties and believe that our relations with our employees are good. We currently have no employees working under collective bargaining agreements.

Health and Safety

We have taken steps to best ensure the health and safety of our employees globally during the COVID-19 pandemic. With most of our workforce temporarily working virtually, we have provided learning resources to enable this transition. We also have provided health and wellness initiatives throughout the year to promote the continued wellbeing of our employees. Finally, despite the global pandemic, we have been able to maintain our employee workforce without material contraction.

Corporate and Available Information

We are a Delaware corporation incorporated in March 2005. Our principal executive office is located at 1950 Camino Vida Roble, Carlsbad, California 92008 and our telephone number is (760) 431-9286. Our Internet address is www.atecspine.com. We are not including the information contained on our website as a part of, or incorporating it by reference into, this Annual Report on Form 10-K. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, are available to you free of charge through the Investor Relations section of our website as soon as reasonably practicable after such materials have been electronically filed with, or furnished to, the Securities and Exchange Commission ("SEC").

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the following risk factors and all other information contained or incorporated by reference in this Annual Report on Form 10-K. The risks and uncertainties described below are not the only risks faced by the Company. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial may become important factors that affect us. If any of such risks or the risks described below occur, either alone or taken together occur, our business, financial condition or results of operations could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you may lose some or all of your investment.

Risks Related to Our Business and Industry

Our business plan relies on certain assumptions pertaining to the market for our products that, if incorrect, may adversely affect our growth and profitability.

We allocate resources based on assumptions about trends in the development of and treatment for spine disorders and the resulting demand for our products. Our assumptions with respect to an aging population, access to broad medical coverage and longer life expectancy may not be accurate. Increasing awareness and use of non-invasive treatments and other shifts in technologies and treatments, emergence of new biological or synthetic materials and acceptance of emerging technologies and procedures could adversely affect demand for our products. If our assumptions prove to be incorrect or if alternative treatments to those we offer gain further acceptance, then demand for our products could be significantly less than we anticipate and we may not be able to achieve or sustain growth or profitability.

We are in a highly competitive market segment, face competition from large, well-established medical device companies with significant resources, and may not be able to compete effectively.

The market in which we operate is highly competitive, subject to rapid technological change and affected by new products and market activities of industry participants. Our competitors include numerous large and well-capitalized companies such as Medtronic Sofamor Danek, a subsidiary of Medtronic; Depuy Spine, a subsidiary of Johnson & Johnson; Stryker; NuVasive; Zimmer Biomet; Globus and SeaSpine Holdings Corp. Several of our competitors enjoy competitive advantages over us, including:

- more established relationships with healthcare providers, distribution networks and healthcare payers;
- broader product offerings, name recognition, more recognizable product trademarks, intellectual property portfolios;
- greater resources for product research and development, clinical data, patent litigation, and launching, marketing, distributing and our selling products; and
- greater experience in obtaining and maintaining FDA and other regulatory clearances or approvals for products and product enhancements.

In addition, at any time our current competitors or other companies may develop alternative treatments, products or procedures for the treatment of spine disorders that compete directly or indirectly with our products, including ones that prove to be superior to our spine surgery products. For these reasons, we may not be able to compete successfully against our existing or potential competitors. Any such failure could lead us to further modify our strategy, lower our prices, increase the commissions we pay on sales of our products and have a significant adverse effect on our business, financial condition and results of operations.

A significant percentage of our revenues are derived from the sale of our systems that include polyaxial pedicle screws.

Net sales of our systems that include polyaxial pedicle screws represented approximately 50% our net sales for both 2019 and 2020 and will continue to be significant in the future. A decline in sales of these systems for any reason would have a significant adverse impact on our business, financial condition and results of operations. We

rely on licenses related to our polyaxial pedicle screw systems in order to be able to use various proprietary technologies that are material to these systems. Our rights to use these technologies are subject to the continuation of the licenses and enforceability of the intellectual property rights in such technologies. Certain of our licenses contain provisions that allow the licensor to terminate the license upon specific conditions. Our rights under each of the licenses are subject to our continued compliance with the terms of the license, including certain diligence, disclosure and confidentiality obligations and the payment of royalties and other fees. Because of the complexity of our product and the patents we have licensed, determining the scope of the license and related obligations can be difficult and can lead to disputes between us and the licensor. An unfavorable resolution of such a dispute could lead to an increase in the royalties payable pursuant to the license or termination of the license. Any action that would prevent us from manufacturing, marketing and selling these systems or increase the costs associated with these systems would have a significant adverse effect on our business, financial condition and results of operations.

Our sales and marketing efforts are largely dependent upon third parties, many of which are non-exclusive and free to market products that compete with our products.

Most of our independent distributor arrangements are non-exclusive and our distributors are not obligated to buy our products and can represent competing products. Many of our independent distributors also market and sell our competitors' products. Our competitors may be able, by offering higher commission payments or otherwise, to convince our independent distributors to terminate their relationships with us, carry fewer of our products or reduce their sales and marketing efforts for our products. Our independent distributors have varying expertise in marketing and selling specialty medical devices. To the extent that our independent distributors, retailers and brokers are distracted from selling our products or do not employ sufficient efforts in managing and selling our products, our sales and results of operations could be adversely affected.

The development of a large distribution network may be expensive and time consuming. Because of the intense competition for their services, we may be unable to recruit or retain qualified independent distributors. Some of our competitors enter into exclusive distribution agreements. Further, we may not be able to enter into agreements with independent distributors on commercially reasonable terms. Even if we do enter into agreements with new independent distributors, it may take 90 to 120 days for new distributors to reach full operational effectiveness. Some distributors may not generate revenue as quickly as we expect, may not commit the necessary resources to effectively market and sell our products and may not ultimately be successful in selling our products. Our business, financial condition and results of operations will be materially adversely affected if we do not attract new distributors or if the marketing and sales efforts of our distributors or sales representatives are unsuccessful.

To be commercially successful, we must convince the spine surgeon community that our products are an attractive alternative to our competitors' products.

In order for us to sell our products, spine surgeons must be convinced that our products are superior to competing products. Acceptance of our products depends on educating the spine surgeon community as to the distinctive characteristics, perceived benefits, safety and cost-effectiveness of our products compared to our competitors' products and on training spine surgeons in the proper application of our products. If we are not successful in convincing the spine surgeon community of the merit of our products, our sales will decline and we will be unable to increase or achieve and sustain growth or profitability. Additionally, if surgeons are not properly trained, they may misuse or ineffectively use our products, which may result in unsatisfactory patient outcomes, patient injury, negative publicity or lawsuits against us, any of which could have a significant adverse effect on our business, financial condition and results of operations.

We rely on a limited number of third parties to manufacture and supply our products. Any problems experienced by these manufacturers could result in a delay or interruption in the supply of our products until such manufacturer cures the problem or until we locate and qualify an alternative source of supply.

We rely on third party manufacturers of our implants and instruments. We currently rely on a limited number of third parties and any prolonged disruption in the operations of our third party suppliers could have a negative impact on our ability to supply products to customers. We may suffer losses as a result of business interruptions that exceed coverage under our manufacturer's insurance policies. Other events beyond our control could also disrupt our product development and commercialization efforts until such events can be resolved or we can put in place third-party contract manufacturers to assume this manufacturing role. In addition, if we are required to change

manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines. Delays associated with the verification of a new manufacturer or the re-verification of an existing manufacturer could negatively affect our ability to develop products or supply products to customers in a timely manner. Any disruption in the manufacture of our products by our third-party suppliers could have a material adverse impact on our business, financial condition and results of operations.

We depend on third-party suppliers, and in one case a single supplier, for key raw materials and the loss of any of these third-party suppliers, or their inability to supply us with adequate raw materials, could harm our business.

We rely on a number of suppliers and in one case on a single source vendor, Invibio, to provide the raw materials used in the production of our products. We have a supply agreement with Invibio, pursuant to which it supplies us with PEEK, a biocompatible plastic that we use in some of our spacers. Invibio is one of a limited number of companies approved to distribute PEEK in the United States for use in implantable devices. We depend on a limited number of sources of human tissue for use in our biologics products. Our supply of human tissue from our current suppliers and our current inventory of biologics products may not be available at current levels or may not be sufficient to meet our needs. Our dependence on a single third-party PEEK supplier and the challenges we may face in obtaining adequate supplies of biologics products involve several risks, including limited control over pricing, availability, quality and delivery schedules. Any supply interruption in a limited or sole sourced component or raw material could materially harm our ability to source manufactured products until a new source of supply could be found. We may be unable to find a sufficient alternative supply channel in a reasonable time period or on commercially reasonable terms, if at all, which would have a significant adverse effect on our business, financial condition and results of operations.

If we or our suppliers fail to comply with FDA regulations, the manufacture of our products could be delayed.

We and our suppliers are required to comply with extensive FDA regulations. The FDA audits compliance with some of these regulations . If we or our suppliers have significant non-compliance issues or if any corrective action plan is not sufficient, we or our suppliers could be forced to halt the manufacture or sale of our products until such problems are corrected to the FDA's satisfaction, which could have a material adverse effect on our business, financial condition and results of operations. Further, our products could be subject to recall if the FDA determines, for any reason, that our products are not safe or effective. Any recall or FDA requirement demanding that we seek additional approvals or clearances could result in delays, costs associated with modification of a product, loss of revenue and potential operating restrictions imposed by the FDA, all of which could have a material adverse effect on our business, financial condition and results of operations.

Demand for products and prices at which customers and patients are willing to pay for products depend upon the ability of our customers to obtain adequate third-party coverage and reimbursement product purchases.

Sales of our products depend in part on the availability of adequate coverage and reimbursement from third-party payers, principally Medicare, Medicaid and private health insurance plans, to pay for all or a portion of the costs and fees associated with the use of our products. While procedures using our currently marketed products are eligible for reimbursement in the United States, if surgical procedures utilizing our products are performed on an outpatient basis, it is possible that private payers may no longer provide reimbursement for the procedures using our products without further supporting data on the procedure. Any delays in obtaining, or an inability to obtain, adequate coverage or reimbursement for procedures using our products could significantly affect the acceptance of our products and have a significant adverse effect on our business. Additionally, third-party payers continue to review their coverage policies carefully for existing and new therapies and can, without notice, deny coverage for treatments that include the use of our products. Our business would be negatively impacted if there are any changes that reduce reimbursement for our products.

Consolidation in the healthcare industry could lead to price concessions or exclusion of some suppliers from some markets, which could have an adverse effect on our business, financial condition or results of operations.

The healthcare industry has undergone and continues to undergo consolidation creating new companies with greater market power, which will cause competition among providers of products and services to industry participants to become more intense. This in turn has resulted and will likely continue to result in greater pricing

pressures and the exclusion of certain suppliers from important market segments as GPOs, independent delivery networks and large single accounts continue to use their market power to consolidate purchasing decisions for some of our customers. We expect that market demand, government regulation, third-party reimbursement policies and societal pressures will continue to change the worldwide healthcare industry, resulting in further business consolidations and alliances among our customers, which may reduce competition, exert further downward pressure on the prices of our products and may adversely impact our business, financial condition or results of operations.

We may be subject to or otherwise affected by federal and state healthcare laws, including fraud and abuse, health information privacy and security, and disclosure laws, and could face substantial penalties if we are unable to fully comply with such laws.

Although we do not provide healthcare services, submit claims for third-party reimbursement, or receive payments directly from any third-party payers for our products or the procedures in which our products are used, healthcare regulation significantly impacts our business. Healthcare fraud and abuse, health information privacy and security, and disclosure laws potentially applicable to our operations include:

- the federal Anti-Kickback Statute, as well as state analogs, which prohibits, among other things, knowingly and willfully soliciting, receiving, offering or providing remuneration, intended to induce the purchase or recommendation of an item or service reimbursable under a federal (or state or commercial) healthcare program (such as the Medicare or Medicaid programs);

- federal and state bans on physician self-referrals, which prohibits, subject to exceptions, physician referrals of Medicare and Medicaid patients to an entity providing certain "designated health services" if the physician or its immediate family member has any financial relationship with the entity;

- false claims laws that prohibit, among other things, knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payers that are false or fraudulent;

- The Health Insurance Portability and Accountability Act, or HIPAA, and its implementing regulations, which created federal criminal laws that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

- the state and federal laws "sunshine" provisions that require detailed reporting and disclosures to the CMS and applicable states of any payments or "transfer of value" made or distributed to prescribers and other health care providers, and for certain states prohibit some forms of these payments, require the adoption of marketing codes of conduct, require the reporting of marketing expenditures and pricing information and constrain relationships with physicians and other referral sources;

- the Health Information Technology for Economic and Clinical Health Act ("HITECH"), which impose restrictions on uses and disclosures of protected health information and civil and criminal penalties for non-compliance and require the reporting of breaches to affected individuals, the government and in some cases the media in the event of a violation; and

- a variety of state-imposed privacy and data security laws which require the protection of personal information beyond health information and which require reporting to state officials in the event of breach or violation and which impose both civil and criminal penalties.

If our operations, or those of our independent sales agents and distributors violate any of such laws or any regulations that may apply to us, we may be subject to civil and criminal penalties, damages, fines, exclusion from federal healthcare programs and/or the curtailment or restructuring of our operations. If the healthcare providers, sales agents, distributors or other entities with which we do business are found to violate applicable laws, they may be subject to sanctions, which could also have a negative impact on us. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results.

Sales and marketing practices in the healthcare industry have been the subject of increased scrutiny from governmental agencies, and we believe that this trend will continue. Prosecutorial scrutiny and governmental oversight over the retention of healthcare professionals as consultants has affected and may continue to affect how

medical device companies retain healthcare professionals as consultants. Our precautions to detect and prevent noncompliance with applicable laws may not be effective in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. Any action against us for violation of these laws, even if we successfully defend against them, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

If we fail to timely obtain FDA clearances or approvals for our future products or modifications to our products, our ability to commercially distribute and market our products could suffer.

Our medical devices are subject to extensive regulation by the FDA and other governmental authorities. The clearance and approval process, particularly with the FDA, can be costly and time consuming, and such clearances or approvals may not be granted on a timely basis, if at all. In particular, the FDA permits commercial distribution of most new medical devices only after clearance under Section 510(k) of the Federal Food, Drug and Cosmetic Act, or 510(k), or approval of a premarket approval application ("PMA"). The FDA may change its 510(k) clearance process, which could make it more restrictive and increase the time or expense required to obtain clearances or could make it unavailable for some of our products. A PMA must be submitted if the device cannot be cleared through the 510(k) process or is not exempt from premarket review by the FDA and must be supported by extensive data, including results of preclinical studies and clinical trials, manufacturing and control data and proposed labeling, to demonstrate to the FDA's satisfaction the safety and effectiveness of the device for its intended use. The PMA process is more costly and uncertain than the 510(k) clearance process. In addition, any modification to a 510(k)-cleared device that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, design or manufacture, requires a new 510(k) clearance or possibly a PMA.

Our commercial distribution and marketing of any products or product modifications that we develop will be delayed until regulatory clearance or approval is obtained. In addition, the regulatory approval process for our new products or product modifications may take significantly longer than anticipated. The FDA may not require a new product or product modification to go through the lengthy and expensive PMA approval process. The FDA can delay, limit or deny clearance or approval of a device for many reasons, including:

- our inability to demonstrate to the satisfaction of the FDA or the applicable regulatory entity or notified body that our products are safe or effective for their intended uses, or that the clinical and other benefits of the device outweigh the risks;
- disagreement of the FDA or the applicable regulatory body with the design or implementation of our clinical trials or the interpretation of data from pre-clinical studies or clinical trials;
- serious and unexpected adverse effects experienced by participants in our clinical trials;
- the data from our pre-clinical studies and clinical trials may be insufficient to support clearance or approval, where required;
- the manufacturing process or facilities we use may not meet applicable requirements; or
- potential that approval policies or regulations of the FDA or applicable regulatory bodies change significantly in a manner rendering our clinical data or regulatory filings insufficient for clearance or approval.

Delays in obtaining regulatory clearances and approvals may delay or prevent commercialization of products we develop, require us to perform costly tests or studies, diminish any competitive advantages that we might otherwise have obtained; and reduce our ability to collect revenues.

If we choose to acquire new and complementary businesses, products or technologies, we may be unable to complete these acquisitions or successfully integrate them in a cost-effective and non-disruptive manner.

Our success depends in part on our ability to continually enhance and broaden our product offering. Accordingly, we have pursued and intend to pursue the acquisition of complementary businesses, products or technologies instead of developing them ourselves. We do not know if we will be able to successfully complete any

acquisitions, including the pending acquisition of EOS, or whether we will be able to successfully integrate any acquired business. Our ability to successfully grow through acquisitions depends upon our ability to identify, negotiate, complete and integrate suitable acquisition targets. These efforts could be expensive and time consuming, disrupt our ongoing business and distract management. If we are unable to integrate any future or recently acquired businesses, products or technologies effectively, our business, financial condition and results of operations will be materially adversely affected.

We are dependent on our senior management team, sales and marketing team, engineering team and key surgeon advisors, and the loss of any of them could harm our business.

Our continued success depends in part upon the continued availability and contributions of our senior management, sales and marketing team and engineering team and the continued participation of our key surgeon advisors. We compete for personnel and advisors with other companies and organizations, many of which have greater name recognition and resources than we do. Changes to our senior management team, sales and marketing team, engineering team and key surgeon advisors, or our inability to attract or retain other qualified personnel or advisors, could have a significant adverse effect on our business, financial condition and results of operations.

Security breaches, loss of data and other disruptions could compromise sensitive information related to our business, prevent us from accessing critical information or expose us to liability, which could adversely affect our business and our reputation.

We regularly collect and store sensitive data, including legally protected patient health and personally identifiable information, intellectual property information, and proprietary business information. We manage and maintain our applications and data utilizing on-site systems. These applications and data encompass a wide variety of business critical information. The secure processing, storage, maintenance and transmission of this critical information is vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take measures to protect sensitive information from unauthorized access or disclosure, our information technology and infrastructure may be vulnerable to attacks by hackers, viruses, breaches or interruptions. Any such security incidents could compromise our networks and the information stored there could be accessed by unauthorized parties, disclosed, lost or stolen. We have measures in place that are designed to detect and respond to such security incidents. Any such security incidents could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, government enforcement actions and regulatory penalties. Unauthorized access, loss or disclosure could also interrupt our operations and result in damage to our reputation, each of which could adversely affect our business.

Nearly all of our operations are currently conducted in locations that may be at risk of damage from fire, earthquakes or other natural disasters.

We conduct nearly all of our business activities in or near known wildfire areas and earthquake fault zones. We have taken precautions to safeguard our facilities, including obtaining property and casualty insurance, and implementing health and safety protocols. We have developed an information technology disaster recovery plan. However, any future natural disaster, such as a fire or an earthquake, could cause substantial delays in our operations, damage or destroy our equipment or inventory and cause us to incur additional expenses. A disaster could seriously harm our business, financial condition and results of operations. Our facilities would be difficult to replace and would require substantial lead time to repair or replace. The insurance we maintain against earthquakes, fires, and other natural disasters would not be adequate to cover a total loss of our facilities, may not be adequate to cover our losses in any particular case and may not continue to be available to us on acceptable terms, or at all.

Public health crises, political crises, and other catastrophic events or other events outside of our control may impact our business.

A natural disaster (such as tsunami, power shortage, or flood), public health crisis (such as a pandemic or epidemic), political crisis (such as terrorism, war, political instability or other conflict), or other events outside of our control that may occur and may adversely impact our business and operating results. Moreover, these types of events could negatively impact surgeon or patient spending in the impacted region(s), which could adversely impact our operating results. We monitor such events and take actions that we deem reasonable given the circumstances. In

the future other types of crises, may create an environment of business uncertainty around the world, which may hinder sales and/or supplies of our products nationally and internationally.

In December 2019, a novel strain of coronavirus, COVID-19, was reported to have surfaced in Wuhan, China and subsequently spread to multiple countries, including the United States. The spread of COVID-19 has disrupted the United States' healthcare and healthcare regulatory systems and diverted healthcare resources away from, and delayed FDA approval with respect some products. It is unknown how long these disruptions could continue. Additionally, COVID-19's spread, which has had a broad global impact, including restrictions on travel and quarantine polices put into place by businesses and governments, may materially affect us economically by causing disruptions in our supply chain or distribution channels, or, by causing delays or cancellations of elective surgical procedures due to lack of hospital resources or staffing. As the global outbreak of COVID-19 continues to evolve, the extent to which it may impact our business will depend on future developments, which are highly uncertain and cannot be predicted.

Alphatec Holdings is a holding company with no operations, and unless it receives dividends or other payments from its subsidiaries, it will be unable to fulfill its cash obligations.

As a holding company with no business operations, Alphatec Holdings' material assets consist only of the common stock of its subsidiaries, dividends and other payments received from time to time from its subsidiaries, and the proceeds raised from the sale of debt and equity securities. Alphatec Holdings' subsidiaries are legally distinct from Alphatec Holdings and have no obligation, contingent or otherwise, to make funds available to Alphatec Holdings. Alphatec Holdings will have to rely upon dividends and other payments from its subsidiaries to generate the funds necessary to fulfill its cash obligations. Alphatec Holdings may not be able to access cash generated by its subsidiaries in order to fulfill cash commitments. The ability of Alphatec Spine or SafeOp to make dividend and other payments to Alphatec Holdings is subject to the availability of funds after taking into account its subsidiaries' funding requirements, the terms of its subsidiaries' indebtedness and applicable state laws.

If we fail to properly manage our anticipated growth, our business could suffer.

We will continue to pursue growth in the number of spine surgeons using our products, the types of products we offer and the geographic regions where our products are sold. Such anticipated growth places significant demands on our managerial, operational and financial resources and systems. Our management may need to divert a disproportionate amount of its attention from day-to-day activities to managing these anticipated growth activities. If we do not manage our anticipated growth effectively, the quality of our products, our relationships with physicians, distributors and hospitals, and our reputation could suffer, which would have a significant adverse effect on our business, financial condition and results of operations.

If we decrease prices for our goods and services and we are unable to compensate for such reductions through changes in our product mix or reductions to our expenses, our results of operations will suffer.

We may be forced to decrease prices for our goods and services due to pricing pressure exerted by our customers in response to increased cost containment efforts from managed care organizations and other third-party payers and increased market power of our customers as the medical device industry consolidates. If we are unable to offset such price reductions through changes in our product mix or reductions in our expenses, our business, financial condition, results of operations and cash flows will be adversely affected.

Risks Relating to the Pending Acquisition of EOS Imaging

The proposed acquisition of EOS may not be consummated on the current terms or at all.

On December 16, 2020, we entered into a Tender Offer Agreement to acquire EOS by means of the Offer, pursuant to which we have agreed to make an offer to purchase the EOS Shares and OCEANEs for a total purchase price of approximately $116.9 million (the "EOS Acquisition"). The Offer will need to be filed with and cleared by the AMF, which filing is expected to occur in the first quarter of 2021, prior to the commencement of the Offer. Our obligation to file the Offer is subject to a number of conditions, including, without limitation, obtaining regulatory clearance from the AMF and certain French foreign investment clearances. Additionally, our obligation to purchase EOS Shares and OCEANEs validly tendered and not properly withdrawn pursuant to the Offer is conditioned upon the number of EOS Shares and OCEANEs having been validly tendered equaling at least two-thirds of the share

capital and voting rights of EOS on a fully diluted basis at the end of the acceptance period of the Offer. Although we expect to complete the EOS Acquisition in the second quarter of 2021, there can be no assurance as to the exact timing of completion of the EOS Acquisition or that it will be completed at all.

Termination of the Tender Offer Agreement or failure to otherwise complete the EOS Acquisition could negatively impact our business and financial results.

Termination of the Tender Offer Agreement or any failure to otherwise complete the EOS Acquisition may result in various consequences, including the following:

- our business may have been adversely impacted by the failure to pursue other beneficial opportunities due to focus on the EOS Acquisition without realizing the anticipated benefits of the EOS Acquisition;
- the market price of our common stock may decline to the extent that the market price reflects market assumptions that the EOS Acquisition will be completed;
- we may be required, under certain circumstances, to pay EOS a reverse break-up fee of up to €2.5 million under the tender offer agreement, which could adversely affect our financial condition and liquidity; and
- negative reactions from the financial markets may occur if the anticipated return on our investment in EOS is not realized.

If the EOS Acquisition is not consummated, we cannot assure you that the risks described above will not negatively impact our business or financial results.

While the EOS Acquisition is pending, we and EOS will be subject to business uncertainties that could adversely affect our respective businesses.

Our success following the announcement of the EOS Acquisition will depend in part upon our and EOS' ability to maintain our respective business relationships. Uncertainty about the effect of the EOS Acquisition on customers, suppliers, employees and other constituencies may have a material adverse effect on us and EOS. In connection with the pendency of the EOS Acquisition, some persons with whom we have a business relationship may delay business decisions or decide to seek to terminate or modify their relationships with us or EOS, which could negatively affect our revenues, earnings and cash flows, as well as the market price of our common stock, regardless of whether the EOS Acquisition is completed. Such risks may be exacerbated by delays or other adverse developments with respect to the completion of the EOS Acquisition.

EOS may have liabilities that are not known to us.

EOS may have liabilities that were not discovered during our due diligence investigations. Any such liabilities, individually or in the aggregate, could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Financial Results, Credit and Certain Financial Obligations and Need for Financing

We may need to raise additional funds in the future and such funds may not be available on acceptable terms, if at all.

At December 31, 2020, our principal sources of liquidity consisted of cash of $107.8 million, accounts receivable, net of $23.5 million and $40.0 million in available borrowings under our secured term loan (the "Term Loan") with Squadron Medical Finance Solutions, LLC ("Squadron Medical"). We believe that our current sources of liquidity will be sufficient to fund our planned expenditures and meet our obligations for at least 12 months subsequent to the date the consolidated financial statements are issued. We will seek additional funds from public and private equity or debt financings, borrowings under new debt facilities or other sources to fund our projected operating requirements. Our capital requirements will depend on many factors, including:

- the payments due in connection with the settlement agreement enter into with Orthotec LLC;
- the revenues generated by sales of our products;

- the costs associated with expanding our sales and marketing efforts;
- the expenses that we incur from the manufacture of our products by third parties and that we incur from selling our products;
- the costs of developing new products or technologies;
- the cost of obtaining and maintaining FDA or other regulatory approval or clearance for our products and products in development;
- the cost of filing and prosecuting patent applications and defending and enforcing our patent and other intellectual property rights;
- the number and timing of acquisitions and other strategic transactions;
- the costs and any payments we may make related to our pending litigation matters;
- the costs associated with increased capital expenditures; and
- the costs associated with our employee retention programs and related benefits.

As a result of these factors, we may need to raise additional funds and such funds may not be available on favorable terms, if at all. In addition, rules and regulations of the SEC may restrict our ability to conduct certain types of financing activities or may affect the timing of and the amounts we can raise by undertaking such activities.

Furthermore, if we issue additional equity or debt securities to raise additional funds, our existing stockholders may experience dilution and the new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. In addition, if we raise additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish valuable rights to our potential products or proprietary technologies, or to grant licenses on terms that are not favorable to us. If we cannot raise funds on acceptable terms, we may not be able to repay debt or other liabilities, develop or enhance our products, execute our business plan, take advantage of future opportunities, or respond to competitive pressures or unanticipated customer requirements. Any of these events could adversely affect our ability to achieve our development and commercialization goals and have a significant adverse effect on our business, financial condition and results of operations.

If we default on our obligations to make settlement payments to Orthotec LLC, the amounts due under the settlement agreements accelerate and become due and payable.

