Alphatec Spine®

# 2016 Annual Report

We improve lives by providing innovative spine surgery solutions through our relentless pursuit of superior outcomes

# 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, 2016**

**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.)** |
| **5818 El Camino Real, 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** | **Name of Each Exchange on Which Registered** |
|---|---|
| **Common Stock, par value $0.0001 per share** | **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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

| | | | |
|---|---|---|---|
| Large accelerated filer | ☐ | Accelerated filer | ☐ |
| Non-accelerated filer | ☒ (Do not check if a smaller reporting company) | Smaller reporting company | ☐ |

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, 2016), was approximately $24.7 million.

The number of outstanding shares of the registrant's common stock, par value $0.0001 per share, as of March 24, 2017 was 9,048,145.

**DOCUMENTS INCORPORATED BY REFERENCE**

None.

**ALPHATEC HOLDINGS, INC.**

**FORM 10-K—ANNUAL REPORT**
**For the Fiscal Year Ended December 31, 2016**

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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. and our subsidiaries and their subsidiaries. "Alphatec Spine" refers to our wholly-owned operating subsidiary Alphatec Spine, Inc. "Scient'x" refers to our operating affiliate, Scient'x S.A.S., which is wholly-owned by several of our subsidiaries, and Scient'x's subsidiaries.

## PART I

### Item 1. Business

#### Overview

We are a medical technology company focused on the design, development and promotion of products for the surgical treatment of spinal disorders. Our mission is to improve patient lives by delivering advancements in spinal fusion technologies. We have a comprehensive product and procedural portfolio, as well as a pipeline that addresses the cervical, thoracolumbar and intervertebral regions of the spine and covers a variety of spinal disorders from degenerative disease to complex deformity and trauma. Our principal product offerings are focused on the U.S. market for fusion-based spinal disorder solutions. We believe that our products and procedural offerings are attractive to surgeons, hospitals, and patients due to innovative features and benefits that are designed to streamline surgical procedures, improve patient outcomes, while delivering predicable results at lower costs.

#### Recent Developments

On September 1, 2016, we completed the sale of our international distribution operations and agreements, including our wholly-owned subsidiaries in Japan, Brazil, Australia, China and Singapore and substantially all of the assets of our other sales operations in the United Kingdom and Italy, or collectively the International Business, to an affiliate of Globus. Following the closing of the Globus Transaction, we now operate in the U.S. market only.

Between September 1, 2016 and March 24, 2017, we announced several changes to our senior leadership team, including the appointment of Terry Rich as our Chief Executive Officer; Craig Hunsaker as our Executive Vice President, People and Culture and General Counsel; Jon Allen as our Executive Vice President, Commercial Operations; Brian Snider as our Executive Vice President, Strategic Marketing and Product Development; and Jeff Black as our Executive Vice President, Chief Financial Officer.

On March 29, 2017, we completed a Private Placement of our securities to certain institutional and accredited investors, including certain directors and executive officers of the Company, providing for the sale by the Company of 1,809,628 shares of our common stock at a purchase price of $2.00 per share, 15,