Any default of our payment obligation under the settlement agreements we entered into with Orthotec LLC ("Orthotec"), would give Orthotec the right to declare all of the future payments to be immediately payable. As of December 31, 2020, the outstanding amount to be paid to Orthotec through January 2024 including future interest was $12.8 million. If acceleration of payments occurs, our business, financial condition and results of operations could be materially and adversely affected.

We have a history of net losses, we expect to continue to incur net losses in the near future, and we may not achieve or maintain profitability.

We have typically incurred net losses from our continuing operations since our inception. As of December 31, 2020, we had an accumulated deficit of $638.0 million. We have incurred significant net losses since inception and have relied on our ability to fund our operations through revenues from the sale of our products and equity and debt financings. Successful transition to profitability is dependent upon achieving a level of revenues adequate to support our cost structure. This may not occur and, unless and until it does, we will continue to need to raise additional capital. We may seek additional funds from public and private equity or debt financings, borrowings under new debt facilities or other sources to fund our projected operating requirements. However, we may not be able to obtain further financing on reasonable terms or at all. If we are unable to raise additional funds on a timely basis, or at all, we would be materially adversely affected

We may be unable to comply with the covenants of our credit facility.

We must comply with certain affirmative and negative covenants under our Term Loan with Squadron Medical. We may not be able to satisfy all such covenants or obtain any required waiver or amendment, in which event Squadron Medical could refuse to make further extensions of credit to us and could require all amounts borrowed under the Term Loan together with accrued interest and other fees, to be immediately due and payable. In addition to allowing Squadron Medical to accelerate the Term Loan, several events of default under the Term Loan could require us to pay interest at a rate higher than the interest rate effective immediately before the event of default. Following an event of default, if Squadron Medical accelerates the repayment of all amounts borrowed, together with accrued interest and other fees, or if Squadron Medical elects to charge us additional interest, we may not have sufficient cash available to repay the amounts due, and we may be forced to seek to amend the terms of the Term Loan or obtain alternative financing, which may not be available to us on acceptable terms, if at all. In addition, if we fail to pay amounts when due under the Term Loan or upon the occurrence of another event of default, Squadron Medical could proceed against the collateral granted to it pursuant to the agreements governing the Term Loan. We have granted to Squadron Medical a first priority security interest in substantially all of our assets and all securities evidencing our interests in our subsidiaries, as collateral under the agreement governing the Term Loan. If Squadron Medical proceeds against the collateral, such assets would no longer be available for use in our business, which would have a significant adverse effect our business, financial condition and results of operations.

Our quarterly financial results could fluctuate significantly.

Our quarterly financial results are difficult to predict and may fluctuate significantly from period to period, particularly because our sales prospects are uncertain. The level of our revenues and results of operations at any given time will be based primarily on the following factors:

- acceptance of our products by spine surgeons, patients, hospitals and third-party payers;
- demand and pricing of our products, and the mix of our products sold, because profit margins differ among our products;
- timing of new product offerings, acquisitions, licenses or other significant events by us or our competitors;
- our ability to grow and maintain a productive sales and marketing organization and independent distributor network;
- regulatory approvals and legislative changes affecting the products we may offer or those of our competitors;
- the effect of competing technological and market developments;
- levels of third-party reimbursement for our products;
- interruption in the manufacturing or distribution of our products or our ability to produce or obtain products of satisfactory quality or in sufficient quantities to meet demand; and
- changes in our ability to obtain FDA, state and international approval or clearance for our products.

In addition until we have a larger base of spine surgeons using our products, occasional fluctuations in the use of our products by individual surgeons or small groups of surgeons will have a proportionately larger impact on our revenues than for companies with a larger customer base.

We cannot begin to commercialize any products that we seek to introduce in the United States without FDA approval or clearance. As a result, it will be difficult for us to forecast demand for these products with any degree of certainty. Any shortfalls in revenue or earnings from levels expected by our stockholders or by industry analysts could have a significant adverse effect on the trading price of our common stock in any given period.

Risks Related to Our Intellectual Property; Regulatory Penalties and Litigation

If our patents and other intellectual property rights do not adequately protect our products, we may lose market share to our competitors and be unable to operate our business profitably.

Our success depends significantly on our ability to protect our proprietary rights in the technologies used in our products. We rely on patent protection, as well as a combination of copyright, trade secret and trademark laws, and confidentiality and other contractual restrictions to protect our proprietary technology. These legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. For example, our pending patent applications may not result in issued patents. The U.S. Patent and Trademark Office ("PTO"), may deny or require significant narrowing of claims in our pending patent applications, and 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. We could also incur substantial costs in proceedings before the PTO. These proceedings could result in adverse decisions as to the priority of our inventions and the narrowing or invalidation of claims in issued patents. Issued patents could subsequently be successfully challenged by others and invalidated or rendered unenforceable, which could limit our ability to prevent competitors from marketing and selling related products. In addition, our pending patent applications include claims to aspects of our products and procedures that are not currently protected by issued patents.

Both the patent application process and the process of managing patent disputes can be time consuming and expensive. Competitors may design around our patents or develop products that provide outcomes that are comparable to our products but fall outside of the scope of our patent protection. Although we have entered into confidentiality agreements and intellectual property assignment agreements with certain of our employees, consultants and advisors as one of the ways we seek to protect our intellectual property and other proprietary technology, such 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 one of our patents or other intellectual property rights, enforcing those patents and rights may be difficult and time consuming. Even if successful, litigation to defend our patents against challenges or to enforce our intellectual property rights could be expensive and time consuming and could divert management's attention from managing our business. Moreover, we may not have sufficient resources to defend our patents against challenges or to enforce our intellectual property rights.

The medical device industry is characterized by patent and other intellectual property litigation and we could become subject to litigation that could be costly, result in the diversion of management's time and efforts, require us to pay damages, and/or prevent us from marketing our existing or future products.

The medical device industry is characterized by extensive litigation and administrative proceedings over patent and other intellectual property rights. Determining whether a product infringes a patent involves complex legal and factual issues, the determination of which is often uncertain. Our competitors may assert that our products, components of those products, methods of using those products, or methods we employ to manufacture or process those products are covered by patents held by them. In addition, they may claim that their patents have priority over ours because their patents were filed first. Because patent applications can take many years to issue, there may be applications now pending of which we are unaware, which may later result in issued patents that our products may infringe. There could also be existing patents that one or more components of our products may be inadvertently infringing, of which we are unaware. As the number of participants in the market for spine disorder devices and treatments increases, the possibility of patent infringement claims against us also increases.

Any such claim against us, even those without merit, may cause us to incur substantial costs, and could place a significant strain on our financial resources, divert the attention of management from our core business and harm our reputation. If the relevant patents are upheld as valid and enforceable and we are found to infringe, we could be required to pay substantial damages and/or royalties and we could be prevented from selling our products unless we obtain a license or redesign our products to avoid infringement. Any such license may not be available on reasonable terms, if at all, and we may be unable to redesign our products to not infringe those patents, and any such redesign, if possible, may be costly. If we fail to obtain any required licenses or make any necessary changes to our products, we may have to withdraw existing products from the market or may be unable to commercialize one or more of our

products, either of which could have a significant adverse effect on our business, financial condition and results of operations. We may lose market share to our competitors if we fail to protect our intellectual property rights.

In addition, we enter into agreements with spine surgeons to develop new products. As consideration for product development activities rendered pursuant to these agreements, in some instances we have agreed to pay royalties on products developed by cooperative involvement between us and such surgeons. The surgeons with whom we have entered into such an arrangement might 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. Any such claim, even those without merit, may cause us to incur substantial costs, and could place a significant strain on our financial resources, divert the attention of management from our core business and harm our reputation.

We are currently involved in a patent litigation action involving NuVasive, Inc. and, if we do not prevail in this action, we could be liable for past damages and might be prevented from marketing or selling some products.

NuVasive has filed suit against us in the U.S. District Court for the Southern District of California, alleging that certain of our products infringe, or contribute to the infringement of, United States patents owned by NuVasive. NuVasive is a large, publicly-traded corporation with significantly greater financial resources than us.

An unfavorable outcome for us in this patent litigation could significantly harm our business if such outcome makes us unable to commercialize some of our current or potential products or cease some of our business operations. In addition, costs of defense and any damages resulting from the litigation may materially adversely affect our business and financial results. The litigation may also harm our relationships with existing customers and subject us to negative publicity, each of which could harm our business and financial results.

If we become subject to product liability claims, 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 manufacture and sale of medical devices for spine surgery procedures. Spine surgery involves significant risk of serious complications, including paralysis and even death. We carry product liability insurance. However, our product liability insurance coverage may be inadequate to satisfy liabilities we might incur. Any product liability claim brought against us could result in the increase of our product liability insurance rates or our inability to secure coverage in the future on commercially reasonable terms. If our product liability insurance proves to be inadequate to pay a damage award, we may have to pay the excess out of our cash reserves, which could harm our financial condition. If longer-term patient results and experience indicate that our products or any component of our products cause tissue damage, motor impairment or other adverse effects, we could be subject to significant liability. Even a meritless or unsuccessful product liability claim 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. If a product liability claim or series of claims is brought against us in excess of our insurance coverage limits, our business could suffer and our financial condition, results of operations and cash flow could be materially adversely impacted.

Because biologics products entail a potential risk of communicable disease to human recipients, we may be the subject of product liability claims regarding our biologics products.

Our biologics products may expose us to additional potential product liability claims. The development of biologics products entails the risk of transmitting disease to human recipients, and substantial product liability claims may be asserted against us. In addition, successful product liability claims made against one of our competitors could cause claims to be made against us or expose us to a perception that we are vulnerable to similar claims. Even a meritless or unsuccessful product liability claim 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, hazardous and radioactive materials could be time consuming and costly.

The manufacture of certain of our products, including our biologics products, involves the controlled use of biological, hazardous and/or radioactive materials and waste. Our business and facilities and those of our suppliers are subject to laws and regulations governing the use, manufacture, storage, handling and disposal of these materials

and waste. Although we believe that our safety procedures comply with legally prescribed standards, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of an accident, we could be held liable for damages or penalized with fines, which could exceed our resources and insurance. We may incur significant expenses in the future relating to any failure to comply with applicable laws and regulations, which could have a significant negative impact on our business, financial condition and results of operations.

Risks Related to Our Common Stock

If we fail to meet all NASDAQ Global Select Market listing requirements, our common stock may be delisted, which could adversely affect the market liquidity of our common stock and harm our business.

Our common stock is listed on the NASDAQ Global Select Market. To maintain that listing, we must satisfy minimum financial and other requirements. If we fail to continue to meet all such requirements in the future and NASDAQ determines to delist our common stock, the delisting could substantially decrease trading in our common stock and adversely affect the market liquidity of our common stock, adversely affect our ability to obtain financing on acceptable terms, if at all, to continue our operations, and result in the potential loss of confidence by investors, suppliers, customers and employees. Additionally, the market price of our common stock may decline further and stockholders may lose some or all of their investment.

Our stock price may fluctuate significantly, particularly if holders of substantial amounts of our stock attempt to sell, and holders may have difficulty selling their shares based on trading volumes of our stock.

The market price of our common stock is likely to be highly volatile and may fluctuate substantially due to many factors, including those described elsewhere in this "Risk Factors" section and the following:

- volume and timing of orders for our products;
- quarterly variations in our or our competitors' results of operations;
- our announcement or our competitors' announcements regarding new or enhanced products, product enhancements, significant contracts, number of distributors, number of hospitals and spine surgeons using products, acquisitions, and collaborative or strategic investments;
- announcements of technological or medical innovations for the treatment of spine pathology;
- changes in earnings estimates or recommendations by securities analysts;
- our ability to develop, obtain regulatory clearance or approval for, and market new and enhanced products on a timely basis;
- changes in healthcare policy in the United States, including changes in governmental regulations or in the status of our regulatory approvals, clearances or applications, and changes in the availability of third-party reimbursement in the United States;
- product liability claims or other litigation involving us, including disputes or other developments with respect to intellectual property rights;
- sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders;
- changes in accounting principles; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

We may become involved in securities class action litigation that could divert management's attention and harm our business.

The stock market in general, the NASDAQ Global Select Market and the market for medical device companies in particular, has experienced price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. In the past, following periods of volatility in the market price of a particular company's securities, the company becomes subject to securities class action litigation. We may become involved in this type of litigation. Litigation is often expensive and diverts management's attention and resources, which could materially harm our financial condition, results of operations and business.

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

Securities analysts may not provide research coverage of our common stock. The trading market for our common stock may be affected in part by the research and reports that analysts publish about our business. If one or more of the analysts who elects to cover us downgrades our stock, our stock price could likely decline rapidly. If one or more of these analysts ceases coverage of us, we could lose visibility in the market, which in turn could cause our stock price to decline.

Because of their significant stock ownership, our executive officers, directors and principal stockholders will be able to exert control over us and our significant corporate decisions.

Based on shares outstanding at March 1, 2021, our executive officers, directors and stockholders holding more than 5% of our outstanding common stock and their affiliates, in the aggregate, beneficially own approximately 30% of our outstanding common stock. As a result, these persons will have the ability to impact significantly the outcome of all matters requiring stockholder approval, including the election and removal of directors and any merger, consolidation, or sale of all or substantially all of our assets. This concentration of ownership may harm the market price of our common stock by delaying, deferring or preventing our change in control, causing us to enter into transactions or agreements that are not in the best interests of all of our stockholders, or reducing our public float held by non-affiliates.

Anti- takeover provisions in our organizational documents and change of control provisions in some of our employment agreements and agreements with distributors, and in some of our outstanding debt agreements, as well as the terms of our redeemable preferred stock, may discourage or prevent a change of control, even if an acquisition would be beneficial to our stockholders, which could affect our stock price adversely.

Certain provisions of our amended and restated certificate of incorporation and restated by-laws could discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which our stockholders might otherwise receive a premium for their shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. Furthermore, these provisions could prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions:

- allow the authorized number of directors to be changed only by resolution of our Board of Directors;
- allow vacancies on our Board of Directors to be filled only by resolution of our Board of Directors;
- authorize our Board of Directors to issue, without stockholder approval, blank check preferred stock that, if issued, could operate as a "poison pill" to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our Board of Directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit stockholder action by written consent;
- establish advance notice requirements for stockholder nominations to our Board of Directors and for stockholder proposals that can be acted on at stockholder meetings; and
- limit who may call stockholder meetings.

These provisions may frustrate or prevent attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our Board of Directors, which is responsible for appointing our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us.

Some of our agreements provide for accelerated vesting of benefits, including full vesting of restricted stock and options, upon a change of control, or extends the term of the agreement upon a change in control and make it more difficult for us or our successor to terminate the agreement. These provisions may discourage or prevent a change of control.

In addition, in the event of a change of control, we would be required to redeem all outstanding shares of our redeemable preferred stock for an aggregate of $29.9 million, at the price of $9.00 per share. Further, our amended and restated certificate of incorporation permits us to issue additional shares of preferred stock. The terms of our redeemable preferred stock or any new preferred stock we may issue could have the effect of delaying, deterring or preventing a change in control.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or Section 382, if a corporation undergoes an "ownership change," generally defined as a cumulative change in its equity ownership by "5-percent shareholders" of greater than 50 percentage points (by value) over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards ("NOLs"), and certain other pre-change tax attributes (such as research tax credits) to offset its post-change taxable income and taxes may be limited. We have completed multiple rounds of financing and entered into transactions which may subject us to the Section 382 limitations. We may also experience ownership changes in the future. As a result, our ability to use our NOLs and research and development credits to offset our U.S. federal taxable income and taxes may be subject to limitations, which could potentially result in increased future tax liability to us. In addition, similar rules may also apply at the state level, and there may be periods during which the use of NOLs is suspended or limited, which could accelerate or permanently increase state taxes owed.

We could be subject to changes in our tax rates, new tax legislation or additional tax liabilities.

The U.S. government has recently enacted comprehensive tax legislation that includes significant changes to the taxation of business entities. These changes include, among others, (i) a permanent reduction to the corporate income tax rate, (ii) a partial limitation on the deductibility of business interest expense, (iii) a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system (along with certain rules designed to prevent erosion of the U.S. income tax base) and (iv) a one-time tax on accumulated offshore earnings held in cash and illiquid assets, with the latter taxed at a lower rate. The overall impact of this tax reform is uncertain, and our business and financial condition could be adversely affected. In addition, it is uncertain if and to what extent various states will conform to the newly enacted federal tax law.

Our tax returns and other tax matters also are subject to examination by the U.S. Internal Revenue Service and other tax authorities and governmental bodies. We regularly assess the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of our provision for taxes. We cannot guarantee the outcome of these examinations. If our effective tax rates were to increase, particularly in the United States, or if the ultimate determination of our taxes owed is for an amount in excess of amounts previously accrued, our financial condition, operating results and cash flows could be adversely affected.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K and, in particular, the description of our "Business" set forth in Item 1, the "Risk Factors" set forth in this Item 1A and our "Management's Discussion and Analysis of Financial Condition and Results of Operations" set forth in Item 7 contain or incorporate a number of forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, including statements regarding:

- our estimates regarding anticipated operating losses, future revenue, expenses, capital requirements, uses and sources of cash and liquidity, including our anticipated revenue growth and cost savings;
- our ability to meet the affirmative and negative covenants under our credit facility;
- our ability to ensure that we have effective disclosure controls and procedures;
- our ability to meet our obligations under the Supply Agreement with Globus;
- our ability to meet, and potential liability from not meeting, the payment obligations under the Orthotec settlement agreement;
- our ability to maintain compliance with the quality requirements of the FDA;
- our ability to market, improve, grow, commercialize and achieve market acceptance of any of our products or any product candidates that we are developing or may develop in the future;
- our beliefs about the features, strengths and benefits of our products;
- our ability to continue to enhance our product offerings, outsource our manufacturing operations and expand the commercialization of our products, and the effect of our strategy;
- our ability to successfully integrate, and realize benefits from licenses and acquisitions;
- the effect of any existing or future federal, state or international regulations on our ability to effectively conduct our business;
- our estimates of market sizes and anticipated uses of our products;
- our business strategy and our underlying assumptions about market data, demographic trends, reimbursement trends and pricing trends;
- our ability to achieve profitability, and the potential need to raise additional funding;
- our ability to maintain an adequate sales network for our products, including to attract and retain independent distributors;
- our ability to enhance our U.S. distribution network;
- our ability to increase the use and promotion of our products by training and educating spine surgeons and our sales network;
- our ability to attract and retain a qualified management team, as well as other qualified personnel and advisors;
- our ability to enter into licensing and business combination agreements with third parties and to successfully integrate the acquired technology and/or businesses;
- other factors discussed elsewhere in this Annual Report on Form 10-K or any document incorporated by reference herein or therein.

Any or all of our forward-looking statements in this Annual Report may turn out to be wrong. They can be affected by inaccurate assumptions by known or unknown risks and uncertainties. Many factors mentioned in our discussion in this Annual Report on Form 10-K will be important in determining future results. Consequently, no forward-looking statement can be guaranteed. Actual future results may vary materially from expected results.

We also provide a cautionary discussion of risks and uncertainties under "Risk Factors" in Item 1A of this Annual Report. These are factors that we think could cause our actual results to differ materially from expected results. Other factors besides those listed there could also adversely affect us.

Without limiting the foregoing, the words "believe," "anticipate," "plan," "expect," "may," "could," "would," "seek," "intend," and similar expressions are intended to identify forward-looking statements. There are a number of factors and uncertainties that could cause actual events or results to differ materially from those indicated by such forward-looking statements, many of which are beyond our control, including the factors set forth under "Item 1A Risk Factors." In addition, the forward-looking statements contained herein represent our estimate only as of the date of this filing and should not be relied upon as representing our estimate as of any subsequent date. While we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking statements, except as required by applicable law.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate office is located in Carlsbad, California. The table below provides selected information regarding our current material operating location.

Location	Use	Approximate Square Footage	Lease Expiration
Carlsbad, California	Prior corporate headquarters and product design	76,693	July 2021
Carlsbad, California	Corporate headquarters	121,541	January 2031

Item 3. Legal Proceedings

We are and may become involved in various legal proceedings arising from our business activities. While the Company has no material accruals for pending litigation or claims for which accrual amounts are not disclosed in the Company's consolidated financial statements, litigation is inherently unpredictable, and depending on the nature and timing of a proceeding, an unfavorable resolution could materially affect our future consolidated results of operations, cash flows or financial position in a particular period. We assess contingencies to determine the degree of probability and range of possible loss for potential accrual or disclosure in our consolidated financial statements. An estimated loss contingency is accrued in our consolidated financial statements if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because litigation is inherently unpredictable and unfavorable resolutions could occur, assessing contingencies is highly subjective and requires judgments about future events. When evaluating contingencies, we may be unable to provide a meaningful estimate due to a number of factors, including the procedural status of the matter in question, the presence of complex or novel legal theories, and/or the ongoing discovery and development of information important to the matters. In addition, damage amounts claimed in litigation against us may be unsupported, exaggerated or unrelated to reasonably possible outcomes, and as such are not meaningful indicators of our potential liability.

Refer to Note 6 of our Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for further information regarding the NuVasive, Inc. litigation.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock is traded on The NASDAQ Global Select Market under the symbol "ATEC."

Stockholders

As of March 1, 2021, there were approximately 308 holders of record of an aggregate 95,149,633 outstanding shares of our common stock.

Dividend Policy

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. In addition, our ability to pay dividends is currently restricted by the terms of the Term Loan with Squadron Medical.

Issuer Purchases of Equity Securities

Under the terms of our 2016 Equity Incentive Plan and our Amended and Restated 2005 Employee, Director and Consultant Stock Plan, as amended, which we refer to collectively as the Stock Plans, and prior to the expiration of the Stock Plans in May 2026, we are permitted to award shares of restricted stock to our employees, directors and consultants. These shares of restricted stock are subject to a lapsing right of repurchase by us. We may exercise this right of repurchase in the event that a restricted stock recipient's employment, directorship or consulting relationship with us terminates prior to the end of the vesting period. If we exercise this right, we are required to repay the purchase price paid by or on behalf of the recipient for the repurchased restricted shares. Repurchased shares are returned to the Stock Plans and are available for future awards under the terms of the Stock Plans. There were no shares of common stock repurchased during the years ended December 31, 2020 or 2019.

Item 6. Selected Financial Data

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information required under this item.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of our financial condition and results of operations should be read in conjunction with the financial statements and the notes to those statements appearing elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this report include the identification of certain trends and other statements that may predict or anticipate future business or financial results that are subject to important factors that could cause our actual results to differ materially from those indicated. See "Item 1A Risk Factors" included elsewhere in this Annual Report on Form 10-K.

Overview

We are a medical technology company focused on the design, development, and advancement of technology for better surgical treatment of spinal disorders. We are dedicated to revolutionizing the approach to spine surgery through clinical distinction. We have a broad product portfolio designed to address the majority of the U.S. market for spinal disorders. We are focused on developing new approaches that integrate seamlessly with the SafeOp Neural InformatiX System to safely and reproducibly treat spine's various pathologies and achieve the goals of spine surgery. Our ultimate vision is to be the standard bearer in Spine.

We intend to drive growth by capitalizing on our collective spine experience and investing in the research and development to continually differentiate our solutions and improve spine surgery. We believe our future success will be fueled by introducing market-shifting innovation to the spine market, and that we are well-positioned to capitalize on current spine market dynamics.

We market and sell our products in the U.S. through a network of independent distributors and direct sales representatives. An objective of our leadership team is to deliver increasingly consistent, predictable growth. To accomplish this, we have partnered more closely with new and existing distributors to create a more dedicated and loyal sales channel for the future. We have added, and intend to continue to add, new high-quality exclusive and dedicated distributors to expand future growth. We believe this will allow us to reach an untapped market of surgeons, hospitals, and national accounts across the U.S., as well as better penetrate existing accounts and territories.

We have continued to make progress in the transition of our sales channel since early 2017, driving the percent of sales contributed by our strategic distribution channel from approximately 88% for the year ended December 31, 2019 to 92% for the year ended December 31, 2020. Going forward, we intend to continue to relentlessly drive toward a fully exclusive network of independent and direct sales agents. Consolidation in the industry has facilitated this process, as large, seasoned agents seek opportunities to partner with spine-focused companies that have broad, growing product portfolios.

Recent Developments

Proposed Acquisition of EOS

On December 16, 2020, we entered into a Tender Offer Agreement (the "Tender Offer Agreement") with EOS imaging S.A., a société anonyme organized and existing under the laws of France ("EOS"), pursuant to which we will commence a public tender offer (the "Offer") to purchase all of the issued and outstanding ordinary shares, nominal value €0.01 per share (collectively, the "EOS Shares"), and outstanding convertible bonds (collectively, the "OCEANEs") of EOS. The Offer will consist of a cash tender offer price of €2.45 (or approximately $2.99) per EOS Share and €7.01 (or approximately $8.55) per OCEANE, (the "Offer Consideration"), for a total purchase price of up to approximately $116.9 million. The Offer will need to be filed with and cleared by the Autorité des marches financiers (the "AMF"). These Tender Commitments will terminate if (i) the Tender Offer Agreement is terminated, (ii) the Offer is withdrawn by the Company pursuant to applicable French laws and regulations, or (iii) the Offer is not declared successful by the AMF as a result of certain conditions failing to be satisfied or waived.

On March 5, 2021, we filed a draft offer with the AMF related to our Tender Offer Agreement with EOS to purchase all of the EOS Shares and OCEANEs. The Tender Offer Agreement is subject to clearance by the French Ministry of the Economy and Finance and AMF. We expect the transaction to close in the second quarter of 2021.

In connection with the Offer, on December 16, 2020, we entered into a securities purchase agreement (the "Purchase Agreement") with certain institutional and accredited investors, including Squadron Capital, LLC (collectively, the "Purchasers"), providing for the sale by the Company of 12,421,242 shares of our common stock (the "Private Placement Shares") at a purchase price of $11.11 per share (the "Private Placement Purchase Price"), in a private placement (the "Private Placement"). The aggregate gross proceeds for the Private Placement will be approximately $138.0 million. We intend to use the net proceeds from the Private Placement to fund the Offer Consideration and for general corporate and working capital purposes. Pursuant to the terms of the Purchase Agreement, from the Private Placement Closing until the completion of the Offer, we are prohibited from issuing, or entering into any agreement to issue, or announcing the issuance or proposed issuance of, any shares of our common stock or common stock equivalents, subject to certain permitted exceptions. If the Tender Offer Agreement is terminated or the Offer is not completed on or before July 31, 2021, we will repurchase the Private Placement Shares from the Purchasers, once issued, for an amount per share equal to the Private Placement Purchase Price plus interest on the Private Placement Purchase Price at a rate of nine percent per year computed from the date of the Private Placement Closing to the date of the repurchase.

On March 1, 2021 we closed the Private placement which generated proceeds of approximately $132.0 million, net of fees related to the Private placement.

Follow-On Registered Public Offering

On October 16, 2020, we closed the 2020 Offering where we issued and sold a total of 13,142,855 shares of our common stock at a price to the public of $8.75 per share. The net proceeds from the 2020 Offering were approximately $107.7 million, including net proceeds from the overallotment shares and deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The COVID-19 Pandemic

The COVID-19 pandemic had a moderate impact on our business in 2020. Since the onset of the pandemic in early 2020, we have carefully monitored its impact on our operations. We have taken steps to minimize the risk to our employees. A significant number of our employees have been working remotely, except for certain staff that require access to our manufacturing and laboratory research facilities, in accordance with applicable government health and safety protocols and guidance issued in response to the COVID-19 pandemic. To date, our remote working arrangements have not affected our ability to maintain critical business operations, and we have not experienced any material disruptions or shortages of the supply of our products.

Since the beginning of the COVID-19 pandemic, we have seen volatility in sales trends as elective surgeries that use our products have been affected by COVID-19, particularly in the early phases of the pandemic. Demand has since recovered to varying degrees by product as local conditions have improved in some geographies that opened after an initial improvement in COVID-19 infection rates, allowing surgeons to resume surgeries. During the second half of the year, procedural volumes returned to pre-pandemic levels. Recently, higher rates of infection have been observed in some geographies, including the United States and Europe, which have further restricted elective surgeries, although not to the extent experienced in the early phases of the pandemic. We expect to see continued volatility through at least the duration of the pandemic as governments respond to current local conditions. The depth and extent to which the COVID-19 pandemic will continue to impact individual markets continues to vary. We expect procedural volumes to remain somewhat difficult to estimate as COVID-19 infections continue to spread and the roll-out of a vaccine remains uncertain.

We continue to believe that existing funds, cash generated from operations and existing sources of and access to financing are adequate to satisfy our needs for working capital, capital expenditures and debt service requirements as well as to engage in other business initiatives that we plan to strategically pursue.

Revenue and Expense Components

The following is a description of the primary components of our revenue and expenses:

Revenue. We derive our revenue primarily from the sale of spinal surgery implants used in the treatment of spine disorders. Spinal implant products include pedicle screws and complementary implants, interbody devices, plates, and tissue-based materials. Our revenue is generated by our direct sales force and independent distributors. Our products are requested directly by surgeons and shipped and billed to hospitals and surgical centers. Currently, most of our business is conducted with customers within markets in which we have experience and with payment terms that are customary to our business. We may defer revenue until the time of collection if circumstances related to payment terms, regional market risk or customer history indicate that collectability is not certain.

Cost of revenue. Cost of revenue consists of direct product costs, royalties, milestones and the amortization of purchased intangibles. Our product costs consist primarily of direct labor, overhead, and raw materials and components. The product costs of certain of our biologics products include the cost of procuring and processing human tissue. We incur royalties related to the technologies that we license from others and the products that are developed in part by surgeons with whom we collaborate in the product development process. Amortization of purchased intangibles consists of amortization of developed product technology.

Research and development expenses. Research and development expense consists of costs associated with the design, development, testing, and enhancement of our products and technologies. Research and development expense also includes salaries and related employee benefits, research-related overhead expenses, fees paid to external service providers in both cash and equity, and costs associated with our Scientific Advisory Board and Executive Surgeon Panels.

Sales, general and administrative expenses. Sales, general and administrative expense consists primarily of salaries and related employee benefits, sales commissions and support costs, depreciation of our surgical instruments, regulatory affairs, quality assurance costs, professional service fees, travel, medical education, trade show and marketing costs, insurance and legal expenses.

Litigation-related expenses. Litigation-related expenses are costs incurred for our ongoing litigation, primarily with NuVasive, Inc.

Transaction-related expenses. Transaction-related expenses are certain costs incurred throughout the year related to the prior tender offer agreement entered into with EOS on February 28, 2020, which was subsequently terminated by the Company in response to the then-expected market effects of the COVID-19 pandemic on April 24, 2020, as well as costs incurred related to the renewed tender offer agreement entered into with EOS on December 16, 2020. These expenses primarily include third-party advisory and legal fees.

Restructuring expenses. Restructuring expenses consist of severance, social plan benefits and related taxes in connection with our historical cost rationalization efforts.

Loss on debt extinguishment. Loss on debt extinguishment is comprised of all amounts previously recorded as debt issuance costs related to the MidCap Funding IV, LLC ("MidCap") facility that was repaid in full as well as amounts associated with Squadron Medical partial debt extinguishment.

Total interest and other expense, net. Total interest and other expense, net includes interest income, interest expense, gains and losses from foreign currency exchanges and other non-operating gains and losses.

Income tax provision (benefit). Income tax provision (benefit) from continuing operations primarily consists of release of the valuation allowance from the SafeOp acquisition, partially offset by state taxes.

Results of Operations

The first table below sets forth our statements of operations data for the periods presented. Our historical results are not necessarily indicative of the operating results that may be expected in the future.

	Year Ended December 31,		Increase (Decrease)	
	2020	2019	$	%
	(in thousands)			
Revenue:				
Revenue from U.S. products	$ 141,079	$ 108,242	$ 32,837	30%
Revenue from international supply agreement	3,782	5,185	(1,403)	(27)%
Total revenue	144,861	113,427	31,434	28%
Cost of revenue	42,360	35,833	6,527	18%
Gross profit	102,501	77,594	24,907	32%
Operating expenses:				
Research and development	18,745	13,849	4,896	35%
Sales, general and administrative	129,156	101,714	27,442	27%
Litigation-related	8,552	8,549	3	-%
Amortization of acquired intangible assets	688	698	(10)	(1)%
Transaction-related	4,223	—	4,223	100%
Restructuring	—	60	(60)	(100)%
Total operating expenses	161,364	124,870	36,494	29%
Operating loss	(58,863)	(47,276)	(11,587)	25%
Interest and other expense, net:				
Interest expense, net	(12,374)	(9,865)	(2,509)	25%
Loss on debt extinguishment	(7,612)	—	(7,612)	100%
Total interest and other expense, net	(19,986)	(9,865)	(10,121)	103%
Loss from continuing operations before taxes	(78,849)	(57,141)	(21,708)	38%
Income tax provision (benefit)	145	(239)	384	161%
Loss from continuing operations	(78,994)	(56,902)	(22,092)	39%
Loss from discontinued operations, net of applicable taxes	—	(100)	100	(100)%
Net loss	$ (78,994)	$ (57,002)	$ (21,992)	39%

	Year Ended December 31,		Increase (Decrease)	
	2020	2019	$	%
Revenue by source:	(in thousands)			
Revenue from U.S. products	$ 141,079	$ 108,242	$ 32,837	30%
Revenue from international supply agreement	3,782	5,185	(1,403)	(27)%
Total revenue	$ 144,861	$ 113,427	$ 31,434	28%
Gross profit by source:				
Gross profit from U.S. products	$ 102,248	$ 77,235	$ 25,013	32%
Gross profit from international supply agreement	253	359	(106)	(30)%
Total gross profit	$ 102,501	$ 77,594	$ 24,907	32%
Gross profit margin by source:				
Gross profit margin from U.S. products	73%	71%		2%
Gross profit margin from international supply agreement	7%	7%		-%
Total gross profit margin	71%	68%		3%

Year Ended December 31, 2020 Compared to the Year Ended December 31, 2019

Total Revenue. Total revenue was $144.9 million for the year ended December 31, 2020 compared to $113.4 million for the year ended December 31, 2019, representing an increase of $31.4 million, or 28%.

Revenue from U.S. products was $141.1 million for the year ended December 31, 2020 compared to $108.2 million for the year ended December 31, 2019, representing an increase of $32.8 million, or 30%.

During the year ended December 31, 2020 we launched a total of 11 new products, bringing our total offerings to over 70 products across our various product categories, of which over 30 were new products launched between July 2018 and December 2020. As a result of the expansion of our product portfolio we continue to see increases in year-over-year revenue contributions from our new product pipeline as product categories per case, average revenue per case, and revenue per surgeon continues to increase, consistent with our commitments to create clinical distinction through organic product development and compel surgeon adoption. For the year ended December 31, 2020, revenue contributions from our new products represented approximately 67% of U.S. revenue compared to 37% for the year ended December 31, 2019, with average product categories sold per case increasing to 1.9 during the year ended December 31, 2020 compared to 1.7 during the year ended December 31, 2019. As a result of the increases in our new product contributions and average product categories sold per case, average revenue per case increased by 13% for the year ended December 31, 2020 as compared to the year ended December 31, 2019. Information related to revenue from each of our product categories is detailed further below (in thousands):

	Year Ended December 31,				Increase (Decrease)	
	2020		2019		$	%
U.S. revenues by product type:						
Fixation	$ 81,735	58%	$ 67,175	62%	$ 14,560	22%
Interbody	42,381	30%	31,940	30%	10,441	33%
Biologics	7,270	5%	5,624	5%	1,646	29%
Access Systems	2,313	2%	1,218	1%	1,095	90%
Information	7,380	5%	2,285	2%	5,095	223%
Total U.S. revenues	$ 141,079	100%	$ 108,242	100%	$ 32,837	30%

In addition to increases in revenue contributions related to our product portfolio, contributions from our strategic distribution channel have also increased during the year ended December 31, 2020, as we continue to build

partnerships with new surgeons and distributor partners, driving growth in our sales network and distribution channel, and geographic footprint. During the year ended December 31, 2020, the number of surgeon partners utilizing our products increased by over 10%, and our strategic distribution partnerships increased by over 27%, as compared to the year ended December 31, 2019. As a result, contributions to U.S. revenue from our strategic distribution channel increased to 92% during the year ended December 31, 2020 compared to 88% for the year ended December 31, 2019. Information related to revenue contributions from both our strategic and legacy distribution partnerships is detailed further below (in thousands):

	Year Ended December 31,				Increase (Decrease)	
	2020		2019		$	%
U.S. revenue by distributor type:						
Strategic	$ 129,917	92%	$ 95,051	88%	$ 34,866	37%
Legacy and terminated	11,162	8%	13,191	12%	(2,029)	(15.4)%
Total U.S. revenue	$ 141,079	100%	$ 108,242	100%	$ 32,837	30%

Revenue from international supply agreement for the year ended December 31, 2020, which is attributed to sales to Globus under which we supply to Globus certain of its implants and instruments at agreed-upon prices for a minimum term of three years, decreased by $1.4 million compared to the year ended December 31, 2019. As part of the supply agreement, Globus had the option to extend the term for up to two additional twelve-month periods subject to Globus meeting specified purchase requirements. During the second quarter of 2020, Globus notified us that it would exercise the option to extend the agreement for the second additional twelve-month period through August 2021, at which time we expect that the supply agreement will expire and revenue from Globus will discontinue.

Cost of revenue. Cost of revenue for the year ended December 31, 2020 increased by $6.5 million, or 18%, primarily due to increased sales and excess and obsolescence expense related to new and legacy products.

Cost of revenue from U.S. products for the year ended December 31, 2020 increased to $38.8 million compared to $31.0 million for the year ended December 31, 2019, which is consistent with our year-over-year revenue growth. Additionally, our non-cash excess and obsolescence expense, which is primarily related to the phase out of older legacy products decreased to $7.0 million for the year ended December 31, 2020 from $8.6 million for the year ended December 31, 2019, a decrease of $1.6 million, or 19%.

Cost of revenue from the international supply agreement for the year ended December 31, 2020 decreased to $3.5 million compared to $4.8 million for the year ended December 31, 2019. The decrease is primarily due to a reduction in sales volume and related costs under the supply agreement with Globus.

Gross profit. Gross profit was $102.5 million for the year ended December 31, 2020 compared to $77.6 million for the year ended December 31, 2019, representing an increase of $24.9 million, or 32%.

Gross profit margin from U.S. product revenue increased by approximately 2% for the year ended December 31, 2020 compared to the year ended December 31, 2019. The change in gross profit margin from U.S. product revenue was primarily attributed to the reduction in non-cash excess and obsolescence expense, partially offset by an increase in amortization expense related to our SafeOp Neural InformatiX system and product mix.

There were no changes to gross profit margin from the international supply agreement for the year ended December 31, 2020 compared to the year ended December 31, 2019.

Research and development expenses. Research and development expenses increased by $4.9 million, or 35%, primarily related to the hiring of new personnel and new project costs, partially offset by decreases in other various research and development initiatives. We expect research and development expenses to increase in future periods as we continue to hire additional engineering and development talent and invest in our product pipeline.

Sales, general and administrative expenses. Sales, general and administrative expenses increased $27.4 million, or 27% during the year ended December 31, 2020 as compared to the year ended December 31, 2019. The increase was primarily related to commissions, sales compensation, stock-based compensation, and variable selling expenses associated with the increase in U.S. product revenue, and in addition to our continued investment in building our strategic distribution channel. Additionally, we have increased our investment in our sales and marketing functions by increasing headcount to support the growth of our business. We expect our sales, general and administrative expenses to continue to increase as we continue to invest in our business infrastructure to fuel our organic growth, in addition to increases in our variable selling expenses related to our projected increase in U.S. product revenue. As we continue to make investments in our business infrastructure and achieve our projected future revenue growth, we expect to attain greater operational efficiencies and in turn, increased operating leverage on the fixed costs associated with our sales, general and administrative expenses, which are currently 92% of U.S. product revenue.

Litigation-related expenses. Litigation-related expenses increased by a negligible amount and was primarily related to our ongoing litigation with NuVasive, Inc. and fluctuations related to the timing of related legal activities.

Amortization of acquired intangible assets. Amortization of acquired intangible assets was $0.7 million for both the years ended December 31, 2020 and December 31, 2019. The expense represents amortization in the period for intangible assets associated with general business assets, intellectual property, licenses, and other assets obtained in acquisitions and licensing agreements.

Transaction-related expenses. Transaction-related expenses of $4.2 million are costs incurred throughout the year related to the prior tender offer agreement entered into with EOS on February 28, 2020, which was subsequently terminated by the Company in response to the then-expected market effects of the COVID-19 pandemic on April 24, 2020, as well as costs incurred related to the renewed tender offer agreement entered into with EOS on December 16, 2020. These expenses primarily include third-party advisory and legal fees.

Total interest and other expense, net. Total interest and other expense, net increased $10.1 million, or 103%, primarily due to interest expense on new debt arrangements, additional draws on existing agreements, a loss on debt extinguishment related to the payoff of the MidCap facility in the second quarter of 2020, and amounts associated with the partial extinguishment of our term loan with Squadron Medical in the fourth quarter of 2020.

Income tax provision. Income tax provision from continuing operations increased $0.4 million, or 161%, primarily related to a release of the 2018 income tax benefit recognized as part of the acquisition of SafeOp.

Liquidity and Capital Resources

Our principal sources of liquidity are our existing cash and additional borrowings available under our Term Loan. Our liquidity and capital structure are evaluated regularly within the context of our annual operating and strategic planning process. We consider the liquidity necessary to fund our operations, which include working capital needs, investments in research and development, investments in inventory and instrument sets to support our customers, as well as other operating costs. Our future capital requirements will depend on many factors including our rate of revenue growth, the timing and extent of spending to support development efforts, the expansion of sales, marketing and administrative activities, and the timing of introductions of new products and enhancements to existing products. As current borrowing sources become due, we may be required to access the capital markets for additional funding. If we are required to access the debt market, we should be able to secure reasonable borrowing rates.

Cash was $107.8 million and $47.1 million at December 31, 2020 and December 31, 2019, respectively, and available borrowings under our Term Loan were $40.0 million and $20.0 million at December 31, 2020 and December 31, 2019, respectively. The increase in cash during the year ended December 31, 2020 of $60.7 million was primarily due to the public offering that closed in October 2020, which raised $107.7 million in net proceeds. The $20.0 million increase in available borrowings under the Term Loan during the year ended December 31, 2020 is mainly due to the debt amendment we entered into in December 2020; whereby, we exchanged $30.0 million of outstanding principal for our common stock and expanded the Term Loan by $15.0 million. We believe that our cash on hand, and the amount available to us under our Term Loan will be sufficient to fund our operations for at

least the next twelve months subsequent to the date the consolidated financial statements are issued. We believe that our existing funds, cash generated from our operations and our existing sources of and access to financing are adequate to satisfy our needs for working capital, capital expenditure and debt service requirements, and other business initiatives we plan to strategically pursue.

Squadron Medical Credit Agreement, Paycheck Protection Loan and Other Debt and Commitments

We have an $85.0 million Term Loan with Squadron Medical which matures on June 30, 2026. The Term Loan bears interest at London Interbank Offered Rate ("LIBOR") plus 8.0% per annum (subject to a 9.0% floor and 12.0% ceiling). Interest-only payments are due monthly until December 2023 and joined by $1.0 million monthly principal payments beginning December 2023. Any remaining principal amounts of the Term Loan will be due on June 30, 2026. In addition to paying interest on outstanding principal on the Term Loan, we will pay a commitment fee at a rate of 1.0% per annum to Squadron Medical in respect of the unutilized Term Loan. As collateral for the Term Loan, Squadron Medical has a first lien security interest in substantially all of our assets, except for accounts receivable. Our obligation outstanding under the Term Loan as of December 31, 2020 was $45.0 million.

On April 23, 2020, we received the proceeds from a loan in the amount of approximately $4.3 million (the "PPP Loan") from Silicon Valley Bank, as lender, pursuant to the Paycheck Protection Program ("PPP") of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"). The PPP Loan matures on April 21, 2022 and bears interest at a rate of 1.0% per annum. Commencing August 21, 2021, we are required to pay the lender equal monthly payments of principal and interest as required to fully amortize by April 21, 2022 the principal amount outstanding on the PPP Loan as of the date prescribed by guidance issued by the U.S. Small Business Administration ("SBA"). The PPP Loan is evidenced by a promissory note dated April 21, 2020, which contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. We may prepay the PPP Loan at any time prior to maturity with no prepayment penalties.

All or a portion of the PPP Loan may be forgiven by the SBA upon application. We submitted our application for forgiveness of the loan in November 2020. Under the CARES Act, loan forgiveness is available for the sum of documented payroll costs, covered rent payments, covered mortgage interest and covered utilities during the twenty-four-week period, beginning on the date of loan approval. For purposes of the CARES Act, payroll costs exclude compensation of an individual employee in excess of $100,000, prorated annually. Not more than 25% of the forgiven amount may be for non-payroll costs. Forgiveness is reduced if full-time headcount declines, or if salaries and wages for employees with salaries of $100,000 or less annually are reduced by more than 25%. In the event the PPP Loan, or any portion thereof, is forgiven pursuant to the PPP, the amount forgiven is applied to outstanding principal. We used all of the proceeds from the PPP Loan to retain employees and maintain payroll. Although we have applied for loan forgiveness as afforded by the PPP, we cannot provide assurance that such loan forgiveness will be granted in whole or in part.

We entered into an Inventory Financing Agreement whereby we may draw up to $6.0 million for the purchase of inventory to accrue interest at a rate of LIBOR plus 8.0% per annum, subject a 10.0% floor and 13.0% ceiling. All principal will become due and payable upon maturity on November 6, 2023 and all interest will be paid monthly. Should we elect to prepay the Squadron Medical Term Loan, all amounts due under the Inventory Financing Agreement will become mandatorily due. Our obligation outstanding under the Inventory Financing Agreement as of December 31, 2020 was $3.8 million.

As of December 31, 2020, we have made $45.0 million in Orthotec settlement payments and there remains an aggregate $12.8 million of Orthotec settlement payments (including interest) to be paid by us.

We entered into a distribution agreement with a third-party provider in January 2020 in which we are obligated to certain minimum purchase requirements related to inventory and equipment leases. As of December 31, 2020, the minimum purchase commitment required by us under the agreement was $3.2 million to be paid over a three-year period.

Our various debt agreements include several event of default provisions, such as payment default, insolvency conditions and a material adverse effect clause, which could cause interest to be charged at a rate which is up to five

percentage points above the rate effective immediately before the event of default or result in our lenders' rights to declare all outstanding obligations immediately due and payable We were in compliance with the covenants under the credit agreements at December 31, 2020.

Operating Activities

We used net cash of $46.4 million from operating activities for the year ended December 31, 2020. During this period, net cash used in operating activities consisted of our net loss adjusted for $48.5 million of non-cash adjustments including amortization, depreciation, stock-based compensation, provision for excess and obsolete inventory, interest expense related to amortization of debt discount and issuance costs, debt extinguishment charges, loss on disposal of instruments, and $16.0 million use of cash related to working capital and other assets.

Investing Activities

We used cash of $23.9 million in investing activities for the year ended December 31, 2020, primarily for the purchase of surgical instruments to support the commercial launch of new products.

Financing Activities

Financing activities provided net cash of $130.8 million for the year ended December 31, 2020, primarily related to $107.7 million of proceeds from the 2020 Offering, $3.3 million from the exercise of stock options or warrants, $42.4 million in borrowings under lines of credit, and $34.0 million in proceeds from the issuance of term debt, partially offset by $56.6 million in repayments under existing lines of credit.

Contractual obligations and commercial commitments

Total contractual obligations and commercial commitments as of December 31, 2020 are summarized in the following table (in thousands):

	Payment Due by Year						
	Total	2021	2022	2023	2024	2025	Thereafter
Paycheck Protection Program	$ 4,271	$ 2,344	$ 1,927	$ —	$ —	$ —	$ —
Inventory financing	3,821	—	—	3,821	—	—	—
Squadron Medical Term Loan	45,000	—	—	1,000	12,000	12,000	20,000
Interest expense	20,782	5,091	4,499	4,463	3,522	2,416	791
Note payable for software agreements, insurance premiums and PP&E	1,887	1,823	23	24	17	—	—
Capital lease obligations	74	37	37	—	—	—	—
Facility lease obligations (1)	30,943	1,552	2,977	3,025	3,116	3,209	17,064
Other purchase commitments and operating lease obligations	3,392	3,392	—	—	—	—	—
Litigation settlement obligations, gross (2)	12,833	4,000	4,400	4,400	33	—	—
Guaranteed minimum royalty obligations & milestones (3)	6,574	918	918	948	918	2,329	543
License agreement milestones (4)	1,240	40	440	240	240	40	240
Total	$ 130,817	$ 19,197	$ 15,221	$ 17,921	$ 19,846	$ 19,994	$ 38,638

(1) Includes our new headquarters building lease that commenced in February 2021.

(2) Represents gross payments due to Orthotec, LLC pursuant to a Settlement and Release Agreement, dated as of August 13, 2014, by and among the Company and its direct subsidiaries, including Alphatec Spine, Inc., Alphatec Holdings International C.V., Scient'x S.A.S. and Surgiview S.A.S.; HealthpointCapital, LLC, HealthpointCapital Partners, L.P., HealthpointCapital Partners II, L.P., John H. Foster and Mortimer Berkowitz III; and Orthotec, LLC and Patrick Bertranou. In September 2014, the Company and HealthpointCapital entered into an agreement for joint payment of settlement whereby HealthpointCapital is obligated to pay $5.0 million of the settlement amount, which payments commenced in the fourth quarter of 2020 and continuing through 2021. See Note 11 of our Notes to Consolidated Financial Statements included this Annual Report on Form 10-K for further information.

(3) Commitments representing cash and equity related royalty payments and are subject to attaining certain sales and equity milestones.

(4) Commitments representing payments in cash that are subject to attaining certain sales milestones which we believe are reasonably likely to be achieved.

Real Property Leases

In January 2016, we entered into a lease agreement, or the Building Lease, for office, engineering, and research and development space in Carlsbad, California with the lease term through July 31, 2021. Under the Building Lease our monthly rent payable is approximately $105,000 per month during the first year and increases by approximately $3,000 each year thereafter.

On December 4, 2019, we entered into a new lease agreement, or New Building Lease, for a new headquarters location which consists of 121,541 square feet of office, engineering, and research and development space in Carlsbad, California. The term of the New Building Lease commenced on February 1, 2021 and is expected to terminate January 31, 2031, subject to two sixty-month options to renew. Base rent under the New Building Lease for the first twelve months of the term will be $195,000 per month subject to full abatement during months two through ten. Base rent for the second year of the term will be $244,115 per month and thereafter will increase annually by 3.0%. At the beginning of each exercised option period, base rent will be adjusted to the market rental value, and thereafter will increase annually by 3.0% through the end of such option period.

Off-Balance Sheet Arrangements

As of December 31, 2020, we did not have any off-balance sheet arrangements.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the U.S. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. On an on-going basis, we evaluate our estimates and assumptions, including those related to revenue recognition, allowances for accounts receivable, inventories and intangible assets, stock-based compensation and income taxes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumption conditions.

We believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

The Company recognizes revenue from products sales in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 606, *Revenue from Contracts with Customers* ("Topic 606"). This standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under Topic 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of Topic 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of Topic 606, the Company assesses the goods or services promised within each contract and determines those that are performance obligations and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Excess and Obsolete Inventory

Our inventories are stated at the lower of cost or net realizable value, with cost primarily determined under the first-in, first-out method. A majority of our inventory is comprised of finished goods and we primarily utilize third-party suppliers to produce our products. We evaluate the carrying value of our inventory in relation to the estimated forecast of product demand, which also takes into consideration estimated product lifecycles. Our estimates and assumptions for excess and obsolete inventory are reviewed and updated on a quarterly basis. Increases in the reserve for excess and obsolete inventory results in a corresponding charge to cost of goods sold. Historically our reserves have been adequate to cover losses.

The need to maintain substantial levels of inventory impacts the risk of inventory obsolescence. We maintain a number of different products in our inventory portfolio. In addition, we continue to introduce new products and product innovations which we believe will increase our revenue, enhance spine surgery, and compel surgeons to adopt our products. Though we believe this strategy provides us with a competitive advantage, it also increases the risk that our products will become excess or obsolete inventory prior to sale or prior to the end of their anticipated useful lives. As a result, the introduction of new or next-generation products may require us to take charges for excess and obsolete inventory which may have impact the value of our current inventory as well as our operating results.

Leases

Effective January 1, 2019, we adopted ASC No. 2016-02, *Leases ("Topic 842") ("ASC 842")*, which supersedes the current accounting for leases, using the modified retrospective transition method. The Company has elected to apply the practical expedients allowed by the standard for existing leases. The new standard, while retaining two distinct types of leases, finance and operating, (i) requires lessees to record a right-of-use ("ROU") asset and a related liability for the rights and obligations associated with a lease, regardless of lease classification, and recognize lease expense in a manner similar to current accounting, (ii) eliminates current real estate specific lease provisions, (iii) modifies the lease classification criteria and (iv) aligns many of the underlying lessor model principles with those in the new revenue standard. We determined the initial classification and measurement of our ROU, assets and lease liabilities at the lease commencement date, or the adoption date, if later, and thereafter if modified. We recognized a right-of-use asset for our operating leases with lease terms greater than 12 months. The lease term includes any renewal options and termination options that we are reasonably assured to exercise. The present value of lease payments is determined by using the incremental borrowing rate for operating leases determined by using the incremental borrowing rate of interest that we would pay to borrow on a collateralized basis an amount equal to the lease payments in a similar economic environment. We applied the new guidance to our existing facility lease at the time of adoption and recognized a right-of-use asset of $2.4 million and operating lease liability of $2.9 million, during the first period of adoption, and recorded a reversal of the previous deferred rent balance under the previous lease guidance of approximately $0.6 million. We entered into another facility lease for smaller office space during the third quarter of 2019 and also applied this guidance to create an additional ROU asset and operating lease liability. The two leases are presented together on the Company's consolidated balance sheet.

Rent expense for operating leases is recognized on a straight-line basis over the reasonably assured lease term based on the total lease payments and is included in research and development and general and administrative expenses in the statements of operations and comprehensive loss.

Valuation of Intangible Assets

We assess the impairment of our intangible assets annually in December or whenever business conditions change and an earlier impairment indicator arises. This assessment requires us to make assumptions and judgments regarding the carrying value of these assets. These assets are considered to be impaired if we determine that their carrying value may not be recoverable based upon our assessment of certain events or changes in circumstances, including the following:

- a determination that the carrying value of such assets cannot be recovered through undiscounted cash flows;
- loss of legal ownership or title to the assets;

- significant changes in our strategic business objectives and utilization of the assets; or
- the impact of significant negative industry or economic trends.

If the assets are considered to be impaired, the impairment we recognize is the amount by which the carrying value of the assets exceeds the fair value of the assets. Significant management judgment is required in estimating the fair value of our intangible assets.

Warrants to purchase common stock

Warrants are accounted for in accordance with the applicable accounting guidance provided in ASC 815 - *Derivatives and Hedging* as either derivative liabilities or as equity instruments depending on the specific terms of the agreements. Liability-classified instruments are recorded at fair value at each reporting period with any change in fair value recognized as a component of change in fair value of derivative liabilities in the consolidated statements of operations. We estimate liability classified instruments using the Black Scholes model, which requires management to develop assumptions and inputs that have significant impact on such valuations.

During each reporting period, we evaluate changes in facts and circumstances that could impact the classification of warrants from liability to equity, or vice versa.

Stock-Based Compensation

We account for stock-based compensation under provisions which require that share-based payment transactions with employees be recognized in the financial statements based on their fair value and recognized as compensation expense over the vesting period. The amount of expense recognized during the period is affected by subjective assumptions, including estimates of our future volatility, the expected term for our stock options, the number of options expected to ultimately vest, and the timing of vesting for our share-based awards.

We use a Black-Scholes option-pricing model to estimate the fair value of our stock option awards. The calculation of the fair value of the awards using the Black-Scholes option-pricing model is affected by our stock price on the date of grant as well as assumptions regarding the following:

- Estimated volatility is a measure of the amount by which our stock price is expected to fluctuate each year during the expected life of the award. Our estimated volatility through December 31, 2020 was based on our actual historical volatility. An increase in the estimated volatility would result in an increase to our stock-based compensation expense.
- The expected term represents the period of time that awards granted are expected to be outstanding. Our estimated expected term through December 31, 2020 was calculated using a weighted-average term based on historical exercise patterns and the term from option grant date to exercise for the options granted within the specified date range. An increase in the expected term would result in an increase to our stock-based compensation expense.
- The risk-free interest rate is based on the yield curve of a zero-coupon U.S. Treasury bond on the date the stock option award is granted with a maturity equal to the expected term of the stock option award. An increase in the risk-free interest rate would result in an increase to our stock-based compensation expense.
- The assumed dividend yield is based on our expectation of not paying dividends in the foreseeable future.

We use historical data to estimate the number of future stock option forfeitures. Share-based compensation recorded in our consolidated statements of operations is based on awards expected to ultimately vest and has been reduced for estimated forfeitures. Our estimated forfeiture rates may differ from our actual forfeitures which would affect the amount of expense recognized during the period.

We account for stock option grants to non-employees under provisions which require that the fair value of these instruments be recognized as an expense over the period in which the related services are rendered.

Stock-based compensation expense of awards with performance conditions is recognized over the period from the date the performance condition is determined to be probable of occurring through the time the applicable condition is met. Determining the likelihood and timing of achieving performance conditions is a subjective judgment made by management which may affect the amount and timing of expense related to these share-based awards. Share-based compensation is adjusted to reflect the value of options which ultimately vest as such amounts become known in future periods. As a result of these subjective and forward-looking estimates, the actual value of our share-based awards could differ significantly from those amounts recorded in our financial statements.

Stock-based awards with market conditions are valued using the Monte Carlo valuation technique which requires management to make significant estimates and assumptions that are not observable from the market. Stock based compensation for awards with both service and market conditions are recognized on a straight-line basis over the longer of the derived service period or the requisite service period.

Income Taxes

We account for income taxes in accordance with provisions which set forth an asset and liability approach that requires the recognition of deferred tax assets and deferred tax liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Valuation allowances are established when necessary to reduce deferred tax assets to the amount that is more likely than not expected to be realized. In making such a determination, a review of all available positive and negative evidence must be considered, including scheduled reversal of deferred tax liabilities, projected future taxable income, tax planning strategies, and recent financial performance.

We recognize interest and penalties related to uncertain tax positions as a component of the income tax provision.

Recent Accounting Pronouncements

See "*Notes to Financial Statements - Note 2 - Recent Accounting Pronouncements*" included elsewhere in this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

Other outstanding debt consists of various variable rate instruments, including debt outstanding under the Term Loan with Squadron Medical.

Our borrowings under our credit facility exposes us to market risk related to changes in interest rates. As of December 31, 2020, our outstanding floating rate indebtedness totaled $49.3 million. The primary base interest rate is the LIBOR rate. Assuming the outstanding balance on our floating rate indebtedness remains constant over a year, a 100-basis point increase in the interest rate would decrease pre-tax income and cash flow by approximately $0.5 million.

Commodity Price Risk

We purchase raw materials that are processed from commodities, such as titanium and stainless steel. These purchases expose us to fluctuations in commodity prices. Given the historical volatility of certain commodity prices, this exposure can impact our product costs. However, because our raw material prices comprise a small portion of our cost of revenue, we have not experienced any material impact on our results of operations from changes in commodity prices. A 10% change in commodity prices would not have had a material impact on our results of operations for the twelve months ended December 31, 2020.

Item 8. Financial Statements and Supplementary Data

The consolidated financial statements and supplementary data required by this item are set forth at the pages indicated in Item 15.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, that are designed to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required financial disclosures. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures as of the end of the period covered by this Form 10-K. We recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of December 31, 2020, as described below.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting. Internal control over financial reporting refers to the process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer, and effected by our Board of Directors, management and other personnel, 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.

Because of its inherent limitations, internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become ineffective because of changes in conditions or that the degree of compliance with established policies or procedures may deteriorate.

Our management, under the supervision of, our Chief Executive Officer and Chief Financial Officer, has assessed the effectiveness of our internal control over financial reporting using the framework set forth in the report entitled *Internal Control—Integrated Framework* published by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. Management reviewed the results of this evaluation with the Audit Committee of our Board of Directors, and based on this evaluation, management identified the following deficiencies.

Remediation of 2019 Material Weaknesses

As previously reported in our Annual Report on Form 10-K for the year ended December 31, 2019, we identified deficiencies in internal controls over our revenue and inventory cycles whereby the review of sales orders and inventory transfers were not properly applied to a portion of the orders during the year. The control deficiencies also had residual impacts on other inventory controls, which were in part dependent on these controls. While these deficiencies did not result in any identified misstatements to our financial statements, and there were no changes to previously released financial results, it was determined that such deficiencies were material enough to substantiate a weaknesses in our internal controls over financial reporting since the deficiencies resulted in a reasonable possibility that a material misstatement of our revenue and inventory in the annual or interim financial statements may not have been prevented or detected on a timely basis. Although several compensating controls in our revenue and inventory cycles were found to be operating effectively during 2019, such controls did not directly address the transactional control risk identified by the deficiencies.

As a result of the deficiencies, we developed and implemented a remediation plan to address the material weaknesses associated with the revenue and inventory controls described above. The remediation efforts included the following:

- Improvement of documentation and review procedures associated with the existing controls over sales orders, which now include additional levels of review as well as increased documentation requirements to ensure transaction-level review procedures are operating as intended.
- The implementation of additional compensating key controls within our revenue cycle to provide additional oversight of sales order and revenue activity.
- Improvement of controls over documentation procedures related to our inventory transfers, which now require the performance of additional documentation procedures as part of the inventory transfer process.
- Additional training for personnel responsible for performing key controls.
- The addition of new personnel in relative functional areas of where the deficiencies occurred.

These remediation efforts are subject to continued management review supported by testing, as well as oversight by the Audit Committee of our Board of Directors. Based on testing that has occurred during the 2020 fiscal year, we concluded that the material weakness mentioned above has been fully remediated.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting except for the remediation of material weakness described above.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Alphatec Holdings, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Alphatec Holdings, Inc.'s (the "Company") internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO criteria). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the balance sheets and the related statements of operations, comprehensive loss, stockholders' equity, and cash flows of the Company and our report dated March 5, 2021 expressed an unqualified opinion.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's 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 accounting principles generally accepted in the United States of America. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness 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.

/s/ Mayer Hoffman McCann P.C.

San Diego, California
March 5, 2021

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 11. Executive Compensation

The information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated herein by reference to our Proxy Statement with respect to our 2021 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of the fiscal year covered by this Annual Report on Form 10-K.

PART IV

Item 15. Exhibits, Financial Statement Schedules

Item 15 (a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements:

Item 15(a)(3) Exhibits List

The following is a list of exhibits filed as part of this Annual Report on Form 10-K.

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
2.1	Purchase and Sale Agreement, dated as of July 25, 2016, by and between Alphatec Holdings, Inc. and Globus Medical Ireland, Ltd.		Form 8-K (Exhibit 2.1)	07/26/16	000-52024
2.2	First Amendment to Purchase and Sale Agreement, dated as of September 1, 2016, by and between Alphatec Holdings, Inc. and Globus Medical Ireland, Ltd.		Form 8-K (Exhibit 99.1)	09/08/16	000-52024
2.3	Second Amendment to Purchase and Sale Agreement and First Amendment to Product Manufacture and Supply Agreement, dated as of February 9, 2017, by and between Alphatec Holdings, Inc. and Globus Medical Ireland, Ltd.		Form 10-K (Exhibit 2.3)	03/31/17	000-52024
2.4	Tender Offer Agreement, dated as of December 16, 2020, by and between Alphatec Holdings, Inc. and EOS imaging S.A.		Form 8-K (Exhibit 2.1)	12/17/20	000-52024
2.5	Form of Tender Commitment, dated as of December 16, 2020		Form 8-K (Exhibit 2.2)	12/17/20	000-52024
3.1	Amended and Restated Certificate of Incorporation of Alphatec Holdings, Inc.		Amendment No. 2 to Form S-1 (Exhibit 3.2)	04/20/06	333-131609
3.2	Amendment to the Certificate of Incorporation of Alphatec Holdings, Inc.		Form 8-K (Exhibit 3.1(B))	08/24/16	000-52024
3.3	Restated Bylaws of Alphatec Holdings, Inc.		Amendment No. 5 to Form S-1 (Exhibit 3.4)	05/26/06	333-131609

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
3.4	Form of Certificate of Designation of Preferences, Rights and Limitations of Series A convertible Preferred Stock of Alphatec Holdings, Inc.		Form 8-K (Exhibit 3.1)	03/23/17	000-52024
3.5	Form of Certificate of Designation of Preferences, Rights and Limitations of Series B convertible Preferred Stock of Alphatec Holdings, Inc.		Form 8-K (Exhibit 3.1)	03/12/18	000-52024
4.1	Form of Common Stock Certificate		Form 10-K (Exhibit 4.1)	03/20/14	333-131609
4.2	Amended and Restated Registration Rights Agreement, dated April 16, 2018, by and among Alphatec Holdings, Inc. and the other signatories thereto		Form 8-K/A (Exhibit 4.1)	04/16/18	000-52024
4.3	Registration Rights Agreement, dated November 6, 2018, by and among Alphatec Holdings, Inc. and the other signatories thereto		Form S-3/A (Exhibit 4.5)	11/13/18	333-221085
4.4	Warrant with Silicon Valley Bank as the Warrant holder, dated December 16, 2011		Form 10-K (Exhibit 4.8)	03/05/12	000-52024
4.5	Form of Warrant issued to certain investors on March 28, 2017		Form 8-K (Exhibit 4.1)	03/23/17	000-52024
4.6	Form of Warrant issued to certain investors on March 8, 2018		Form 8-K (Exhibit 4.1)	03/12/18	000-52024
4.7	Form of Registration Rights Agreement		Form 8-K (Exhibit 4.2)	03/23/17	000-52024
4.8	Amended and Restated Warrant to Purchase Common Stock of Alphatec Holdings, Inc. issued to Patrick S. Miles		Form 10-Q (Exhibit 4.1)	11/05/20	000-52024
4.9	Form of Warrant to Purchase Common Stock of Alphatec Holdings, Inc. issued in connection with financing dated November 6, 2018		Form S-3/A (Exhibit 4.11)	11/13/18	333-221085
4.10	Form of Warrant to Purchase Common Stock of Alphatec Holdings, Inc. issued in connection with financing dated June 21, 2019		Form 8-K (Exhibit 10.1)	06/27/19	000-52024
4.11	Form of Merger Warrant		Form 8-K (Exhibit 4.3)	03/12/18	000-52024
4.12	Registration Rights Agreement between Alphatec Holdings, Inc., and Squadron Medical Finance Solutions LLC and Tawani Holdings LLC, dated November 6, 2018		Form S-3/A (Exhibit 4.5)	11/13/18	333-221085
4.13	Registration Rights Agreement between Alphatec Holdings, Inc., and Squadron Medical Finance Solutions LLC and Tawani Holdings LLC, dated June 21, 2019		Form 8-K (Exhibit 10.2)	06/27/19	000-52024

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
4.14	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities and Exchange Act of 1934		Form 10-K (Exhibit 4.15)	03/17/20	000-52024
4.15	Form of Common Stock Purchase Warrant		Form 8-K (Exhibit 4.1)	06/04/20	000-52024
4.16	Form of Amendment to Warrant		Form 8-K (Exhibit 4.2)	06/04/20	000-52024
4.17	Form of Second Amendment to Warrant		Form 8-K (Exhibit 4.3)	06/04/20	000-52024
4.18	Registration Rights Agreement between Alphatec Holdings, Inc., and Squadron Medical Finance Solutions LLC and Tawani Holdings LLC, dated May 29, 2020		Form 8-K (Exhibit 4.4)	06/04/20	000-52024
4.19	Registration Rights Agreement, dated December 16, 2020		Form 8-K (Exhibit 4.1)	12/17/20	000-52024
	Securities Purchase Agreements				
10.1	Securities Purchase Agreement dated as of March 8, 2018, between Alphatec Holdings, Inc. and each purchaser named in the signature pages thereto		Form 8-K (Exhibit 10.1)	03/12/18	000-52024
10.2	Securities Purchase Agreement dated as of December 16, 2020, between Alphatec Holdings, Inc. and each purchaser named in the signature pages thereto		Form 8-K (Exhibit 10.1)	12/17/20	000-52024
	Real Property Lease Agreements				
10.3	Lease Agreement by and between Alphatec Holdings, Inc. and Fenton Property Company., dated as of January 21, 2016		Form 10-K (Exhibit 10.24)	03/15/16	000-52024
10.4	Lease Agreement by and between Alphatec Spine, Inc. and RAF Pacifica Group - Real Estate Fund IV, LLC; ARKA Monterey Park, LLC, and 170 Arrowhead Partners, LLC, dated as of December 4, 2019		Form 10-K (Exhibit 10.3	03/17/20	000-52024
	Loan Agreements				
10.5	Credit, Security and Guaranty Agreement between Alphatec Holdings, Inc., Alphatec Spine, Inc. and SafeOp Surgical, Inc. and Squadron Medical Finance Solutions LLC, dated November 6, 2018		Form 10-K (Exhibit 10.26)	03/29/19	000-52024

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
10.6	First Amendment to Credit, Security and Guaranty Agreement between Alphatec Holdings, Inc., Alphatec Spine, Inc. and SafeOp Surgical, Inc. and Squadron Medical Finance Solutions LLC, dated March 27, 2019		Form 10-Q (Exhibit 10.2)	05/10/19	000-52024
10.7	Second Amendment to Credit, Security and Guaranty Agreement between Alphatec Holdings, Inc., Alphatec Spine, Inc. and SafeOp Surgical, Inc. and Squadron Medical Finance Solutions LLC, dated May 29, 2020		Form 8-K (Exhibit 10.1)	06/04/20	000-52024
10.8	Third Amendment to Credit, Security and Guaranty Agreement between Alphatec Holdings, Inc., Alphatec Spine, Inc. and SafeOp Surgical, Inc. and Squadron Medical Finance Solutions LLC, dated December 16, 2020		Form 8-K (Exhibit 10.1)	06/04/20	000-52024
10.9	Third Amended and Restated Term Note, dated December 16, 2020, with Squadron Medical Finance Solutions LLC		Form 8-K (Exhibit 10.28)	06/04/20	000-52024
10.10	Debt Exchange Agreement between Alphatec Holdings, Inc. and Squadron Medical Finance Solutions LLC, dated December 16, 2020		Form 10-K (Exhibit 10.27)	03/29/19	000-52024
10.11	U.S. Small Business Administration Paycheck Protection Program Note		Form 10-Q (Exhibit 10.1)	05/11/20	000-52024
	Agreements with Respect to Product Supply, Collaborations, Licenses, Research and Development				
10.12†	Supply Agreement by and between Alphatec Spine, Inc. and Invibio, Inc., dated as of October 18, 2004 and amended by Letter of Amendment in respect of the Supply Agreement, dated as of December 13, 2004		Amendment No. 4 to Form S-1 (Exhibit 10.29)	05/15/06	333-131609
10.13†	Letter Amendment between Alphatec Spine, Inc. and Invibio, Inc., dated November 24, 2010		Form 10-Q (Exhibit 10.3)	05/06/11	000-52024
10.14†	Product Manufacture and Supply Agreement, dated September 1, 2016 with Globus Medical Ireland, Ltd.		Form 10-Q (Exhibit 10.2)	11/09/16	000-52024
	Agreements with Officers and Directors				
10.15*	Employment Agreement with Jeffrey G. Black dated February 10, 2017		Form 10-Q (Exhibit 10.3)	05/12/17	000-52024
10.16*	Employment Agreement with Jon Allen dated October December 10, 2016		Form 10-Q (Exhibit 10.4)	05/12/17	000-52024
10.17*	Employment Agreement with Craig E. Hunsaker dated September 14, 2016		Form 10-Q (Exhibit 10.5)	05/12/17	000-52024

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
10.18*	Employment Agreement with Brian Snider dated February 27, 2017		Form 10-Q (Exhibit 10.6)	05/12/17	000-52024
10.19*	Employment Agreement by and among Patrick S. Miles, Alphatec Spine, Inc., and Alphatec Holdings, Inc., dated, October 2, 2017		Form 10-K (Exhibit 10.26)	03/09/18	000-52024
10.20*	Employment Agreement by and among Mark Ojeda, Alphatec Spine, Inc., and Alphatec Holdings, Inc., dated, September 17, 2018		Form 10-K (Exhibit 10.28)	03/17/20	000-52024
10.21*	Employment Agreement by and among Eric Dasso, Alphatec Spine, Inc., and Alphatec Holdings, Inc., dated, August 2, 2019		Form 10-K (Exhibit 10.29)	03/17/20	000-52024
10.22*	Employment Agreement by and among Kelli Howell, Alphatec Spine, Inc., and Alphatec Holdings, Inc., dated March 10, 2018		Form 10-K (Exhibit 10.30)	03/17/20	000-52024
10.23*	Employment Agreement by and among Dave Sponsel, Alphatec Spine, Inc., and Alphatec Holdings, Inc., dated March 4, 2018		Form 10-K (Exhibit 10.31)	03/17/20	000-52024
10.24*	Severance Agreement between Dave Sponsel and Alphatec Spine, Inc dated March 11, 2019		Form 10-Q (Exhibit 10.2)	05/11/20	000-52024
10.25*	Severance Agreement between Eric Dasso and Alphatec Spine, Inc dated March 11, 2019		Form 10-Q (Exhibit 10.3)	05/11/20	000-52024
10.26*	Severance Agreement between Kelli Howell and Alphatec Spine, Inc dated March 11, 2019		Form 10-Q (Exhibit 10.4)	05/11/20	000-52024
10.27*	Severance Agreement between Mark Ojeda and Alphatec Spine, Inc dated March 11, 2019		Form 10-Q (Exhibit 10.5)	05/11/20	000-52024
10.28*	Severance Agreement between Patrick S. Miles and Alphatec Spine, Inc dated February 18, 2021		Form 8-K (Exhibit 10.1)	02/22/21	000-52024
10.29*	Severance Agreement between Craig E. Hunsaker and Alphatec Spine, Inc dated February 18, 2021		Form 8-K (Exhibit 10.2)	02/22/21	000-52024
10.30*	Form of Change in Control Agreement entered into separate between Alphatec Spine, Inc. and Dave Sponsel, Eric Dasso, Kelli Howell, Mark Ojeda	X			
	Equity Compensation Plans				
10.31*	Amended and Restated 2005 Employee, Director and Consultant Stock Plan		Form S-8 (Exhibit 99.1)	03/23/13	333-187190

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
10.32*	Amendment to Amended and Restated 2005 Employee, Director and Consultant Stock Plan		Schedule 14A (Appendix B)	06/11/13	000-52024
10.33*	Amendment to the Amended and Restated 2005 Employee, Director and Consultant Stock Plan		Form 10-Q (Exhibit 10.1)	10/30/14	000-52024
10.34*	Form of Non-Qualified Stock Option Agreement issued under the Amended and Restated 2005 Employee, Director and Consultant Stock Plan		Form 10-K (Exhibit 10.40)	03/05/13	000-52024
10.35*	Form of Incentive Stock Option Agreement issued under the Amended and Restated 2005 Employee, Director and Consultant Stock Plan		Form 10-K (Exhibit 10.41)	03/05/13	000-52024
10.36*	Form of Restricted Stock Agreement issued under the Amended and Restated 2005 Employee, Director and Consultant Stock Plan		Form 10-K (Exhibit 10.42)	03/05/14	000-52024
10.37*	Form of Performance-Based Restricted Unit Agreement issued under the Amended and Restated 2005 Employee, Director and Consultant Stock Plan.		Form 10-Q (Exhibit 10.2)	10/30/14	000-52024
10.38*	Amended and Restated 2016 Equity Incentive Award Plan		Form 10-Q (Exhibit 10.1)	11/09/18	000-52024
10.39*	First Amendment to 2016 Equity Incentive Plan		Form 8-K (Exhibit 10.2)	05/18/18	000-52024
10.40*	Second Amendment to 2016 Equity Incentive Plan		Form 10-Q (Exhibit 10.1)	11/09/18	000-52024
10.41*	Third Amendment to 2016 Equity Incentive Plan		Form 8-K (Exhibit 10.2)	06/13/19	000-52024
10.42*	Fourth Amendment to 2016 Equity Incentive Plan		Form 8-K (Exhibit 10.2)	06/18/20	000-52024
10.43*	Amended and Restated 2007 Equity Stock Purchase Plan		Form 8-K/A (Exhibit 10.2)	06/22/17	000-52024
10.44*	First Amended and Restated 2007 Employee Stock Purchase Plan		Form 8-K (Exhibit 10.1)	06/13/19	000-52024
10.45*	2016 Employment Inducement Plan		Form S-8 (Exhibit 10.2)	10/05/16	333-213981
10.46*	First Amendment to 2016 Employment Inducement Award Plan		Form S-8 (Exhibit 10.2)	12/12/16	333-215036
10.47*	Second Amendment to the 2016 Employment Inducement Award Plan		Form S-8 (Exhibit 10.3)	03/31/17	333-217055
10.48*	Third Amendment to the 2016 Employment Inducement Award Plan, dated October 1, 2017.		Form 8-K (Exhibit 10.4)	10/2/17	000-52024
10.49*	Fourth Amendment to the 2016 Employment Inducement Award Plan, dated March 6, 2018.		Form 8-K (Exhibit 10.9)	03/12/18	000-52024

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
10.50*	Fifth Amendment to the 2016 Employment Inducement Award Plan, dated May 13, 2019		Form S-8 (Exhibit 10.11)	07/16/19	333-232661
10.51*	Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Award Agreement under the 2016 Employment Inducement Award Plan		Form S-8 (Exhibit 10.3)	10/05/16	333-213981
10.52*	Form of Stock Option Grant Notice and Stock Option Agreement under the 2016 Employment Inducement Award Plan		Form S-8 (Exhibit 10.4)	10/05/16	333-213981
10.53*	Form of Performance Stock-Based Award Grant Notice and Performance Stock-Based Award Agreement under the 2016 Employment Inducement Award Plan		Form S-8 (Exhibit 10.5)	10/05/16	333-213981
	Settlement Agreements				
10.54	Settlement and Release Agreement, dated as of August 13, 2014, by and among Alphatec Holdings, Inc. and its direct and indirect subsidiaries and affiliates, Orthotec, LLC, Patrick Bertranou and the other parties named therein		Form 10-Q (Exhibit 10.3)	10/30/14	000-52024
21.1	Subsidiaries of the Registrant and Wholly Owned Subsidiaries of the Registrant's Subsidiaries	X			
23.1	Consent of Independent Registered Public Accounting Firm	X			
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32	Certification pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X			
101.INS	XBRL Instance Document-the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				
101.SCH	Inline XBRL Taxonomy Extension Schema Document				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document				
104	Cover page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).				

(*) Management contract or compensatory plan or arrangement.

(†) Confidential treatment has been granted by the Securities and Exchange Commission as to certain portions.

SIGNATURES

Pursuant to the requirements 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.

ALPHATEC HOLDINGS, INC.

Dated: March 5, 2021

By: /s/ Patrick S. Miles
Patrick S. Miles
Chairman and Chief Executive Officer
(principal executive officer)

Dated: March 5, 2021

By: /s/ Jeffrey G. Black
Jeffrey G. Black
Executive Vice President and Chief Financial Officer
(principal financial officer and principal accounting officer)

SIGNATURES AND POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Patrick S. Miles and Jeffrey G. Black, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that such attorneys-in-fact and agents or any of them, or his or her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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.

Signature	Title	Date
/s/ PATRICK S. MILES **Patrick S. Miles**	Chairman and Chief Executive Officer (Principal Executive Officer)	March 5, 2021
/s/MORTIMER BERKOWITZ III **Mortimer Berkowitz III**	Lead Director	March 5, 2021
/s/EVAN BAKST **Evan Bakst**	Director	March 5, 2021
/s/QUENTIN BLACKFORD **Quentin Blackford**	Director	March 5, 2021
/s/JASON HOCHBERG **Jason Hochberg**	Director	March 5, 2021
/s/KAREN K. MCGINNIS **Karen K. McGinnis**	Director	March 5, 2021
/s/DAVID H. MOWRY **David H. Mowry**	Director	March 5, 2021

Signature	Title	Date
/s/DAVID R. PELIZZON **David R. Pelizzon**	Director	March 5, 2021
/s/JEFFREY P. RYDIN **Jeffrey P. Rydin**	Director	March 5, 2021
/s/JAMES L.L. TULLIS **James L.L. Tullis**	Director	March 5, 2021
/s/DONALD A. WILLIAMS **Donald A. Williams**	Director	March 5, 2021
/s/WARD W. WOODS **Ward W. Woods**	Director	March 5, 2021

ALPHATEC HOLDINGS, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Alphatec Holdings, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Alphatec Holdings, Inc. (“Company”) as of December 31, 2020 and 2019, and the related consolidated statements of operations, comprehensive loss, stockholders’ equity, and cash flows for each of the two years in the period ended December 31, 2020, 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, 2020 and 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company’s internal control over financial reporting as of December 31, 2020, based on criteria established in the 2013 Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated March 5, 2021 expressed an unqualified opinion thereon.

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. 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 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 year audit of the financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the financial statements and (ii) 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 accounts or disclosures to which it relates.

Valuation of Inventories

As described in note 2 to the financial statements, the Company reviews the components of inventory on a periodic basis for excess, obsolete and impaired inventory, and records a reserve for the identified items. The Company estimates an inventory reserve for estimated excess and obsolete inventory based upon historical turnover and assumptions about future demand for its products and market conditions.

We identified the valuation of the implant and biologics product inventory as a critical audit matter. The principal consideration for this determination was the degree of judgment involved in evaluating the assumptions about future demand for products and market conditions and the development of assumptions used to quantify the impact of those expectations. Therefore, especially challenging, subjective and complex auditor judgment was necessary in evaluating the significant assumptions used by the Company to develop the reserve for excess and obsolete inventory and the application of those assumptions within the methodology.

The primary procedures we performed to address this critical audit matter included:

- Testing the design and operating effectiveness of certain internal controls over the Company's process for determining the excess and obsolete inventory reserve.
- Testing management’s process for developing the estimate, including evaluation of the key assumptions and data used to classify inventory as either obsolete or excess inventory, including:
  - Testing whether the data used to determine if inventory is obsolete was complete and accurate and sufficiently precise, and
  - Evaluating whether the expected customer demand of specific inventory products used to classify inventory as excess were reasonable, considering past product sales, term of historical sales used in developing the estimate of future demand, the useful life of the inventory, current economic conditions that could impact the business and sales forecasts, and the timing of the introduction and development of new or enhanced products.
  - Identifying and evaluating the key assumptions used in developing the excess inventory reserve, including evaluating whether the reserve percentages assigned to excess inventory based on the product age and useful life are supportable.

We have served as the Company's auditor since 2017.

/s/ Mayer Hoffman McCann P.C.
San Diego, California
March 5, 2021

ALPHATEC HOLDINGS, INC.

CONSOLIDATED BALANCE SHEETS

(In thousands, except par value data)

	December 31,	
	2020	2019
Assets		
Current assets:		
Cash	$ 107,765	$ 47,113
Accounts receivable, net	23,527	16,150
Inventories, net	46,001	34,854
Prepaid expenses and other current assets	5,439	9,880
Withholding tax receivable from officer	1,076	—
Current assets of discontinued operations	352	321
Total current assets	184,160	108,318
Property and equipment, net	36,670	19,722
Right-of-use asset	1,177	1,860
Goodwill	13,897	13,897
Intangibles assets, net	24,720	25,605
Other assets	541	493
Noncurrent assets of discontinued operations	58	53
Total assets	$ 261,223	$ 169,948
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 17,599	$ 7,772
Accrued expenses	35,231	26,416
Current portion of long-term debt	4,200	489
Current portion of operating lease liability	885	1,314
Current liabilities of discontinued operations	397	399
Total current liabilities	58,312	36,390
Long-term debt, less current portion	38,034	53,448
Operating lease liability, less current portion	41	925
Other long-term liabilities	11,353	11,951
Redeemable preferred stock, $0.0001 par value; 20,000 shares authorized at December 31, 2020 and 2019; 3,319 shares issued and outstanding at December 31, 2020 and 2019	23,603	23,603
Commitments and contingencies		
Stockholders' equity:		
Series A convertible preferred stock, $0.0001 par value; 15 shares authorized at December 31, 2020 and 2019; 0 shares issued and outstanding at December 31, 2020 and 2019	—	—
Series B convertible preferred stock, $0.0001 par value; 45 shares authorized at December 31, 2020 and 2019; 0 shares issued and outstanding at December 31, 2020 and 2019	—	—
Common stock, $0.0001 par value; 200,000 authorized; 82,294 shares issued and 82,104 outstanding at December 31, 2020, net of 190 unvested shares and 61,718 shares issued and 61,400 shares outstanding, net of 318 unvested shares at December 31, 2019	8	6
Treasury stock, 2 shares, at cost	(97)	(97)
Additional paid-in capital	770,764	606,558
Shareholder note receivable	(4,000)	(5,000)
Accumulated other comprehensive income	1,204	1,088
Accumulated deficit	(637,999)	(558,924)
Total stockholders' equity	129,880	43,631
Total liabilities and stockholders' equity	$ 261,223	$ 169,948

See accompanying notes to consolidated financial statements.

ALPHATEC HOLDINGS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

	Year Ended December 31,	
	2020	**2019**
Revenues:		
Revenue from U.S. products	$ 141,079	$ 108,242
Revenue from international supply agreement	3,782	5,185
Total revenues	144,861	113,427
Cost of revenues	42,360	35,833
Gross profit	102,501	77,594
Operating expenses:		
Research and development	18,745	13,849
Sales, general and administrative	129,156	101,714
Litigation-related	8,552	8,549
Amortization of acquired intangible assets	688	698
Transaction-related	4,223	—
Restructuring	—	60
Total operating expenses	161,364	124,870
Operating loss	(58,863)	(47,276)
Interest and other expense, net:		
Interest expense, net	(12,374)	(9,865)
Loss on debt extinguishment	(7,612)	—
Total interest and other expense, net	(19,986)	(9,865)
Loss from continuing operations before taxes	(78,849)	(57,141)
Income tax provision (benefit)	145	(239)
Loss from continuing operations	(78,994)	(56,902)
Loss from discontinued operations, net of applicable taxes	—	(100)
Net loss	(78,994)	(57,002)
Loss per share, basic and diluted:		
Continuing operations	$ (1.18)	$ (1.09)
Discontinued operations	—	—
Net loss per share, basic and diluted	$ (1.18)	$ (1.09)
Shares used in calculating basic and diluted net loss per share	67,020	52,234

See accompanying notes to consolidated financial statements.

ALPHATEC HOLDINGS, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)

	Year Ended December 31,	
	2020	**2019**
Net loss	$ (78,994)	$ (57,002)
Foreign currency translation adjustments related to continuing operations	116	24
Comprehensive loss	$ (78,878)	$ (56,978)

See accompanying notes to consolidated financial statements.

ALPHATEC HOLDINGS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands)

	Common stock		Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Additional paid-in capital	Shareholder note receivable	Treasury stock	Accumulated other comprehensive income	Accumulated deficit	Total stockholders' equity (deficit)
	Shares	Par Value	Shares	Par Value	Shares	Par Value						
Balance at December 31, 2018	43,368	$ 4	4	$ —	—	$ —	$ 523,525	$ (5,000)	$ (97)	$ 1,064	$ (501,922)	$ 17,574
Stock-based compensation	—	—	—	—	—	—	10,294	—	—	—	—	10,294
Common stock issued for conversion of Series A preferred stock	1,954	—	(4)	—	—	—	—	—	—	—	—	—
Recognition of beneficial conversion feature - SafeOp Convertible Notes	—	—	—	—	—	—	242	—	—	—	—	242
Distributor equity incentives	75	—	—	—	—	—	322	—	—	—	—	322
Common stock issued for warrant exercises	757	—	—	—	—	—	1,668	—	—	—	—	1,668
Common stock issued for employee stock purchase plan and stock option exercises	477	—	—	—	—	—	1,522	—	—	—	—	1,522
Common stock issued for vesting of performance and restricted stock units and restricted stock awards, net of tax liability	1,347	—	—	—	—	—	(1,414)	—	—	—	—	(1,414)
Issuance of common stock warrants, net	—	—	—	—	—	—	13,664	—	—	—	—	13,664
Issuance of common stock for public offering, net of offering costs of $3.8 million	12,535	2	—	—	—	—	53,846	—	—	—	—	53,848
Issuance of common stock for acquisition of SafeOp - Milestone 2	887	—	—	—	—	—	2,889	—	—	—	—	2,889
Foreign currency translation adjustments	—	—	—	—	—	—	—	—	—	24	—	24
Net loss	—	—	—	—	—	—	—	—	—	—	(57,002)	(57,002)
Balance at December 31, 2019	61,400	$ 6	—	$ —	—	$ —	$ 606,558	$ (5,000)	$ (97)	$ 1,088	$ (558,924)	$ 43,631

	Common stock		Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Additional paid-in capital	Shareholder note receivable	Treasury stock	Accumulated other comprehensive income	Accumulated deficit	Total stockholders' equity (deficit)
	Shares	Par Value	Shares	Par Value	Shares	Par Value						
Balance at December 31, 2019	61,400	$ 6	—	$ —	—	$ —	$ 606,558	$ (5,000)	$ (97)	$ 1,088	$ (558,924)	$ 43,631
Cumulative effect of change in accounting principle	—	—	—	—	—	—	—	—	—	—	(81)	(81)
Stock-based compensation	—	—	—	—	—	—	15,730	—	—	—	—	15,730
Common stock issued for conversion of Series A preferred stock	39	—	—	—	—	—	—	—	—	—	—	—
Distributor equity incentives	—	—	—	—	—	—	521	—	—	—	—	521
Common stock issued for warrant exercises	1,907	—	—	—	—	—	2,368	—	—	—	—	2,368
Common stock issued for employee stock purchase plan and stock option exercises	665	—	—	—	—	—	1,970	—	—	—	—	1,970
Common stock issued for vesting of performance and restricted stock units and restricted stock awards, net of tax liability	2,238	—	—	—	—	—	(983)	—	—	—	—	(983)
Issuance of common stock warrants, net	—	—	—	—	—	—	2,974	—	—	—	—	2,974
Issuance of common stock for public offering, net of offering costs of $7.3 million	13,143	2	—	—	—	—	107,696	—	—	—	—	107,698
Shareholder note receivable	—	—	—	—	—	—	—	1,000	—	—	—	1,000
Issuance of common stock for other services	12						123	—	—	—	—	123
Issuance of common stock for prepayment of debt	2,700	—	—	—	—	—	33,807	—	—	—	—	33,807
Foreign currency translation adjustments	—	—	—	—	—	—	—	—	—	116	—	116
Net loss	—	—	—	—	—	—	—	—	—	—	(78,994)	(78,994)
Balance at December 31, 2020	82,104	$ 8	—	$ —	—	$ —	$ 770,764	$ (4,000)	$ (97)	$ 1,204	$ (637,999)	$ 129,880

See accompanying notes to consolidated financial statements.

ALPHATEC HOLDINGS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,	
	2020	2019
Operating activities:		
Net loss	$ (78,994)	$ (57,002)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	10,949	7,578
Stock-based compensation	17,659	10,956
Amortization of debt discount and debt issuance costs	3,974	3,709
Amortization of right-of-use assets	683	930
Provision for doubtful accounts	107	242
Provision for excess and obsolete inventory	7,044	8,624
Deferred income tax benefit	9	(438)
Beneficial conversion feature from convertible notes	—	242
Loss on disposal of instruments	498	127
Loss on debt extinguishment	7,612	—
Accretion to contingent consideration	—	289
Changes in operating assets and liabilities:		
Accounts receivable, net	(7,484)	(1,298)
Inventories, net	(18,192)	(14,712)
Prepaid expenses and other current assets	(2,930)	186
Other assets	(51)	262
Other long-term assets	—	(3,308)
Accounts payable	7,130	6,003
Accrued expenses and other	8,812	6,647
Lease liability	(1,312)	2,239
Other long-term liabilities	(1,926)	(4,397)
Net cash used in operating activities	(46,412)	(33,121)
Investing activities:		
Purchases of property and equipment	(23,131)	(13,032)
Cash paid for acquisition of intangible assets	(755)	—
Cash received from sale of equipment	27	—
Net cash used in investing activities	(23,859)	(13,032)
Financing activities:		
Proceeds from public offering, net	107,698	53,848
Proceeds from sale of common stock, net	3,341	1,977
Borrowings under lines of credit	42,455	114,710
Repayments under lines of credit	(56,615)	(112,934)
Principal payments on capital lease obligations	(32)	(27)
Proceeds from issuance of term debt, net	34,008	9,700
Principal payments on term loan and notes payable	(26)	(3,091)
Net cash provided by financing activities	130,829	64,183
Effect of exchange rate changes on cash	94	29
Net increase in cash	60,652	18,059
Cash at beginning of year	47,113	29,054
Cash at end of year	$ 107,765	$ 47,113
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 6,330	$ 5,969
Cash paid for income taxes	$ 190	$ 161
Supplemental disclosure of noncash investing and financing activities:		
Common stock issued for achievement of SafeOp contingent consideration	$ —	$ 2,889
Common stock issued for partial extinguishment of debt	$ 33,807	$ —
Common stock issued for development of intangible assets	$ 123	$ —
Common stock warrants issued with term loan draw	$ 2,974	$ 13,664
Purchases of property and equipment in accounts payable	$ 3,527	$ 1,275

See accompanying notes to consolidated financial statements.

1. The Company and Basis of Presentation

The Company

Alphatec Holdings, Inc. (the "Company"), through its wholly owned subsidiaries, Alphatec Spine, Inc. ("Alphatec Spine") and SafeOp Surgical, Inc. ("SafeOp"), is a medical technology company that designs, develops, and markets technology for the treatment of spinal disorders associated with disease and degeneration, congenital deformities, and trauma. The Company markets its products in the U.S. via independent sales agents and a direct sales force. On March 8, 2018, the Company completed its acquisition of SafeOp, pursuant to a reverse triangular merger of SafeOp into a newly created wholly owned subsidiary of the Company, with SafeOp being the surviving corporation and a wholly-owned subsidiary of the Company.

On September 1, 2016, the Company completed the sale of its international distribution operations and agreements (collectively, the "International Business") to Globus Medical Ireland, Ltd., a subsidiary of Globus Medical, Inc., and its affiliated entities (collectively "Globus"). As a result of this transaction, the International Business has been excluded from continuing operations for all periods presented in the consolidated financial statements and is reported as discontinued operations. See Note 4 for additional information on the divestiture of the International Business.

Basis of Presentation

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and include the accounts of the Company, Alphatec Spine and SafeOp. All intercompany balances and transactions have been eliminated in consolidation. The Company operates in one reportable business segment.

Recent Developments

Proposed Acquisition of EOS

On December 16, 2020, the Company, entered into a Tender Offer Agreement (the "Tender Offer Agreement") with EOS imaging S.A., a société anonyme organized and existing under the laws of France ("EOS"), pursuant to which the Company will commence a public tender offer (the "Offer") to purchase all of the issued and outstanding ordinary shares, nominal value €0.01 per share (collectively, the "EOS Shares"), and outstanding convertible bonds ("OCEANEs"), of EOS. The Offer will consist of a cash tender offer price of €2.45 (or approximately $2.99) per EOS Share and €7.01 (or approximately $8.55) per OCEANE, (the "Offer Consideration"), for a total purchase price of up to approximately $116.9 million. The Offer will need to be filed with and cleared by the Autorité des marches financiers (the "AMF"). Certain shareholders of EOS, which currently control approximately 23% of the outstanding EOS Shares, collectively, have entered into Tender Commitments with the Company pursuant to which they have agreed, among other things, to tender their respective EOS Shares into the Offer, subject to certain conditions. These Tender Commitments will terminate if (i) the Tender Offer Agreement is terminated, (ii) the Offer is withdrawn by the Company pursuant to applicable French laws and regulations, or (iii) the Offer is not declared successful by the AMF as a result of certain conditions failing to be met or waived.

In connection with the Offer, on December 16, 2020, the Company entered into a securities purchase agreement (the "Purchase Agreement") with certain institutional and accredited investors, including Squadron Capital LLC ("Squadron Capital" and collectively, the "Purchasers"), providing for the sale by the Company of 12,421,242 shares of ATEC common stock (the "Private Placement Shares") at a purchase price of $11.11 per share (the "Private Placement Purchase Price"), in a private placement (the "Private Placement") for aggregate gross proceeds of $138.0 million. The Company intends to use the net proceeds from the Private Placement to fund the Offer Consideration and for general corporate and working capital purposes. Pursuant to the terms of the Purchase Agreement, from the Private Placement Closing until the Offer Closing, the Company is prohibited from issuing, or entering into any agreement to issue, or announcing the issuance or proposed issuance of, any shares of ATEC

common stock or ATEC common stock equivalents, subject to certain permitted exceptions. If the Tender Offer Agreement is terminated or the Offer Closing has not occurred by July 31, 2021, then the Company will repurchase the Private Placement Shares from the Purchasers for an amount per share equal to the Private Placement Purchase Price plus interest on the Private Placement Purchase Price at a rate of nine percent per year computed from the date of the Private Placement Closing to the date of the repurchase. The Company determined that since it is within control of the Company to cancel the Private placement before closing and the shares have not yet been issued, an obligation to issue shares did not exist as of December 31, 2020.

2. Summary of Significant Accounting Policies

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, the disclosure of contingent assets and liabilities, and the reported amounts of revenues and expenses. Actual results could differ from those estimates. Significant items subject to such estimates and assumptions include the useful lives of property and equipment, intangibles, allowances for doubtful accounts, the valuation of share-based liabilities, deferred tax assets, inventory, stock-based compensation, revenues, restructuring liabilities, income tax uncertainties, and other contingencies.

Concentrations of Credit Risk and Significant Customers

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist primarily of cash and accounts receivable. The Company limits its exposure to credit loss by depositing its cash with established financial institutions. As of December 31, 2020, a substantial portion of the Company's available cash funds is held in business accounts. Although the Company deposits its cash with multiple financial institutions, its deposits, at times, may exceed federally insured limits.

The Company's customers are primarily hospitals, surgical centers and distributors. No one single customer represented greater than 10 percent of consolidated revenues and accounts receivable for any of the years presented. Credit to customers is granted based on an analysis of the customers' credit worthiness. Credit losses have not been significant.

Accounts Receivable, net

Accounts receivable are presented net of allowance for doubtful accounts. The Company makes judgments as to its ability to collect outstanding receivables and provides allowances for a portion of receivables when collection becomes doubtful. Provisions are made based upon a specific review of all significant outstanding invoices and the overall quality and age of those invoices not specifically reviewed. In determining the provision for invoices not specifically reviewed, the Company analyzes historical collection experience. If the historical data used to calculate the allowance provided for doubtful accounts does not reflect the Company's future ability to collect outstanding receivables or if the financial condition of customers were to deteriorate, resulting in impairment of their ability to make payments, an increase in the provision for doubtful accounts may be required.

The Company's accounts receivable generally have net 30-day payment terms. The Company generally does not allow returns of products that have been delivered. The Company offers standard quality assurance warranty on its products. As of December 31, 2020, accounts receivable related to products and services were $23.5 million. For the year ended December 31, 2020, the Company had no material bad debt expense and there were no material contract assets, contract liabilities or deferred contract costs recorded on the consolidated balance sheet as of December 31, 2020.

Inventories, net

Inventories are stated at the lower of cost or net realizable value, with cost primarily determined under the first-in, first-out method. The Company reviews the components of inventory on a periodic basis for excess, obsolete and impaired inventory, and records a reserve for the identified items. The Company calculates an inventory reserve for estimated excess and obsolete inventory based upon historical turnover and assumptions about future demand for its products and market conditions. The Company's biologics inventories have an expiration based on a shelf life and are subject to demand fluctuations based on the availability and demand for alternative implant products. The Company's estimates and assumptions for excess and obsolete inventory are reviewed and updated on a quarterly basis. Increases in the reserve for excess and obsolete inventory result in a corresponding increase to cost of revenues and establish a new cost basis for the part.

Property and Equipment, net

Property and equipment are stated at cost, net of accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets, generally ranging from three to seven years. Leasehold improvements and assets acquired under capital leases are amortized over the shorter of their useful lives or the remaining terms of the related leases.

Operating Lease

Effective January 1, 2019, the Company adopted ASC No. 2016-02, *Leases (Topic 842) ("ASC 842")*, which supersedes the current accounting for leases, using the modified retrospective transition method. The Company has elected to apply the practical expedients allowed by the standard for existing leases. The new standard, while retaining two distinct types of leases, finance and operating, (i) requires lessees to record a right-of-use ("ROU") asset and a related liability for the rights and obligations associated with a lease, regardless of lease classification, and recognize lease expense in a manner similar to current accounting, (ii) eliminates current real estate specific lease provisions, (iii) modifies the lease classification criteria and (iv) aligns many of the underlying lessor model principles with those in the new revenue standard. The Company determines the initial classification and measurement of its ROU asset and lease liabilities at the lease commencement date and thereafter, if modified. The Company recognizes a ROU asset for its operating leases with lease terms greater than 12 months. The lease term includes any renewal options and termination options that the Company is reasonably assured to exercise. The present value of lease payments is determined by using the incremental borrowing rate for operating leases determined by using the incremental borrowing rate of interest that the Company would pay to borrow on a collateralized basis an amount equal to the lease payments in a similar economic environment. The Company applied the new guidance to its existing facility lease at the time of adoption and recognized a ROU asset of $2.4 million and operating lease liability of $2.9 million as of March 31, 2019, the initial period of adoption, and removed the previous deferred rent balance under the previous lease guidance of approximately $0.6 million. The Company entered into another facility lease for smaller office space during the third quarter of 2019 and also applied this guidance to create an additional ROU asset and operating lease liability. The two leases are presented together on the Company's consolidated balance sheet.

On December 4, 2019, the Company entered into a new lease agreement, ("New Building Lease"), for a new headquarters location in Carlsbad, California. The term of the New Building Lease commenced on February 1, 2021 and at time of lease commencement the Company applied this guidance to create an additional ROU asset and operating lease liability on the Company's consolidated balance sheet.

Rent expense for operating leases is recognized on a straight-line basis over the reasonably assured lease term based on the total lease payments and is included in research and development and general and administrative expenses in the consolidated statements of operations.

Goodwill and Intangible Assets

The Company's goodwill represents the excess of the cost over the fair value of net assets acquired from its business combination with SafeOp. The determination of the value of goodwill and intangible assets arising from its business combination and asset acquisitions requires extensive use of accounting estimates and judgments to allocate the purchase price to the fair value of the net tangible and intangible assets acquired, including capitalized in-process research and development ("IPR&D"). Intangible assets acquired in a business

combination that are used for IPR&D are considered indefinite lived until the completion or abandonment of the associated research and development efforts. Upon reaching the end of the relevant research and development project, the Company will amortize the acquired IPR&D over its estimated useful life or expense the acquired IPR&D should the research and development project be unsuccessful with no future alternative use.

Goodwill and IPR&D are not amortized; however, they are assessed for impairment using fair value measurement techniques on an annual basis or more frequently if facts and circumstance warrant such a review. The goodwill or IPR&D are considered to be impaired if the Company determines that the carrying value of the reporting unit or IPR&D exceeds its respective fair value.

The Company performs its annual impairment analysis by comparing the Company's estimated fair value, calculated from the Company's market capitalization, to its carrying amount. The Company's annual evaluation for impairment of goodwill consists of one reporting unit. The Company completed its most recent annual evaluation for impairment as of December 31, 2020 and determined that no impairment existed and, consequently, no impairment charge has been recorded during the year ended December 31, 2020.

Intangible assets with a finite life, such as acquired technology, customer relationships, manufacturing know-how, licensed technology, supply agreements and certain trade names and trademarks, are amortized on a straight-line basis over their estimated useful life, ranging from one to twenty-year period. In determining the useful lives of intangible assets, the Company considers the expected use of the assets and the effects of obsolescence, demand, competition, anticipated technological advances, changes in surgical techniques, market influences and other economic factors. For technology based intangible assets, the Company considers the expected life cycles of products which incorporate the corresponding technology. Trademarks and trade names that are related to products are assigned lives consistent with the period in which the products bearing each brand are expected to be sold.

The Company evaluates its intangible assets with finite lives for indications of impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that could trigger an impairment review include significant under-performance relative to expected historical or projected future operating results, significant changes in the manner of the Company's use of the acquired assets or the strategy for the Company's overall business or significant negative industry or economic trends. If this evaluation indicates that the value of the intangible asset may be impaired, the Company makes an assessment of the recoverability of the net carrying value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the technology over the remaining amortization period, the Company reduces the net carrying value of the related intangible asset to fair value and may adjust the remaining amortization period. There were no impairment charges during the years ended December 31, 2020 or 2019.

Impairment of Long-Lived Assets

The Company assesses potential impairment to its long-lived assets when there is evidence that events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss is recognized when the carrying amount of the long-lived assets is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Any required impairment loss is measured as the amount by which the carrying amount of a long-lived asset exceeds its fair value and is recorded as a reduction in the carrying value of the related asset and a charge to operating results. There were no impairment charges during the years ended December 31, 2020 or 2019.

Warrants to Purchase Common Stock

Warrants are accounted for in accordance with the applicable accounting guidance as either derivative liabilities or as equity instruments depending on the specific terms of the agreements. Liability-classified instruments are recorded at fair value at each reporting period with any change in fair value recognized as a component of change in fair value of derivative liabilities in the consolidated statements of operations.

All warrants issued in 2020 and 2019 qualified for classification within stockholders' equity and, therefore, did not require liability accounting.

Fair Value Measurements

The carrying amount of financial instruments consisting of cash, trade accounts receivable, prepaid expenses and other current assets, accounts payable, accrued expenses, accrued compensation and current portion of long-term debt included in the Company's consolidated financial statements are reasonable estimates of fair value due to their short maturities. Based on the borrowing rates currently available to the Company for loans with similar terms, management believes the fair value of long-term debt approximates its carrying value.

Authoritative guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1: Observable inputs such as quoted prices in active markets;

Level 2: Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and

Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The Company does not maintain any financial assets that are considered to be Level 1, Level 2 or Level 3 instruments as of the years ended December 31, 2020 or December 31,2019.

Liabilities measured at fair value on a recurring basis as of December 31, 2020 and 2019, included the following (in thousands):

	Balance at Year Ended December 31, 2020	Level 1	Level 2	Level 3
Liability classified equity award*	$ 4,108	—	—	$ 4,108
Foreign currency forward contract	$ 878	—	$ 878	—

	Balance at Year Ended December 31, 2019	Level 1	Level 2	Level 3
Liability classified equity award*	$ 1,705	—	—	$ 1,705

**a portion of this liability is being accreted over the requisite service period*

On December 18, 2020, the Company entered into a foreign currency forward contract, with a notional amount of $117.9 million to mitigate the foreign currency exchange risk related to the Company's Tender Offer Agreement, denominated in Euros ("EUR"). The contract is not designated as a hedging instrument. The Company has classified the derivative liability within Level 2 of the fair value hierarchy as observable inputs are available for the full term of the derivative instrument. The fair value of the forward contract was developed using a market approach based on publicly available market yield curves and the term of the contract. For the year ended December 31, 2020, the Company recognized a $0.9 million loss from the change in fair value of the contract, which was included in other expense, net in the consolidated statement of operations. A corresponding liability of $0.9 million related to the forward contract was included in accrued expenses on the Company's consolidated balance sheet as of December 31, 2020.

In 2019, the fair value of the contingent consideration liability assumed in the SafeOp acquisition was recorded as part of the purchase price consideration of the acquisition. The contingent consideration related to the SafeOp acquisition was classified within Level 3 of the fair value hierarchy as the Company was using a probability-weighted income approach, utilizing significant unobservable inputs including the probability of achieving each of the potential milestones and an estimated discount rate related to the risks of the expected cash flows attributable to the milestones. All the contingent milestones were achieved as of December 31, 2019.

During the year ended December 31, 2019, the Company achieved the second of the two milestones related to the acquisition of SafeOp, which was settled through the issuance of 886,843 shares of the Company's common stock.

During the second quarter of 2019, the Company issued a liability classified equity award to one of its executive officers. The award will be earned over a 4-year vesting period and upon a specific market condition. As the award will be cash settled, it is classified as a liability within Level 3 of the fair value hierarchy as the Company is using a probability-weighted income approach, utilizing significant unobservable inputs including the probability of achieving the specified market condition with the valuation updated at each reporting period. The full fair value of the cash settled award was $4.1 million and $1.7 million as of December 31, 2020 and December 31, 2019, respectively. The fair value of the award is being recognized ratably as the underlying service period is provided.

The following table provides a reconciliation of liabilities measured at fair value on a recurring basis as of December 31, 2019 and 2020, respectively, and indicates the fair value hierarchy of valuation techniques the Company utilized to determine such fair value (in thousands):

	Level 3 Liabilities
Balance at December 31, 2018	$ 2,600
Settlement of milestone #2	(2,889)
Change in fair value measurement- milestone #2	289
Straight line recognition of liability classified equity award	173
Change in fair value measurement of liability classified equity award	93
Balance at December 31, 2019	266
Straight line recognition of liability classified equity award	371
Change in fair value measurement of liability classified equity award	1,031
Balance at December 31, 2020	$ 1,668

Revenue Recognition

The Company recognizes revenue from product sales in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 606, *Revenue from Contracts with Customers* ("Topic 606"). This standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under Topic 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of Topic 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of Topic 606, the Company assesses the goods or services promised within each contract and determines those that are performance obligations, and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

The Company derives its revenues primarily from the sale of spinal surgery implants and products used in the treatment of spine disorders. The Company sells its products primarily through its direct sales force and independent distributors. Revenue is recognized when control of the promised goods is transferred to the customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods. Transfer of control generally occurs when the Company receives the written acknowledgment that the product has been used in a surgical procedure or upon shipment to third-party customers who immediately accept title to such product.

Research and Development Expenses

Research and development expenses consist of costs associated with the design, development, testing, and enhancement of the Company's products and technologies. Research and development costs also include salaries and related employee benefits, research-related overhead expenses, and fees paid to external service providers. Research and development costs are expensed as incurred.

Litigation-related Expenses

Litigation-related expenses are costs incurred for the ongoing litigation, primarily with NuVasive, Inc. See Note 6 for further information.

Transaction-related Expenses

The Company expensed certain costs incurred throughout the year related to the prior tender offer agreement entered into with EOS on February 28, 2020, which was subsequently terminated by the Company in response to the then-expected market effects of the COVID-19 pandemic on April 24, 2020, as well as costs incurred related to the renewed tender offer agreement entered into with EOS on December 16, 2020. These expenses primarily include third-party advisory and legal fees.

Product Shipment Cost

Product shipment costs are included in sales and marketing expenses in the accompanying consolidated statements of operations. Product shipment costs totaled $5.3 million and $4.0 million for the years ended December 31, 2020 and 2019, respectively.

Stock-Based Compensation

The Company accounts for stock-based compensation under provisions which require that share-based payment transactions with employees be recognized in the financial statements based on their fair value and recognized as compensation expense over the vesting period. The amount of expense recognized during the period is affected by subjective assumptions, including estimates of the future volatility of the Company's stock price, the expected term for its stock options, the number of options expected to ultimately vest, and the timing of vesting for the Company's share-based awards.

The Company uses a Black-Scholes option pricing valuation model to estimate the fair value of its stock option awards. The calculation of the fair value of the awards using the Black-Scholes option pricing model is affected by the Company's common stock price on the date of grant as well as assumptions regarding the following:

- Estimated volatility is a measure of the amount by which the Company's common stock price is expected to fluctuate each year during the expected life of the award. The Company's estimated volatility through December 31, 2020 was based on a weighted-average volatility of its actual historical volatility over a period equal to the expected life of the awards.
- The expected term represents the period of time that awards granted are expected to be outstanding. Through December 31, 2020, the Company calculated the expected term using a weighted-average term based on historical exercise patterns and the term from option date to full exercise for the options granted within the specified date range.
- The risk-free interest rate is based on the yield curve of a zero-coupon U.S. Treasury bond on the date the stock option award is granted with a maturity equal to the expected term of the stock option award.
- The assumed dividend yield is based on the Company's expectation of not paying dividends in the foreseeable future.

The Company uses historical data to estimate the number of future stock option forfeitures. Stock-based compensation recorded in the Company's consolidated statements of operations is based on awards expected to ultimately vest and has been reduced for estimated forfeitures. The Company's estimated forfeiture rates may differ from its actual forfeitures which would affect the amount of expense recognized during the period.

The Company accounts for stock option grants to non-employees in accordance with provisions which require that the fair value of these instruments be recognized as an expense over the period in which the related services are rendered.

Stock-based compensation expense of awards with performance conditions is recognized over the period from the date the performance condition is determined to be probable of occurring through the time the applicable condition is met. Determining the likelihood and timing of achieving performance conditions is a subjective judgment made by management which may affect the amount and timing of expense related to these share-based awards. Share-based compensation is adjusted to reflect the value of options which ultimately vest as such amounts become known in future periods.

Stock-based awards with market conditions are valued using the Monte Carlo valuation technique which requires management to make significant estimates and assumptions that are not observable from the market. Stock based compensation for awards with both service and market conditions that contain one vesting date are recognized on a straight-line basis over the longer of the derived service period or the requisite service period. For awards with both service and market conditions with various vesting dates, stock-based compensation is recognized utilizing an accelerated expense model over the longer of the derived service period or the requisite service period.

Valuation of Stock Option Awards

The weighted average assumptions used to compute the stock-based compensation costs for the stock options granted during the years ended December 31, 2020 and 2019 are as follows:

	Year Ended December 31,	
	2020	2019
Risk-free interest rate	1.03%	2.00%
Expected dividend yield	—	—
Weighted average expected life (years)	6.08	6.09
Volatility	84.00%	80.76%

Stock-Based Compensation Costs

The compensation cost that has been included in the Company's consolidated statements of operations for all stock-based compensation arrangements is detailed as follows (in thousands):

	Year Ended December 31,	
	2020	2019
Cost of revenues	$ 512	$ 146
Research and development	2,114	752
Sales, general and administrative	15,033	10,058
Total	$ 17,659	$ 10,956

Income Taxes

The Company accounts for income taxes in accordance with provisions which set forth an asset and liability approach that requires the recognition of deferred tax assets and deferred tax liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. In making such determination, a review of all available positive and negative evidence must be considered, including scheduled reversal of deferred tax liabilities, projected future taxable income, tax planning strategies, and recent financial performance.

The Company recognizes interest and penalties related to uncertain tax positions as a component of the income tax provision.

Net Loss per Share

Basic earnings per share ("EPS") is calculated by dividing the net income or loss available to common stockholders by the weighted average number of shares of common stock outstanding for the period without consideration for common stock equivalents. Diluted EPS is computed by dividing the net income or loss available to common stockholders by the weighted average number of shares of common stock outstanding for the period and the weighted average number of dilutive common stock equivalents outstanding for the period determined using the treasury-stock method. For purposes of this calculation, common stock subject to repurchase by the Company, common stock issuable upon conversion of preferred shares, options and warrants are considered to be common stock equivalents and are only included in the calculation of diluted earnings per share when their effect is dilutive.

The following table sets forth the computation of basic and diluted loss per share (in thousands, except per share data):

	Year Ended December 31,	
	2020	2019
Numerator:		
Net loss, basic and diluted	$ (78,994)	$ (57,002)
Denominator:		
Weighted average common shares outstanding	67,200	52,520
Weighted average unvested common shares subject to repurchase	(180)	(286)
Weighted average common shares outstanding - basic and diluted	67,020	52,234
Net loss per share, basic and diluted	$ (1.18)	$ (1.09)

The anti-dilutive securities not included in diluted net loss per share were as follows calculated on a weighted average basis (in thousands):

	Year Ended December 31,	
	2020	2019
Options to purchase common stock	3,951	4,215
Warrants to purchase common stock	24,881	26,557
Series A convertible preferred stock	29	67
Unvested restricted stock awards	8,216	6,727
	37,077	37,566

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In December 2019, the Financial Accounting Standards Board (the "FASB") issued ASU 2019-12, Income Taxes (Topic 740) intended to simplify the accounting for income taxes. The guidance removes the following exceptions: (1) exception to the incremental approach for intraperiod tax allocation when there is a loss from continuing operations and income or a gain from other items, (2) exception to the requirement to recognize a deferred tax liability for equity method investments when a foreign subsidiary becomes an equity method investment, (3) exception to the ability not to recognize a deferred tax liability for a foreign subsidiary when a foreign equity method investment becomes a subsidiary, and (4) exception to the general methodology for calculating income taxes in an interim period when a year-to-date loss exceeds the anticipated loss for the year. Additionally, the guidance simplifies the accounting for income taxes by: (1) requiring that an entity recognize a franchise tax (or similar tax) that is partially based on income as an income-based tax and account for any incremental amount incurred as a non-income-based tax, (2) requiring that an entity evaluate when a step up in the tax basis of goodwill should be considered part of the business combination in which the book goodwill was originally recognized and when it should be considered a separate transaction, (3) specifying that an entity is not required to allocate the consolidated amount of current and deferred tax expense to a legal entity that is not subject to tax in its separate financial statements (although the entity may elect to do so (on an entity-by-entity basis) for a legal entity that is both not subject to tax and disregarded by the taxing authority), (4) requiring that an entity reflect the effect of an enacted change in tax laws or rates in the annual effective tax rate computation in the interim period

that includes the enactment date, and (5) making minor improvements for income tax accounting related to employee stock ownership plans and investments in qualified affordable housing projects accounted for using the equity method. The guidance will be effective for fiscal years and interim periods beginning after December 15, 2020. Different components of the guidance require retrospective, modified retrospective or prospective adoption, and early adoption is permitted. The Company early adopted this standard on January 1, 2020, and the adoption of the standard did not have a material impact to our consolidated financial statements.

In November 2019, the FASB issued Accounting Standards Update ("ASU") 2019-08, *Compensation—Stock Compensation* (Topic 718) and Revenue from Contracts with Customers (Topic 606), which clarifies that an entity must measure and classify share-based payment awards granted to a customer by applying the guidance in Topic 718. ASC 2019-08 is effective for annual reporting periods beginning after December 15, 2019, including interim reporting periods within those annual reporting periods. The Company adopted the guidance effective January 1, 2020 and recorded a cumulative adjustment of $0.1 million to accumulated deficit as of January 1, 2020.

In August 2018, the FASB issued ASU 2018-15, Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40), which aligns the accounting for cloud computing implementation costs with that of costs to develop or obtain internal-use software, meaning such costs that are part of the application development stage are capitalized as an asset and amortized over the term of the arrangement, otherwise, such costs are expensed as incurred. It also clarifies the classification of amounts related to capitalized implementation costs in the financial statements. ASU 2018-15 is effective for annual reporting periods beginning after December 15, 2019, including interim reporting periods within those annual reporting periods. Early adoption is permitted. The Company adopted the guidance effective January 1, 2020. It did not have a material impact on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, *Intangibles – Goodwill and Other*, which eliminates the requirement to calculate the implied fair value of goodwill to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value. The standard has tiered effective dates, starting in 2020 for calendar-year public business entities that meet the definition of an SEC filer. Early adoption is permitted for annual and interim goodwill impairment testing dates after January 1, 2017. The Company adopted the guidance effective January 1, 2020 as part of its process to assess impairment of Goodwill.

Recently Issued Accounting Pronouncements

In August 2020, the FASB issued ASU No. 2020-06, *Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40)* ("ASU 2020-06"), which simplifies the accounting for convertible instruments. The guidance removes certain accounting models that separate the embedded conversion features from the host contract for convertible instruments. ASU 2020-06 allows for a modified or full retrospective method of transition. This update is effective for fiscal years beginning after December 15, 2021, and interim periods within those fiscal years, and early adoption is permitted. The Company does not intend to early adopt the standard and is in the process of assessing the impact, if any, on its consolidated financial statements and related disclosures.

3. Balance Sheet Details

Accounts Receivable, net

Accounts receivable consist of the following (in thousands):

	December 31,	
	2020	2019
Accounts receivable	$ 23,887	$ 16,436
Less allowance for doubtful accounts	(360)	(286)
Accounts receivable, net	$ 23,527	$ 16,150

Inventories, net

Inventories consist of the following (in thousands):

	December 31,	
	2020	2019
Raw materials	$ 6,064	$ 5,822
Work-in-process	1,982	1,578
Finished goods	67,892	51,669
	75,938	59,069
Less reserve for excess and obsolete	(29,937)	(24,215)
Inventories, net	$ 46,001	$ 34,854

Property and Equipment, net

Property and equipment consist of the following (in thousands, except as indicated):

	Useful lives (in years)	December 31,	
		2020	2019
Surgical instruments	4	$ 76,669	$ 58,502
Machinery and equipment	7	6,562	6,038
Computer equipment	3	4,206	3,594
Office furniture and equipment	5	1,380	1,297
Leasehold improvements	various	1,761	1,761
Construction in progress	n/a	2,738	496
		93,316	71,688
Less accumulated depreciation and amortization		(56,646)	(51,966)
Property and equipment, net		$ 36,670	$ 19,722

Total depreciation expense was $9.2 million and $6.8 million for the years ended December 31, 2020 and 2019, respectively. At December 31, 2020 and 2019, assets recorded under capital leases of $0.1 million were included in the machinery and equipment balance. Amortization of assets under capital leases is included in depreciation expense.

Intangible Assets, net

Intangible assets, net consist of the following (in thousands, except as indicated):

December 31, 2020:	Remaining Avg. Useful lives (in years)	Gross Amount	Accumulated Amortization	Intangible Assets, net
Developed product technology	12	$ 35,376	$ (23,056)	$ 12,320
License agreements	1	5,536	(965)	4,571
Trademarks and trade names	—	792	(119)	673
Customer-related	3	7,458	(3,968)	3,490
Distribution network	2	4,027	(1,639)	2,388
In process research and development	7	1,278	—	1,278
Total		$ 54,467	$ (29,747)	$ 24,720

December 31, 2019:	Remaining Avg. Useful lives (in years)	Gross Amount	Accumulated Amortization	Intangible Assets, net
Developed product technology	12	$ 35,376	$ (22,206)	$ 13,170
Intellectual Property	—	1,004	(1,004)	—
License agreements	1	5,536	(740)	4,796
Trademarks and trade names	—	792	(119)	673
Customer-related	4	7,458	(3,481)	3,977
Distribution network	3	4,027	(1,438)	2,589
In process research and development	7	400	—	400
Total		$ 54,593	$ (28,988)	$ 25,605

Total expense related to amortization of intangible assets was $1.8 million and $0.7 million for the years ended December 31, 2020 and 2019, respectively.

Future amortization expense related to intangible assets as of December 31, 2020 is as follows (in thousands):

Year Ending December 31,	
2021	$ 2,014
2022	2,014
2023	2,014
2024	1,911
2025	1,326
Thereafter	15,441
Total	$ 24,720

Accrued Expenses

Accrued expenses consist of the following (in thousands):

	December 31,	
	2020	2019
Commissions and sales milestones	$ 6,734	$ 5,299
Payroll and payroll related	12,247	7,949
Litigation settlement obligation - short-term portion	4,000	4,400
Professional fees	3,551	3,945
Royalties	2,293	1,981
Interest	619	155
Other	5,787	2,687
Total accrued expenses	$ 35,231	$ 26,416

Other Long-Term Liabilities

Other long-term liabilities consist of the following (in thousands):

	December 31,	
	2020	2019
Litigation settlement obligation - long-term portion	$ 7,634	$ 10,712
Line of credit exit fee	—	600
Tax liabilities	373	373
Royalties	1,678	—
Other	1,668	266
Other long-term liabilities	$ 11,353	$ 11,951

4. Discontinued Operations

In connection with the sale of the International Business, the Company entered into a product manufacture and supply agreement (the "Supply Agreement") with Globus, pursuant to which the Company supplies to Globus certain of its implants and instruments, previously offered for sale by the Company in international markets at agreed-upon prices for a minimum term of three years, with the option for Globus to extend the term for up to two additional twelve month periods subject to Globus meeting specified purchase requirements. During the second quarter of 2020, Globus notified the Company that it will exercise the option to extend the agreement for the second additional twelve-month period through August 2021, at which time the Company expects that the Supply Agreement will expire and revenue from Globus will discontinue. In accordance with authoritative guidance, sales to Globus are reported under continuing operations as the Company has continuing involvement under the Supply Agreement. The Company recorded $3.8 million in revenue and $3.5 million in cost of revenue from the Supply Agreement in continuing operations for the year ended December 31, 2020, and $5.2 million in revenue and $4.8 million in cost of revenue from the Supply Agreement in continuing operations for the year ended December 31, 2019.

5. Debt

MidCap Facility Agreement

On May 29, 2020, the Company repaid in full all amounts outstanding under the Amended Credit Facility with MidCap Funding IV, LLC ("MidCap"). The Company made a final payment of $9.6 million to MidCap, consisting of outstanding principal and accrued interest. All amounts previously recorded as debt issuance costs were recorded as part of loss on debt extinguishment on the Company's consolidated statement of operations for the year ended December 31, 2020.

Squadron Medical Credit Agreement

On November 6, 2018, the Company entered into a Term Loan with Squadron Medical Finance Solutions, LLC ("Squadron Medical"), a provider of debt financing to growing companies in the orthopedic industry. The Term Loan was subsequently amended March 2019, May 29, 2020 and December 16, 2020 to expand the availability of additional term loans, extend the maturity, remove all financial covenant requirements and, in the December 2020 amendment, to incorporate a debt exchange. On December 16, 2020, the Company amended the Term Loan to expand the credit facility by an additional $15.0 million and to extend the maturity of the Term Loan to June 30, 2026. In conjunction with the Term Loan amendment on December 16, 2020, the Company entered into a debt exchange agreement whereby the Company exchanged $30.0 million of the Company's outstanding debt obligations pursuant to the Term Loan dated as of November 6, 2018, as amended, for the issuance of 2,700,270 shares of the Company's Common Stock to Squadron Capital LLC and a participant lender, based on a price of $11.11 per share. The debt exchange resulted in additional debt issuance costs of $3.8 million calculated as the difference between the Company's stock price on the date of issuance and the issuance price. The total principal outstanding under the Term Loan as of December 31, 2020 was $45.0 million, with an additional $40.0 million in available borrowings.

The Term Loan bears interest at LIBOR plus 8.0% per annum, subject to a 9.0% floor and 12.0% ceiling. Interest-only payments are due monthly until December 2023 and joined by $1.0 million monthly principal payments beginning December 2023. Any remaining principal amounts of the Term Loan will be due on June 30, 2026. In addition to paying interest on outstanding principal on the Term Loan, the Company will pay a commitment fee at a rate of 1.0% per annum to Squadron Medical in respect of the unutilized Term Loan. As collateral for the Term Loan, Squadron Medical has a first lien security interest in substantially all assets.

In connection with the initial 2018 financing, the Company issued initial warrants to Squadron Medical and a participant lender to purchase 845,000 shares of common stock at an exercise price of $3.15 per share. In conjunction with the first draw under the first amendment of the Term Loan in 2019, the Company issued to Squadron Medical and the participant lender warrants to purchase an additional 4,838,710 shares of the Company's common stock at an exercise price of $2.17 per share. In connection with the second amendment of the Term Loan in 2020, the Company issued warrants to purchase an additional 1,075,820 shares of the Company's common stock at an exercise price of $4.88 per share. All of the warrants are exercisable immediately and were amended to have the same maturity date in May 2027. Total warrants outstanding to Squadron Medical and the participant lender are 6,759,530 as of December 31, 2020. The warrants were valued utilizing the Monte-Carlo simulation model as described further in Note 10 and are recorded within equity in accordance with authoritative accounting guidance and recorded as a debt discount.

The Company accounted for the March 2019, May 2020, and December 2020 amendments of the Term Loan as debt modifications with continued amortization of the existing and inclusion of the new debt issuance costs amortized into interest expense utilizing the effective interest rate method. The Company determined that the $30.0 million pre-payment associated with the December 16, 2020 amendment should be accounted for as a partial extinguishment of the November 6, 2018 Term Loan, as amended. As a result of the partial extinguishment the Company elected, as an accounting policy in accordance with ASC 470-50-40-2, to write off a proportionate amount of the unamortized fees at the time that the financing was partially settled in accordance with the terms of the Term Loan dated November 6, 2018, as amended. The unamortized debt issuance costs are allocated between the remaining original loan balance and the portion of the loan paid down on a pro-rata basis. At the time of prepayment, the Company recorded a loss on extinguishment of $6.1 million and capitalized $3.8 million in non-cash debt issuance closing costs.

As of December 31, 2020, the debt is recorded at its carrying value of $32.2 million, net of issuance costs of $12.8 million, including all amounts paid to third parties to secure the debt and the fair value of the warrants issued. The total debt discount will be amortized into interest expense through maturity of the debt utilizing the effective interest rate method.

Paycheck Protection Loan

On April 23, 2020, the Company received the proceeds from a loan in the amount of approximately $4.3 million (the "PPP Loan") from Silicon Valley Bank, as lender, pursuant to the Paycheck Protection Program

("PPP") of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"). The PPP Loan matures on April 21, 2022 and bears interest at a rate of 1.0% per annum. Commencing August 21, 2021, the Company is required to pay the lender equal monthly payments of principal and interest as required to fully amortize by April 21, 2022 the principal amount outstanding on the PPP Loan as of the date prescribed by guidance issued by U.S. Small Business Administration ("SBA"). The PPP Loan is evidenced by a promissory note dated April 21, 2020 (the "Note"), which contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The PPP Loan may be prepaid by the Company at any time prior to maturity with no prepayment penalties.

All or a portion of the PPP Loan may be forgiven by the SBA upon application. The Company submitted its application for forgiveness of the loan in November 2020. Under the CARES Act, loan forgiveness is available for the sum of documented payroll costs, covered rent payments, covered mortgage interest and covered utilities during the twenty-four-week period, beginning on the date of loan approval. For purposes of the CARES Act, payroll costs exclude compensation of an individual employee in excess of $100,000, prorated annually. Not more than 25% of the forgiven amount may be for non-payroll costs. Forgiveness is reduced if full-time headcount declines, or if salaries and wages for employees with salaries of $100,000 or less annually are reduced by more than 25%. In the event the PPP Loan, or any portion thereof, is forgiven pursuant to the PPP, the amount forgiven is applied to outstanding principal. The Company used all of the proceeds from the PPP Loan to retain employees and maintain payroll. Although the Company has applied for loan forgiveness as afforded by the PPP, no assurance can be provided that such loan forgiveness will be granted in whole or in part. As such, the PPP Loan is recorded as long-term debt on the Company's consolidated balance sheet.

Inventory Financing

In November 2018, the Company entered into an Inventory Financing Agreement with a key inventory and instrument components supplier whereby the Company may draw up to $3.0 million for the purchase of inventory to accrue interest at a rate of LIBOR plus 8.0% subject to a 10.0% floor and 13.0% ceiling. In November 2020, the Company amended the agreement with the supplier to increase the available draw to $6.0 million. All principal will become due and payable upon maturity on November 6, 2023 and all interest will be paid monthly. The obligation outstanding under the Inventory Financing Agreement as of December 31, 2020 was $3.8 million.

Other Debt Agreements

The Company has one outstanding capital lease arrangement as of December 31, 2020. The lease bears interest at an annual rate of 6.4% and is due in monthly principal and interest installments, collateralized by the related equipment, and matures in December 2022.

Long-term debt consists of the following (in thousands):

	December 31,	
	2020	2019
Squadron Medical Term Loan	$ 45,000	$ 45,000
Amended Credit Facility with MidCap	—	12,785
Inventory Financing	3,821	2,987
Note payable for software agreements, insurance premiums and PP&E	1,887	457
PPP Loan	4,271	—
Total	54,979	61,229
Add: capital leases	69	101
Less: debt discount	(12,814)	(7,393)
Total	42,234	53,937
Less: current portion of long-term debt	(4,200)	(489)
Total long-term debt, net of current portion	$ 38,034	$ 53,448

Principal payments on debt are as follows as of December 31, 2020 (in thousands):

Year Ending December 31,		
2021	$	4,167
2022		1,949
2023		4,845
2024		12,018
2025 and thereafter		32,000
Total		54,979
Add: capital lease principal payments		69
Less: debt discount		(12,814)
Total		42,234
Less: current portion of long-term debt		(4,200)
Long-term debt, net of current portion	$	38,034

6. Commitments and Contingencies

Leases

The Company occupies approximately 76,000 square feet of office, engineering, and research and development space in Carlsbad, California. Monthly rent is approximately $118,000 per month for the year ended December 31, 2020 and increases by approximately $3,000 per month each year through expiration of the lease on July 31, 2021. On December 4, 2019, the Company entered into a new lease agreement for a new headquarters location which consists of 121,541 square feet of office, engineering, and research and development space in Carlsbad, California. The term of the new lease commenced on February 1, 2021 and will terminate on January 31, 2031, subject to two (2) sixty (60) month options to renew. The Company recognized a ROU asset and liability upon taking control of the premises on the lease commencement date. Base rent under the new building lease for the first twelve months of the term will be $195,000 per month subject to full abatement during months two through ten. Base rent for the second year of the term will be $244,115 per month and thereafter will increase annually by 3.0%. At the beginning of each exercised option period, base rent will be adjusted to the market rental value, and thereafter will increase annually by 3.0% through the end of such option period.

Operating Lease

The Company leases its buildings and certain equipment under operating leases which expire on various dates through 2021. Upon the Company's adoption of ASC 842 on January 1, 2019, the Company recognized a ROU asset and lease liability for its building lease, assuming a 10.5% discount rate. Any short-term leases defined as 12 months or less or month-to-month leases were excluded and continue to be expensed each month. Total costs associated with these leases for the year ended December 31, 2020 was immaterial.

The Company determines if an arrangement is a lease at inception. The Company has operating leases for its buildings and certain equipment with lease terms of 1 year to 10 years, some of which include options to extend and/or terminate the lease. The exercise of lease renewal options is at the Company's sole discretion and were not included in the calculation of the Company's lease liability as the Company is not able to determine without uncertainty if the renewal option will be exercised. The depreciable life of assets and leasehold improvements are limited to the expected term unless there is a transfer of title or purchase option reasonably certain of exercise. The Company's lease agreements do not contain any variable lease payments, residual value guarantees or any restrictive covenants.

The Company's ROU asset represents the right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date of the lease or the ASC 842 adoption date, whichever is later, based on the present value of lease payments over the lease term. When readily determinable, the Company uses the implicit rate in determining the present value of lease payments, or 10.5% as of the adoption date. When leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at

the lease commencement date or adoption date, including the lease term. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Future minimum annual undiscounted lease payments under the Company's operating and capital leases are as follows (in thousands):

Year ending December 31,	
2021	$ 918
2022	40
Total undiscounted lease payments	958
Less: present value adjustment	(32)
Operating lease liability	926
Less: current portion of operating lease liability	(885)
Operating lease liability, less current portion	$ 41

As of December 31, 2020, the Company's remaining average lease term is 0.7 years. Rent expense under operating leases for the years ended December 31, 2020 and 2019 was $1.3 million. The Company paid $1.4 million of cash payments related to its operating lease agreements for the years ended December 31, 2020 and 2019.

Purchase Commitments

The Company entered into a distribution agreement with a third-party provider in January 2020 in which the Company is obligated to certain minimum purchase requirements related to inventory and equipment leases. As of December 31, 2020, the minimum purchase commitment required by the Company under the agreement was $3.2 million to be paid over a three-year period. Upon commencement, the Company also recognized a ROU asset related to the leased assets within the purchase agreement in the amount of $0.5 million. The ROU asset is being amortized into rent expense through the lease term. The Company has recognized $0.1 million of rent expense pertaining to these assets for the year ended December 31, 2020. As of December 31, 2020, the Company recognized a ROU asset in the amount of $0.4 million related to the leased assets within the purchase agreement on its consolidated balance sheet.

Litigation

The Company is and may become involved in various legal proceedings arising from its business activities. While management is not aware of any litigation matter that in and of itself would have a material adverse impact on the Company's consolidated results of operations, cash flows or financial position, litigation is inherently unpredictable, and depending on the nature and timing of a proceeding, an unfavorable resolution could materially affect the Company's future consolidated results of operations, cash flows or financial position in a particular period. The Company assesses contingencies to determine the degree of probability and range of possible loss for potential accrual or disclosure in the Company's consolidated financial statements. An estimated loss contingency is accrued in the Company's consolidated financial statements if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because litigation is inherently unpredictable and unfavorable resolutions could occur, assessing contingencies is highly subjective and requires judgments about future events. When evaluating contingencies, the Company may be unable to provide a meaningful estimate due to a number of factors, including the procedural status of the matter in question, the presence of complex or novel legal theories, and/or the ongoing discovery and development of information important to the matters. In addition, damage amounts claimed in litigation against the Company may be unsupported, exaggerated or unrelated to reasonably possible outcomes, and as such are not meaningful indicators of the Company's potential liability.

In February 2018, NuVasive, Inc. filed suit against the Company in the United States District Court for the Southern District of California (*NuVasive, Inc. v. Alphatec Holdings, Inc. et al.*, Case No. 3:18-cv-00347-CAB-MDD (S.D. Cal.)), alleging that certain of the Company's products (including components of its Battalion™ Lateral System), infringe, or contribute to the infringement of, U.S. Patent Nos. 7,819,801, 8,355,780, 8,439,832, 8,753,270, 9,833,227 (entitled "Surgical access system and related methods"), U.S. Patent No. 8,361,156 (entitled "Systems

and methods for spinal fusion"), and U.S. Design Patent Nos. D652,519 ("Dilator") and D750,252 ("Intervertebral Implant"). NuVasive seeks unspecified monetary damages and an injunction against future purported infringement.

In March 2018, the Company moved to dismiss NuVasive's claims of infringement of its design patents for failure to state a cognizable legal claim. In May 2018, the Court ruled that NuVasive failed to state a plausible claim for infringement of the asserted design patents and dismissed those claims with prejudice. The Company filed its answer, affirmative defenses and counterclaims to NuVasive's remaining claims in May 2018.

Also in March 2018, NuVasive moved for a preliminary injunction. In March 2018, the Court denied that motion without prejudice for failure to comply with the Court's chambers rules. In April 2018, NuVasive again moved for a preliminary injunction. In July 2018, after a hearing on the matter in June 2018, the Court denied that motion on the grounds that NuVasive failed to establish either likelihood of success on the merits or that it would suffer irreparable harm absent injunction.

In September 2018, NuVasive filed an Amended Complaint, asserting additional infringement claims of U.S. Patent Nos. 9,924,859, 9,974,531 and 8,187,334. The Company filed its answer, affirmative defenses and counterclaims to these claims in October 2018. Also in October 2018, NuVasive moved to dismiss the Company's counterclaims that NuVasive intentionally had misled the U.S. Patent and Trademark Office as a means of obtaining certain patents asserted against the Company. In January 2019, the Court denied NuVasive's motion as to all but one counterclaim, but granted the Company leave to amend that counterclaim to cure dismissal. The Company amended that counterclaim in February 2019 and, that same month, NuVasive again moved to dismiss it. In March 2019, the Court denied NuVasive's motion. NuVasive filed its Answer to the amended counterclaim in April 2019.

In December 2018, the Company filed a petition with the Patent Trial and Appeal Board ("PTAB") challenging the validity of certain claims of the '156 and '334 Patents. In July 2019, PTAB instituted IPR of the validity of asserted claims of the two patents at issue. In July 2019, PTAB instituted IPR of the validity of asserted claims of the two patents at issue and held a hearing on the matter in April 2020. In July 2020, the PTAB ruled that all challenged claims of the '156 Patent were valid (not unpatentable) and ruled that several challenged claims of the '334 Patent were invalid, while finding that other challenged claims of the '334 Patent valid. NuVasive and the Company have both appealed the PTAB's written decision on the matter. The appeals are currently pending before the U.S. Court of Appeals for the Federal Circuit. No briefing or hearing schedule has been set.

In January 2020, NuVasive filed a Motion for Partial Summary Judgment of infringement and validity of the '832, '780 and '270 Patents and the Company filed a Motion for Summary Judgment of non-infringement of all asserted claims and of invalidity of the '832 Patent and for dismissal of NuVasive's claim for lost profits and its allegations of assignor estoppel. In April 2020, the Court granted NuVasive's Motion as to the alleged infringement of the '832 Patent only and denied NuVasive's Motion in all other respects. Also, in April 2020, the Court granted the Company's Motion as to dismissal of the allegations of assignor estoppel and denied the Company's Motion in all other respects.

In January 2021, NuVasive filed a Motion for Partial Summary Judgment of infringement and validity of the '156 and '334 Implant Patents and the Company filed a Motion for Summary Judgment of invalidity of those same patents. The parties currently are briefing the respective motions. Hearing on the motions is set for March 2021. Trial is scheduled to take place in June 2021.

The Company believes that the allegations lack merit and intends to vigorously defend all claims asserted. A liability is recorded in the consolidated financial statements if it is believed to be probable that a loss has been incurred and the amount of the loss can be reasonably estimated. It is impossible at this time to assess whether the outcome of this proceeding will have a material adverse effect on the Company's consolidated results of operations, cash flows or financial position. Therefore, in accordance with authoritative accounting guidance, the Company has not recorded any accrual for a contingent liability associated with this legal proceeding based on its belief that a liability, while possible, is not probable and any range of potential future charge cannot be reasonably estimated at this time.

Indemnifications

In the normal course of business, the Company enters into agreements under which it occasionally indemnifies third-parties for intellectual property infringement claims or claims arising from breaches of representations or warranties. In addition, from time to time, the Company provides indemnity protection to third-parties for claims relating to past performance arising from undisclosed liabilities, product liabilities, environmental obligations, representations and warranties, and other claims. In these agreements, the scope and amount of remedy, or the period in which claims can be made, may be limited. It is not possible to determine the maximum potential amount of future payments, if any, due under these indemnities due to the conditional nature of the obligations and the unique facts and circumstances involved in each agreement.

In October 2017, NuVasive filed a lawsuit in Delaware Chancery Court against Mr. Miles, the Company's Chairman and CEO, who was a former officer and board member of NuVasive. The Company itself was not initially a named defendant in this lawsuit; however, on June 28, 2018, NuVasive amended its complaint to add the Company as a defendant. As of December 31, 2020, the Company has not recorded any liability on the consolidated balance sheet related to this matter. On October 12, 2018, the Delaware Court ordered that NuVasive begin advancing legal fees for Mr. Miles' defense in the lawsuit, as well as Mr. Miles' legal fees incurred in pursuing advancement of his fees, pursuant to an indemnification agreement between NuVasive and Mr. Miles.

Royalties

The Company has entered into various intellectual property agreements requiring the payment of royalties based on the sale of products that utilize such intellectual property. These royalties primarily relate to products sold by Alphatec Spine and are based on fixed fees or calculated either as a percentage of net sales or on a per-unit sold basis. Royalties are included on the accompanying consolidated statements of operations as a component of cost of revenues. As of December 31, 2020, the Company is obligated to pay guaranteed minimum royalty payments under these agreements of approximately $4.9 million through 2025 and beyond.

7. Orthotec Settlement

On September 26, 2014, the Company entered into a Settlement and Release Agreement, dated as of August 13, 2014, by and among the Company and its direct subsidiaries, including Alphatec Spine, Inc., Alphatec Holdings International C.V., Scient'x S.A.S. and Surgiview S.A.S.; HealthpointCapital, LLC, HealthpointCapital Partners, L.P., HealthpointCapital Partners II, L.P., John H. Foster and Mortimer Berkowitz III; and Orthotec, LLC and Patrick Bertranou, (the "Settlement Agreement"). Pursuant to the Settlement Agreement, the Company agreed to pay Orthotec, LLC $49.0 million in cash, including initial cash payments totaling $1.75 million, which the Company previously paid in March 2014, and an additional lump sum payment of $15.75 million, which the Company previously paid in April 2014. The Company agreed to pay the remaining $31.5 million in 28 quarterly installments of $1.1 million and one additional quarterly installment of $0.7 million, commencing October 1, 2014. The payments set forth above are guaranteed by Stipulated Judgments held against the Company, HealthpointCapital Partners, L.P., HealthpointCapital Partners II, L.P., HealthpointCapital, LLC, John H. Foster and Mortimer Berkowitz III and, in the event of a default, will be entered and enforced against these entities and/or individuals in that order. In September 2014, the Company and HealthpointCapital entered into an agreement for joint payment of settlement whereby HealthpointCapital has agreed to contribute $5.0 million to the $49.0 million settlement amount. In October 2020, HealthpointCapital began its $5.0 million contribution, which will be in the form of five quarterly payments. The remaining $4.0 million receivable from HealthpointCapital, LLC continues to be classified within stockholders' equity on the Company's consolidated balance sheets due to the related party nature with HealthpointCapital affiliates. Payments made by HealthpointCapital will be recorded as a reduction to stockholder's equity. See Note 11 for further information.

As of December 31, 2020, the Company has made installment payments in the aggregate of $45.0 million, with a remaining outstanding balance of $12.8 million (including interest). The Company has the right to prepay the amounts due without penalty. The unpaid amounts due accrue interest at the rate of 7.0% per year until paid in full. The accrued but unpaid interest will be paid in quarterly installments of $1.1 million (or the full amount of the accrued but unpaid interest if less than $1.1 million) following the full payment of the $31.5 million in quarterly installments described above. No interest will accrue on the accrued interest. The Settlement Agreement provides for mutual releases of all claims in the Orthotec, LLC v. Surgiview, S.A.S, et al. matter in the Superior Court of

California, Los Angeles County and all other related litigation matters involving the Company and its directors and affiliates.

A reconciliation of the total net settlement obligation is as follows (in thousands):

	December 31, 2020	December 31, 2019
Litigation settlement obligation - short-term portion	$ 4,000	$ 4,400
Litigation settlement obligation - long-term portion	7,634	10,712
Total	11,634	15,112
Future Interest	1,199	2,121
Total settlement obligation, gross	12,833	17,233
Related party receivable - included in stockholders' equity	(4,000)	(5,000)
Total settlement obligation, net	$ 8,833	$ 12,233

8. Equity

Follow-On Registered Public Offering

On October 16, 2020, the Company closed the 2020 Offering where it issued and sold a total of 13,142,855 shares of its common stock. The shares were sold pursuant to the Underwriting Agreement between the Company and Morgan Stanley & Co. LLC and Cowen and Company, LLC, as representative of the several underwriters named therein, at a price to the public of $8.75 per share. The closing of the 2020 Offering included the issuance and sale of 1,714,285 shares of the Company's common stock, included within the total number of shares above, pursuant to the full exercise of the underwriters' option to purchase additional shares pursuant to the Underwriting Agreement. The net proceeds to the Company from the 2020 Offering were approximately $107.7 million, including the net proceeds from the overallotment shares and deducting underwriting discounts and commissions and estimated offering expenses payable by the Company.

Redeemable Preferred Stock

The Company issued shares of redeemable preferred stock in connection with its initial public offering in June 2006. As of December 31, 2020, and 2019, the redeemable preferred stock carrying value was $23.6 million and there were 20 million shares of redeemable preferred stock authorized. The redeemable preferred stock is not convertible into common stock but is redeemable at $9.00 per share, (i) upon the Company's liquidation, dissolution or winding up, or the occurrence of certain mergers, consolidations or sales of all or substantially all of the Company's assets, before any payment to the holders of the Company's common stock, or (ii) at the Company's option at any time. Holders of redeemable preferred stock are generally not entitled to vote on matters submitted to the stockholders, except with respect to certain matters that will affect them adversely as a class and are not entitled to receive dividends. The carrying value of the redeemable preferred stock was $7.11 per share at December 31, 2020 and 2019. The redeemable preferred stock is presented separately from stockholders' equity in the consolidated balance sheets and any adjustments to its carrying value up to its redemption value of $9.00 per share are reported as a dividend.

2017 PIPE Warrants

The 2017 Common Stock Warrants (the "2017 PIPE Warrants") have a five-year life and are exercisable for cash. During the year ended December 31, 2020, there were 273,554 2017 PIPE Warrant exercises for total cash proceeds of $0.6 million. During the year ended December 31, 2019, there were 543,864 2017 PIPE Warrant exercises, for total cash proceeds of $1.1 million. As of December 31, 2020, there were 3,107,000 2017 PIPE Warrants outstanding.

2018 PIPE Warrants

The 2018 Common Stock Warrants (the "2018 PIPE Warrants") have a five-year life and are exercisable for cash or by cashless exercise. During the year ended December 31, 2020, there were 2,342,986 2018 PIPE Warrant exercises for total cash proceeds of $1.3 million. During the year ended December 31, 2019, there were 274,180 2018 PIPE Warrant exercises for total cash proceeds of $0.6 million. A total of 11,379,685 2018 PIPE Warrants remained outstanding as of December 31, 2020.

SafeOp Surgical Merger Warrants

In conjunction with the Company's 2018 acquisition of SafeOp, the Company issued warrants to purchase 2,200,000 shares of common stock at an exercise price of $3.50 per share and contain a five-year life and are exercisable for cash or by cashless exercise. During the year ended December 31, 2020, there were 34,807 SafeOp Surgical Merger Warrant exercises for no cash proceeds. During the year ended December 31, 2019, there were a negligible amount of exercises and no cash proceeds related to SafeOp Surgical Merger Warrants. As of December 31, 2020, there were 2,164,875 SafeOp Surgical Merger Warrants outstanding.

Squadron Medical Warrants

As further described in Note 5, during the year ended December 31, 2018, in connection with the initial debt financing with Squadron Medical and a participant lender, the Company issued warrants to purchase 845,000 shares of common stock at an exercise price of $3.15 per share. An additional 4,838,710 warrants were issued at an exercise price of $2.17 per share during the second quarter of 2019, in conjunction with the Company's draw on the expanded credit facility. In May 2020, an additional 1,075,820 warrants were issued at an exercise price of $4.88 per share in conjunction with the Company's second amendment to the Squadron Medical debt for total warrants outstanding to Squadron Medical and the participant lender of 6,759,530. The warrants have a seven-year term and are immediately exercisable. Further in conjunction with the second amendment, the expiration dates for all existing warrants were extended to May 29, 2027 in order to align all warrant expiration dates. In accordance with authoritative accounting guidance, the warrants qualified for equity treatment upon issuance and were recorded as a debt discount to the face of the debt liability based on fair value to be amortized into interest expense over the life of the debt agreement. The fair value assigned to the warrant amendment was also allocated as a debt issuance cost and amortized into interest expense. As the warrants provide for partial price protection that allow for a reduction in the price in the event of a lower per share priced issuance, the warrants were valued utilizing a Monte Carlo simulation that considers the probabilities of future financings. The Monte Carlo model simulates the present value of the potential outcomes of future stock prices of the Company over the seven-year life of the warrants. The projection of stock prices is based on the risk-free rate of return and the volatility of the stock price of the Company and correlates future equity raises based on the probabilities provided.

Executive Warrants

In December 2017 the Company issued warrants to Mr. Miles, the Company's Chairman and Chief Executive Officer, to purchase 1,327,434 shares of the Company's common stock for $5 per share. The warrants have a five-year term. The warrants issued to Mr. Miles were accounted for as share based compensation, and the fair value of the warrants of approximately $1.4 million were recognized in full in the statement of operations for the year ended December 31, 2017 as the warrants were immediately vested upon issuance.

A summary of all outstanding warrants is as follows (in thousands):

	Number of Warrants	Strike Price	Expiration
2017 PIPE Warrants	3,107	$ 2.00	June 2022
2018 PIPE Warrants	11,380	$ 3.50	May 2023
SafeOp Surgical Merger Warrants	2,165	$ 3.50	May 2023
2018 Squadron Medical Warrants	845	$ 3.15	May 2027
2019 Squadron Medical Warrants	4,839	$ 2.17	May 2027
2020 Squadron Medical Warrants	1,076	$ 4.88	May 2027
Executive Warrants	1,327	$ 5.00	December 2022
Other*	142	$ 3.85	Various through May 2023
Total	24,881		

*Represents weighted average strike price

9. Stock Benefit Plans and Stock-Based Compensation

2016 Equity Incentive Plan

In the third quarter of 2016, the Company adopted its 2016 Equity Incentive Plan (the "2016 Plan"), which replaced the Company's 2005 Employee, Director and Consultant Stock Plan. On October 25, 2018, the Company's Board of Directors adopted an amendment to the Company's 2016 Equity Incentive Award Plan. The 2016 Plan allows for the grant of options, restricted stock, restricted stock unit awards and performance unit awards to employees, directors, and consultants of the Company. Upon its adoption, the 2016 Plan had 1,083,333 shares of common stock reserved for issuance. The Board of Directors determines the terms of the grants made under the 2016 Plan. Options granted under the 2016 Plan expire no later than ten years from the date of grant (five years for incentive stock options granted to holders of more than 10% of the Company's voting stock). Options generally vest over a four-year period and may be immediately exercisable upon a change of control of the Company. The exercise price of incentive stock options may not be less than 100% of the fair value of the Company's common stock on the date of grant. The exercise price of any option granted to a 10% stockholder may be no less than 110% of the fair value of the Company's common stock on the date of grant. On June 17, 2020, the Company's shareholders approved an amendment to the Company's 2016 Equity Incentive Award Plan which increased the shares of common stock available for issuance under the Equity Plan by 7,000,000 shares. At December 31, 2020, 4,161,838 shares of common stock remained available for issuance under the 2016 Plan. The 2016 Plan will expire in May 2026.

Salary-to-Equity Conversion Program

On April 5, 2020, the Company implemented a voluntary salary-to-equity conversion program for certain employees whose annual payroll costs exceed $100,000, including the Company's executive officers. The program permitted each participant to make a voluntary election to reduce the participant's compensation rate through July 11, 2020 from 10% to 75%. In exchange for the compensation reduction, each participant was granted a restricted stock unit from the Company's 2016 Equity Incentive Plan, equal to the dollar amount of compensation reduction divided by the 30-day volume weighted average price of the Company's common stock as of close of market on April 3, 2020. The restricted stock units granted under the program fully vested on July 10, 2020. The temporary reduction in compensation to the participants shall not be treated as a reduction in base annual salary rate for purposes of any other benefits plans in which the participants are enrolled or eligible to participate, including in any bonus plans of the Company. As the plan allows for a cash payment of the deferred amount in the event the employee separated from the Company prior to the completion date of the program, the amounts were recorded as a liability instrument through its settlement date with a corresponding fair value adjustment at each reporting period. The full fair value of $0.9 million was reclassified into equity upon settlement of the program and issuance of the common stock. A stock compensation charge of $0.9 million related to the program was recorded during the year ended December 31, 2020.

2016 Employment Inducement Award Plan

On October 4, 2016, the Company's Board of Directors adopted the 2016 Employment Inducement Award Plan (the "Inducement Plan"). The Inducement Plan allows for the grant of options, restricted stock, restricted stock unit awards and performance unit awards to new employees of the Company by granting an award to such new employee as an inducement for the employee to begin employment with the Company. As of December 31, 2020 the Inducement Plan had 692,392 shares of common stock reserved for issuance, which may only be granted to an employee who has not previously been an employee or member of the board of directors of the Company. The terms of the Inducement Plan are substantially similar to the terms of the Company's 2016 Plan with two principal exceptions: (i) incentive stock options may not be granted under the Inducement Plan; and (ii) the annual compensation paid by the Company to specified executives will be deductible only to the extent that it does not exceed $1.0 million.

2019 Management Objective Strategic Incentive Plan

Under the 2019 Management Objective Strategic Incentive Plan, the Company is authorized to grant up to 500,000 shares of common stock to third-party individuals or entities that do not qualify under the Company's other existing equity plans, with a maximum grant of 50,000 shares per participant. As of December 31, 2020, 130,000 restricted shares and a warrant to purchase up to 25,000 restricted common stock shares have been granted under the 2019 Management Objective Strategic Incentive Plan. Total expense for the plan was $0.2 million and an immaterial amount for the years ended December 31, 2020 and December 31, 2019, respectively.

2017 Distributor Inducement Plan and 2017 Development Services Plan

Under the 2017 Distributor Inducement Plan, the Company is authorized to grant up to 1,000,000 shares of common stock to third-party distributors whereby, upon the achievement of certain Company sales and/or distribution milestones the Company may grant to a distributor shares of common stock or warrants to purchase shares of common stock. The warrants and restricted stock units issued under the plan are subject to time based or net sales-based vesting conditions. As of December 31, 2020, 525,000 warrants and 284,500 shares of restricted common stock were granted under the 2017 Distributor Inducement Plan. As of December 31, 2020, 220,000 shares of common stock were earned or issued. Warrants granted under the plan as of December 31, 2020 were not yet subject to expiration related to any time or sales-based vesting conditions. Expense recorded for the plan was $0.5 million and $0.4 million for the years ended December 31, 2020 and December 31, 2019, respectively.

Under the 2017 Development Services Plan, the Company is authorized to grant up to 7,000,000 shares of common stock to third-party individuals or entities whereby, upon the achievement of certain Company financial and commercial revenue milestones, future royalty payments for product and/or intellectual property development work may be paid in either cash or restricted shares of Company common stock at the election of the developer. Each common stock issuance is subject to net sales-based and other vesting provisions and satisfaction of applicable laws and market regulations regarding the issuance of restricted shares to such developers. As of December 31, 2020, the Company has entered into Development Services Agreements pursuant to which the Company has allocated 5,769,000 shares and granted 3,190,000 shares of restricted common stock under the 2017 Development Services Plan, subject to achievement of the performance criteria and vesting conditions as set forth in such Development Services Agreements. None of the grants are deemed probable of equity election and no common stock elections or cash payouts have been made under the plan as of December 31, 2020. The Company will recognize a non-cash charge to cost of sales associated with each of the Development Services Agreements when it is probable the respective performance targets will be achieved.

Stock Options

A summary of the Company's stock option activity under the Plans and related information is as follows (in thousands, except as indicated and per share data):

	Shares	Weighted average exercise price	Weighted average remaining contractual term (in years)	Aggregate intrinsic value
Outstanding at December 31, 2019	4,215	$ 3.27		
Granted	71	$ 6.64		
Exercised	(241)	$ 2.33		$ 2,253
Forfeited	(94)	$ 10.44		
Outstanding at December 31, 2020	3,951	$ 3.21	6.93	$ 45,320
Options vested and exercisable at December 31, 2020	2,837	$ 3.26	6.70	$ 32,570
Options vested and expected to vest at December 31, 2020	3,951	$ 3.21	6.93	$ 45,320

The weighted-average grant-date fair value per share of stock options granted during the years ended December 31, 2020 and 2019 was $4.71 and $1.92, respectively. The aggregate intrinsic value of options at December 31, 2020 is based on the Company's closing stock price on the last business day of 2020 of $14.52 per share.

As of December 31, 2020, there was $2.2 million of unrecognized compensation expense for stock options which is expected to be recognized on a straight-line basis over a weighted average period of approximately 1.57 years.

Restricted Stock Awards and Units

The following table summarizes information about the restricted stock awards, restricted stock units and performance-based restricted units activity (in thousands, except as indicated and per share data):

	Shares	Weighted average grant date fair value	Weighted average remaining recognition period (in years)
Unvested at December 31, 2019	6,727	$ 2.17	
Awarded	3,964	$ 4.87	
Vested	(2,363)	$ 3.52	
Forfeited	(112)	$ 4.13	
Unvested at December 31, 2020	8,216	$ 3.13	1.99

The weighted average fair value per share of awards granted during the years ended December 31, 2020 and 2019 was $4.87 and $1.92, respectively.

As of December 31, 2020, there was $22.1 million of unrecognized compensation expense for restricted stock awards and units which is expected to be recognized on a straight-line basis over a weighted average period of approximately 1.99 years.

Employee Stock Purchase Plan

In 2007, the Company adopted the Alphatec Holdings, Inc. 2007 Employee Stock Purchase Plan (the "ESPP"), which was amended in May 2017. The ESPP provides eligible employees with a means of acquiring equity in the Company at a discounted purchase price using their own accumulated payroll deductions. Under the terms of the ESPP, employees can elect to have up to 20% of their annual compensation, up to a maximum of $21,250 per year, withheld to purchase shares of Company common stock for a purchase price equal to 85% of the lower of the fair market value per share (at closing) of Company common stock on (i) the commencement date of the six-month offering period or (ii) the respective purchase date.

During the years ended December 31, 2020 and 2019, there were 379,166 and 359,689 shares of common stock, respectively, purchased under the ESPP. The Company recognized $1.0 million and $0.7 million in expense related to the ESPP for the years ended December 31, 2020 and 2019, respectively. As of December 31, 2020, 216,131 shares were available under the ESPP for future issuance.

The Company estimates the fair value of shares issued to employees under the ESPP using the Black-Scholes option-pricing model. The assumptions used to estimate the fair value of stock options granted and stock purchase rights under the ESPP are as follows:

	Year Ended December 31,	
	2020	2019
Risk-free interest rate	0.12% - 1.58%	1.58% - 2.50%
Expected dividend yield	—	—
Expected term (years)	0.50	0.50
Volatility	54.96%-102.50%	49.78%-82.08%

Common Stock Reserved for Future Issuance

Common stock reserved for future issuance consists of the following (in thousands):

	December 31, 2020
Warrants outstanding	24,881
Authorized for future grant under the Plans	5,015
Authorized for future grant under the Management Objective Strategic Incentive Plan	345
Authorized for future grant under the Distributor and Development Services plans	7,780
Stock options outstanding	3,951
Unvested restricted stock awards	8,216
Employee stock purchase plan	216
Series A convertible preferred stock	29
	50,433

10. Income Taxes

The components of the pretax income (loss) are presented in the following table (in thousands):

	Year Ended December 31,	
	2020	2019
U.S. Domestic	$ (78,849)	$ (57,141)
Foreign	—	(100)
Pretax loss from operations	$ (78,849)	$ (57,241)

The components of the provision (benefit) for income taxes from continuing operations are presented in the following table (in thousands):

	Year Ended December 31,	
	2020	2019
Current income tax provision:		
Federal	$ —	$ —
State	100	207
Foreign	35	—
Total current	135	207
Deferred income tax (benefit) provision:		
Federal	(2)	(195)
State	12	(251)
Total deferred	10	(446)
Total income tax provision (benefit)	$ 145	$ (239)

The provision for income taxes differs from the amount of income tax determined by applying the applicable U.S. statutory federal income tax rate to pretax loss from continuing operations as a result of the following differences:

	December 31,	
	2020	2019
Federal statutory rate	21.00%	21.00%
Adjustments for tax effects of:		
State taxes, net	(0.11)%	0.12%
Stock-based compensation	(0.93)%	0.26%
R&D credit expiration	-%	(5.96)%
Foreign taxes	(0.04)%	-%
Other permanent adjustments	(1.70)%	(0.42)%
Foreign partnership liquidation	-%	19.19%
Federal uncertain tax positions	-%	3.25%
NOL expiration	-%	(3.01)%
Other	(0.15)%	1.16%
Valuation allowance	(18.25)%	(35.09)%
Effective income tax rate	(0.18)%	0.50%

Significant components of the Company's deferred tax assets and liabilities as of December 31, 2020 and 2019 are as follows (in thousands):

	December 31,	
	2020	2019
Deferred tax assets:		
Accruals and reserves	$ 3,665	$ 2,730
Income tax credit carryforwards	1,582	1,591
Interest	8,193	4,095
Inventory	8,117	8,625
Legal settlement	2,875	3,789
Net operating losses	70,220	53,592
Stock-based compensation	2,464	2,256
Total deferred tax assets	97,116	76,678
Valuation allowance	(87,489)	(71,159)
Total deferred tax assets, net of valuation allowance	9,627	5,519
Deferred tax liabilities:		
Property and equipment	(7,094)	(3,117)
Goodwill and intangibles	(2,483)	(2,344)
Total deferred tax liabilities	(9,577)	(5,461)
Net deferred tax assets	$ 50	$ 58

The realization of deferred tax assets is dependent on the Company's ability to generate sufficient taxable income in future years in the associated jurisdiction to which the deferred tax assets relate. As of December 31, 2020, a valuation allowance of $87.5 million has been established against the deferred tax assets, as the Company has determined that it is currently not likely that these assets will be realized. During the years ended December 31, 2020, the federal and state valuation allowances collectively increased by $14.4 million and $1.9 million, respectively.

In determining the need for a valuation allowance, the Company considers all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies, and recent financial performance. Based on the review of all positive and negative evidence, including a three-year cumulative pre-tax loss, the Company determined that a full valuation allowance should be recorded against its deferred tax assets, with the exception of the Company's Texas Temporary Credit for Business Loss Carryforwards. There are no indefinite life assets.

At December 31, 2020, the Company has unrecognized tax benefits of $2.5 million which will affect the effective tax rate if recognized when the Company no longer has a valuation allowance offsetting its deferred tax assets.

The following table summarizes the changes to unrecognized tax benefits (in thousands):

	Year ended December 31,	
	2020	2019
Unrecognized tax benefit at the beginning of the year	$ 2,452	$ 4,334
Reductions as a result of lapse of applicable statute of limitations	—	(1,882)
Unrecognized tax benefits at the end of the year	$ 2,452	$ 2,452

The Company and its subsidiaries are subject to federal income tax as well as income tax of multiple state and foreign jurisdictions. With few exceptions, the Company is no longer subject to income tax examination by tax authorities in major jurisdictions for years prior to 2015. However, to the extent allowed by law, the taxing authorities may have the right to examine prior periods where net operating losses and tax credits were generated

and carried forward and make adjustments up to the amount of the carryforwards. The Company is not currently under examination by the Internal Revenue Service, foreign or state and local tax authorities.

The Company recognizes interest and penalties related to uncertain tax positions as a component of the income tax provision. As of December 31, 2020, there were no accrued interest and penalties.

At December 31, 2020, the Company had federal and state net operating loss carryforwards of $273.7 million and $193.4 million, respectively, which began expiring at various dates beginning in 2021 and through 2040. Federal and some state net operating losses generated in years ending after December 31, 2017 can be carried forward indefinitely. At December 31, 2020, the Company had state research and development tax credit carryforwards of $3.2 million. The state research and development tax credits do not have an expiration date and may be carried forward indefinitely. Utilization of the net operating loss and tax credit carryforwards may become subject to annual limitations due to ownership change limitations that could occur in the future as provided by Section 382 and 383 of the Internal Revenue Code of 1986, as amended (the “Internal Revenue Code”), as well as similar state provisions. These ownership changes may limit the amount of the net operating loss and tax credit carryforwards that can be utilized annually to offset future taxable income, if the Company experiences a cumulative change in ownership of more than 50% within a three-year testing period. The Company completed formal study through the year ended December 31, 2018 and determined ownership changes within the meaning of IRC Section 382 had occurred. The Company adjusted federal tax attribute carry forwards and deferred tax assets accordingly. As the deferred tax assets associated with the tax attribute carry forwards were fully offset by a valuation allowance, a corresponding reduction in the Company’s valuation allowance was also recorded, resulting in no income tax impact.

11. Related Party Transactions

In July 2016, the Company entered into a forbearance agreement with HealthpointCapital, LLC, HealthpointCapital Partners, L.P., and HealthpointCapital Partners II, L.P. (collectively, "HealthpointCapital"), pursuant to which HealthpointCapital, on behalf of the Company, paid $1.0 million of the $1.1 million payment due and payable by the Company to Orthotec on July 1, 2016 and agreed to not exercise its contractual rights to seek an immediate repayment of such amount. Pursuant to this forbearance agreement, the Company repaid this amount in September 2016. The Company and HealthpointCapital also entered into an agreement for joint payment of settlement whereby HealthpointCapital has agreed to contribute $5.0 million to the $49.0 million Orthotec settlement amount. In October 2020, HealthpointCapital began making its $5.0 million contribution, which will be in the form of five quarterly payments.

During the second quarter of 2018, HealthpointCapital Partners, L.P., and HealthpointCapital Partners II, L.P. distributed its holdings in the Company’s common stock to its limited partners. As a result, the fund is no longer a shareholder of the Company as of December 31, 2020. The remaining $4.0 million receivable from HealthpointCapital, LLC continues to be classified within stockholders’ equity on the Company’s consolidated balance sheets due to the related party nature with HealthpointCapital affiliates. Payments made by HealthpointCapital will be recorded as an increase to stockholder’s equity.

In November 2018, the Company entered into a Term Loan with Squadron Medical. The Term Loan was amended in March 2019, May 2020 and December 2020. See Note 5 for further details regarding the Term Loan. Squadron Capital, LLC, an affiliate of Squadron Medical, was a lead investor in the Private Placement that was closed on March 1, 2021. David Pelizzon, President and Director of Squadron Capital, LLC, currently serves on the Company’s Board of Directors.

Included on the consolidated balance sheet as of December 31, 2020 is a $1.1 million officer receivable for settlement of a tax liability related to the vesting of a restricted stock unit. A corresponding liability for the same amount is also included on the consolidated balance sheet within the accrued expenses line item. Subsequent to December 31, 2020, the amounts were remitted to settle the tax liability.

12. Retirement Plan

The Company maintains an employee savings plan that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the savings plan, participating employees may contribute a portion of their pre-tax earnings, up to the Internal Revenue Service annual contribution limit. Additionally, the Company may elect to make matching contributions into the savings plan at its sole discretion of up to 4% of each individual's compensation. Matching contributions vest after one year of service. The Company's total contributions to the 401(k) plan were $0.9 million and $0.6 million for the years ended December 31, 2020 and 2019, respectively.

13. Subsequent Events

On March 5, 2021, the Company filed a draft offer with the AMF related to its Tender Offer Agreement with EOS to purchase all of the issued and outstanding EOS Shares and OCEANEs.

The Tender Offer Agreement is subject to clearance by the French Ministry of the Economy and Finance and AMF and will consist of a cash tender offer price of €2.45 (or approximately $2.99) per EOS Share and €7.01 (or approximately $8.55) per OCEANE for a total purchase price of up to approximately $116.9 million. Once approved, the Offer will be open for tender during an initial acceptance period of 25 Euronext Paris trading days. The obligation of the Company or its affiliates to purchase EOS Shares and OCEANEs pursuant to the Offer is subject to the satisfaction or waiver of the condition that a minimum number of EOS Shares and OCEANEs have been validly tendered that would allow the Company to acquire at least two-thirds of the share capital and voting rights of EOS on a fully diluted basis at the end of the acceptance period of the Offer. The settlement and delivery of the EOS Shares and OCEANEs tendered into the Offer will occur shortly after the end of the initial acceptance period of the Offer. The Offer will then reopen for a subsequent acceptance period of 10 Euronext Paris trading days.

If the Company or its affiliates own 90% or more of EOS' share capital and voting rights upon closing of the initial or subsequent offer acceptance period, the Company shall implement a mandatory squeeze out on any remaining non-tendered EOS Shares pursuant to applicable French laws and regulations. A squeeze-out of the OCEANEs may also be implemented if the Company or its affiliates own 90% or more of EOS Shares on an as-converted basis. The transaction is expected to close in the second quarter of 2021.

In connection with the proposed acquisition of EOS in December 2020, the Company announced a definitive securities purchase agreement to raise $138.0 million in a private placement of common stock at a price of $11.11 per share. The Private Placement, which closed on March 1, 2021, generated net proceeds of approximately $132.0 million, net of fees related to the Private Placement.

Exhibit 10.30

ATEC CHANGE IN CONTROL AGREEMENT

This Change in Control Agreement ("Agreement") dated as of _____ (the *"Commencement Date"),* is by and between Alphatec Holdings, Inc., Alphatec Spine, Inc. (collectively, "ATEC" or the "Company") and _____ (the "Executive") (each a "Party", and, collectively, the "Parties").

I. Term of Agreement. This Agreement shall commence on the date hereof and continue in effect until the earlier of (a) Executive's Separation from Service other than within twenty-four (24) months following a Change in Control (each as defined below); (b) the Company's satisfaction of all of its obligations under this Agreement; or (c) the execution of a written agreement between the Company and Executive terminating this Agreement.

2. Definitions. As used in this Agreement:

(a) "Annual Compensation" means the sum of the following:

(i) one year of Executive's base salary, the highest rate at which Executive was paid at any time during the twelve (12)-month period prior to the Executive's Separation from Service; *plus*

(ii) the greater of (A) the Executive's target annual bonus amount for the year in which the Separation from Service occurs, or (B) the highest annual bonus paid to the Executive out of the three (3) prior bonuses paid to the Executive prior to the Executive's Separation from Service.

(b) "Cause" means (i) Executive's willful and repeated failure to satisfactorily perform his or her material duties which is not remedied within thirty (30) days' written notice from the Company specifying such failure; (ii) Executive's repeated and willful failure to follow the lawful directions of the Company's Chief Executive Officer or Board of Directors which is not remedied within thirty (30) days' written notice from the Company specifying such failure; (iii) Executive's conviction of or plea of guilty or *nolo contendere* to a crime involving moral turpitude; (iv) Executive engaging, or in any manner participating, in any activity which is directly competitive and materially and demonstrably injurious to the Company; or (v) commission of an intentional act of fraud, embezzlement or theft by the Executive in the course of Executive's employment by the Company.

(c) "Change in Control" has the meaning set forth in the Company's 2016 Equity Incentive Plan.

(d) "COBRA" means the Consolidated Budget Omnibus Reconciliation Act of 1985, as amended.

(e) "Code" means the Internal Revenue Code of 1986, as amended from time- to-time.

(f) "Disability" means that, at the time Executive Separates from Service, Executive has been unable to perform the duties of Executive's position for a period of 180 consecutive days as the result of an incapacity due to physical or mental illness.

(g) "Good Reason" means the occurrence of one of the following which occurs within twenty-four (24) months following a Change in Control and without Executive's

express, written consent: (i) a significant reduction of Executive's duties, position or responsibilities (including, without limitation, any negative change in reporting hierarchy involving the Executive or the person to whom he or she directly reports), or Executive's removal from such position and responsibilities; (ii) a material reduction by the Company in Executive's base salary or target annual bonus as in effect immediately prior to such reduction, (iii) a material reduction by the Company in the kind or aggregate level of employee benefits to which Executive is entitled immediately prior to such reduction with the result that Executive's overall benefits package is significantly reduced; (iv) a request that Executive relocate (except for office relocations that would not increase Executive's one-way commute to more than fifty (50) miles); or (v) the failure of the Company to obtain the assumption of this Agreement pursuant to Section 7. For avoidance of doubt (as examples and not an exhaustive list), a significant reduction of duties, position or responsibilities shall have occurred if the Executive was a Section 16 reporting officer immediately prior to the Change in Control and is no longer a Section 16 reporting officer immediately following the Change in Control. The Executive may terminate her employment for "Good Reason" within 90 days after Executive has actual knowledge of the occurrence, without the written consent of Executive, of one of the above events that has not been cured within 30 days after written notice thereof has been given by Executive to the Company setting forth in reasonable detail the basis of the event (provided that such notice must be given to the Company within 30 days of the Executive becoming aware of such condition).

(h) "Long-term Incentive Award Value" means the highest grant date fair value of any long-term incentive award (cash and/or equity-based incentive) granted to Executive in the three (3) calendar year period prior to the calendar year of the Separation from Service.

(i) "PPACA" means the Patient Protection and Affordable Care Act of 2010 and related regulations and guidance promulgated thereunder.

(j) "Separation from Service" or "Separates from Service" means a termination of employment with the Company that qualifies as a separation from service in accordance with Section 409A of the Code.

(k) "Specified Employee" means an employee who is determined by the Company to be a Specified Employee in accordance with Section 409A of the Code.

3. Severance Payments and Benefits.

(a) If a Change in Control occurs and within a period of twenty-four (24) months thereafter, Executive incurs a Separation from Service on account of (i) an involuntary termination by the Company for reasons other than death, Disability or Cause, or (ii) a voluntary termination elected by the Executive for Good Reason, then subject to (A) Executive signing and not revoking a separation and general release agreement (the "Release") in a form provided by the Company as may be in use from time to time, and (B) Section 4 below, Executive shall (and the Company (or any successor thereto) shall pay, award and/or provide):

(1) receive a lump-sum cash severance payment in an amount equal to the sum of(a) one times (lx) Executive’s Annual Compensation; (b) the product of (x) Executive’s Long-term Incentive Award Value, *multiplied* by (y) a fraction, the numerator of which is the number of full and partial calendar months between January 1 of the year of Separation from Service and the date of the Executive's Separation from Service (provided,

however, that such numerator shall not exceed six (6)) and the denominator of which is twelve (12); and (c) the product of(x) the greater of (A) Executive's target annual bonus amount for the year in which the Separation from Service occurs, or (B) the highest annual bonus paid to the Executive out of the three (3) prior bonuses paid to the Executive prior to the Executive's Separation from Service, *multiplied* by (y) a fraction, the numerator of which is the number of full and partial calendar months between January 1 of the year of Separation from Service and the date of the Executive's Separation from Service and the denominator of which is twelve (12); and

(2) receive twelve (12) months of continued coverage under the Company's group health plans (based on the level of the Executive's coverage in effect on the date of the Executive's Separation from Service), at the Company's expense, subject to the Executive's timely election of continuation coverage under the COBRA, it being understood that (a) in the event that the Executive becomes eligible to receive substantially similar or improved medical, dental or vision benefits from a subsequent employer (whether or not the Executive accepts such benefits), the Company's obligations under this Section 3(a)(2) shall immediately cease, (b) the Executive will notify the Company of her eligibility for such benefits from a subsequent employer within thirty (30) days of such eligibility and (c) in the event that the Company's making payments under this Section 3(a)(2) would violate nondiscrimination rules or result in the imposition of penalties under the PPACA, the parties agree to reform this Section 3(a)(2) in such manner as is necessary to comply with tax laws and the PPACA, as applicable.

(3) become fully vested in all Company equity and long-term incentive awards granted to Executive (including, but not limited to, and all stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, performance units, and all other stock and cash-based long-term incentive awards) to the extent that such vesting is based on service with the Company. With respect to any performance shares and performance unit awards, (a) the final number of units and/or shares payable under such awards shall only be determined in accordance with the terms and conditions of the respective grant agreement governing such award, and accordingly, (b) distribution of such awards can only take place following such share and/or unit amount determination. Notwithstanding the foregoing, the full and immediate vesting of any restricted stock units, performance shares, performance units, shall not change the payment date thereof or otherwise apply to the extent it would result in adverse tax consequences under Section 409A of the Code; and

(4) notwithstanding anything to the contrary in the respective award agreement(s), be entitled to exercise any stock options or stock appreciation rights until the expiration of twenty-four (24) months following Executive's Separation from Service (or until such later date as may be applicable under the terms of the award agreement governing the stock option or stock appreciation right upon termination of employment), subject to the maximum full term of the stock option or stock appreciation right; provided, however, that, if any stock option or stock appreciation right is terminated or cashed-out in connection with a Change in Control, the Executive shall receive a lump sum cash payment equal to the time value (i.e., under the Black Scholes option pricing model) of such stock options or stock appreciation rights inclusive of the economic value for the period of twenty-four (24) months following Executive's Separation from Service (or until such later date as may be applicable under the terms of the award agreement governing the stock option or stock appreciation right upon termination of employment), subject to the maximum full term of the stock option or stock appreciation right.

(b) If Executive is not a Specified Employee, all payments made to Executive under Section 3(a) immediately above shall be made on the sixtieth (60th) calendar day following Executive's Separation from Service, provided that Executive's Release must be effective and not revocable on the date payment is to be made in order to receive such payments. If Executive is a Specified Employee, to the extent required to comply with Section 409A of the Code, payments made under Section 3(a) immediately above shall be made within ten (I0) calendar days following the date following the first (Ist) day of the seventh (7th) month after the date of Executive's Separation from Service, provided that no such payment shall be made to Executive if the Release has not become effective as of the six (6)-month anniversary of the date of Executive's Separation from Service.

4. **Parachute Payments.** In the event that any of the severance payments and other benefits provided by this Agreement or otherwise payable to Executive (a) constitute "parachute payments" within the meaning of Section 280G of the Code, and (b) but for this Section, would be subject to the excise tax imposed by Section 4999 of the Code ("Excise Tax"), then Executive's severance payments and benefits under this Agreement or otherwise shall be payable either in full or in such lesser amount which would result in no portion of such severance payments or benefits being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local income and employment taxes and the Excise Tax, results in the receipt by Executive, on an after-tax basis, of the greatest amount of severance payments and benefits under this Agreement or otherwise, notwithstanding that all or some portion of such severance payments or benefits may be taxable under Section 4999 ofthe Code. Any reduction in the severance payments and benefits required by this Section shall be made in the following order: (i) reduction of cash payments; (ii) reduction of accelerated vesting of equity awards other than stock options; (iii) reduction of accelerated vesting of stock options; and (iv) reduction of other benefits paid or provided to Executive. The calculations in Section 4 will be performed by the professional firm engaged by the Company for general tax purposes as of the day prior to the date of the event that might reasonably be anticipated to result in severance payments and benefits that would otherwise be subject to the Excise Tax. If the tax firm so engaged by the Company is serving as accountant or auditor for the acquiring company, the Company shall appoint a nationally recognized tax firm to make the determinations required by this Section. The Company shall bear all expenses with respect to the determinations by such firm required to be made by this Section 4. The Company and Executive shall furnish such tax firm such information and documents as the tax firm may reasonably request in order to make its required determination. The tax firm will provide its calculations, together with detailed supporting documentation, to the Company and Executive as soon as practicable following its engagement. Any good faith determinations of the tax firm made hereunder shall be final, binding and conclusive upon the Company and Executive. As a result of the uncertainty in the application of Sections 409A, 280G or 4999 of the Code at the time of the initial determination by the professional tax firm described in this Section 4, it is possible that the Internal Revenue Service (the "IRS") or other agency will claim that an Excise Tax greater than that amount, if any, determined by such professional firm for the purposes of Section 4 is due (the "Additional Excise Tax"). Executive shall notify the Company in writing of any claim by the IRS or other agency that, if successful, would require payment of Additional Excise Tax. Executive and the Company shall each reasonably cooperate with the other in connection with any administrative or judicial proceedings concerning the existence or amount of liability for Excise Tax with respect to payments made or due to Executive. The Company shall pay all reasonable fees, expenses and penalties of Executive relating to a claim by the IRS or other agency. In the event it is finally determined that a further reduction would have been required under Section 4 to place Executive in a better after-tax position,

Executive shall repay the Company such amount within 30 days thereof in order to effect such result.

5. No Mitigation. Executive shall not be required to mitigate the amount of any payment or benefit provided for in Section 3 hereof by seeking other employment or otherwise, nor shall the amount of such payment be reduced by reason of compensation or other income Executive receives for services rendered after Executive's Separation from Service from the Company.

6. Exclusive Remedy. In the event of Executive's Separation from Service on account of an involuntary termination without Cause or a voluntary termination for Good Reason within twenty-four (24) months following a Change in Control, the provisions of Section 3 are intended to be and are exclusive and in lieu of any other rights or remedies to which Executive or the Company may otherwise be entitled (including any contrary provisions in any employment agreement Executive may have with the Company), whether at law, tort or contract, in equity, or under this Agreement. Payments made to or on behalf of Executive under any other severance plan, policy, contract or arrangement with the Company shall reduce amounts payable under this Agreement on a dollar-for-dollar basis.

7. Company's Successors. The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company, to expressly assume and agree to perform the obligations under this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place. As used in this Section 7, Company includes any successor to its business or assets as aforesaid which executes and delivers this Agreement, or which otherwise becomes bound by all the terms and provisions of this Agreement by operation of law.

8. Notice. Notices and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or five (5) days after deposit with postal authorities transmitted by United States registered or certified mail, return receipt requested, postage prepaid, addressed to the respective addresses set forth on the first or last page of this Agreement, or to such other address as either party may have furnished to the other in writing in accordance herewith, except that notices of change of address shall be effective only upon receipt.

9. Amendment or Waiver. No provisions of this Agreement may be amended, modified, waived or discharged unless Executive and the Company agree to such amendment, modification, waiver or discharge in writing. No amendment, modification, waiver or discharge of this Agreement shall result in the accelerated payment of any benefit or payment provided for in Section 3. No waiver by either party at any time of the breach of, or lack of compliance with, any conditions or provisions of this Agreement shall be deemed a waiver of the provisions or conditions hereof.

10. Entire Agreement. This Agreement represents the entire agreement between Executive and the Company with respect to the matters set forth herein and supersedes and replaces any prior agreements in their entirety. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter of this Agreement will be made by either party which are not set forth expressly herein. No future agreement between Executive and the Company may supersede this Agreement, unless it is in writing and specifically makes reference to this Section 10.

11. Executive's Successors. This Agreement shall inure to the benefit of and be enforceable by Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If Executive dies while any amounts are still payable hereunder, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to Executive's devisee, legatee, or other designee or, if there be no such designees, to Executive's estate.

12. No Funding Obligation. This Agreement shall be unfunded. Any payment made under this Agreement shall be made from the Company's general assets, and the Executive's rights shall be no greater than those of general unsecured creditor of the Company.

13. Legal Fees. In the event of any dispute or controversy arising out, relating to, or in connection with this Agreement, the Company shall reimburse Executive for reasonable attorney fees, costs and expenses incurred with respect thereto if Executive substantially prevails on the merits with respect to any breach of this Agreement by the Company.

14. **Headings.** All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

15. **Validity.** The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provisions of this Agreement, which shall remain in full force and effect.

16. **Withholding.** All payments made pursuant to this Agreement will be subject to withholding of applicable income, employment and excise taxes.

17. **Applicable Law.** This Agreement shall be interpreted and enforced in accordance with the laws of the State of California (with the exception of its conflict of law provisions). This Agreement is intended to comply with or be exempt from Section 409A of the Code and the regulations promulgated thereunder.

18. **Counterparts; Electronic Signatures.** This Agreement may be executed (including via electronic signature) in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

IN WITNESS WHEREOF, this Agreement is executed effective as of the date set forth above.

Alphatec Holdings, Inc.
Alphatec Spine, Inc.

By: _____
Craig E. Hunsaker
Executive Vice President, People & Culture and General Counsel

ACCEPTED A N D AGREED TO AS OF THE DATE FIRST SET FORTH

_____

Exhibit 21.1

Subsidiaries of the Registrant and Wholly Owned Subsidiaries of the Registrant's Subsidiaries

Name	Parent Company	Jurisdiction of Incorporation
Alphatec Spine, Inc.	Alphatec Holdings, Inc.	California
SafeOp Surgical, Inc.	Alphatec Holdings, Inc.	Delaware

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

1. Registration Statement (Form S-8 No. 333-144293) pertaining to the Alphatec Holdings, Inc. 2005 Employee, Director and Consultant Stock Plan,
2. Registration Statement (Form S-8 No. 333-147212) pertaining to the Alphatec Holdings, Inc. 2007 Employee Stock Purchase Plan,
3. Registration Statement (Form S-8 No. 333-187189) pertaining to the Alphatec Holdings, Inc. 2007 Employee Stock Purchase Plan,
4. Registration Statement (Form S-8 No. 333-187190) pertaining to the Amended and Restated Alphatec Holdings, Inc. 2005 Employee, Director and Consultant Stock Plan,
5. Registration Statement, as amended (Form S-3 No. 333-195604) of Alphatec Holdings, Inc.,
6. Registration Statement (Form S-8 No. 333-196616) pertaining to the Alphatec Holdings, Inc. Amended 2007 Employee Stock Purchase Plan,
7. Registration Statement (Form S-8 No. 333-196617) pertaining to the Amended and Restated Alphatec Holdings, Inc. 2005 Employee, Director and Consultant Stock Plan,
8. Registration Statement (Form S-3 No. 333-200869) of Alphatec Holdings, Inc.,
9. Registration Statement (Form S-8 No. 333-202504) pertaining to the Alphatec Holdings, Inc. Amended 2007 Employee Stock Purchase Plan,
10. Registration Statement (Form S-8 No. 333-202505) pertaining to the Amended and Restated Alphatec Holdings, Inc. 2005 Employee, Director and Consultant Stock Plan,
11. Registration Statement (Form S-8 No. 333-211182) pertaining to the Alphatec Holdings, Inc. Amended 2007 Employee Stock Purchase Plan,
12. Registration Statement (Form S-8 No. 333-213981) pertaining to the Alphatec Holdings, Inc. 2016 Equity Incentive Plan and the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan,
13. Registration Statement (Form S-8 No. 333-215036) pertaining to the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan,
14. Registration Statement (Form S-8 No. 333-217055) pertaining to the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan and the Alphatec Holdings, Inc. Amended 2007 Employee Stock Purchase Plan,
15. Registration Statement (Form S-3 No. 333-217444) of Alphatec Holdings, Inc.,
16. Registration Statement (Form S-8 No. 333-217907) pertaining to the Alphatec Holdings, Inc. Amended 2007 Employee Stock Purchase Plan,
17. Registration Statement (Form S-8 No. 333-221084) pertaining to the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan,
18. Registration Statement (Form S-3 No. 333-221085) of Alphatec Holdings, Inc.,

19. Registration Statement (Form S-3 No. 333-224304) of Alphatec Holdings, Inc.,
20. Registration Statement (Form S-8 No. 333-225080) pertaining to the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan,
21. Registration Statement (Form S-8 No. 333-232661) pertaining to the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan,
22. Registration Statement (Form S-3 No. 333-222664) of Alphatec Holdings, Inc.,
23. Registration Statement (Form S-3 No. 333-239546) of Alphatec Holdings, Inc.,
24. Registration Statement (Form S-8 No. 333-239556) pertaining to the Alphatec Holdings, Inc. 2016 Equity Incentive Plan,
25. Registration Statement (Form S-3 No. 333-241677) of Alphatec Holdings, Inc., of our report dated March 5, 2021, with respect to the financial statements of Alphatec Holdings, Inc. included in this Annual Report (Form 10-K) of Alphatec Holdings, Inc. for the year ended December 31, 2020.

/s/ Mayer Hoffman McCann P.C.

San Diego, California
March 5, 2021

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Patrick S. Miles, certify that:

1. I have reviewed this Annual Report on Form 10-K of Alphatec Holdings, 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(s) 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(s) 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.

By: /S/ Patrick S. Miles
Patrick S. Miles
Chairman and Chief Executive Officer
(principal executive officer)
March 5, 2021

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jeffrey G. Black, certify that:

1. I have reviewed this Annual Report on Form 10-K of Alphatec Holdings, 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(s) 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(s) 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.

By: /S/ Jeffrey G. Black
Jeffrey G. Black
Chief Financial Officer
(principal financial and accounting officer)
March 5, 2021

Exhibit 32

CERTIFICATION UNDER
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Alphatec Holdings, Inc. (the "Company") on Form 10-K for the year ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Patrick S. Miles, Chairman and Chief Executive Officer, certify, to my knowledge, pursuant to 18 U.S.C. Section 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.

Dated: March 5, 2021

/S/ Patrick S. Miles
Patrick S. Miles
Chairman and Chief Executive Officer
(principal executive officer of the Company)

In connection with the Annual Report of Alphatec Holdings, Inc. (the "Company") on Form 10-K for the year ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey G. Black, Chief Financial Officer, certify, to my knowledge, pursuant to 18 U.S.C. Section 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.

Dated: March 5, 2021

/S/ Jeffrey G. Black
Jeffrey G. Black
Chief Financial Officer
(principal financial and accounting officer of the Company)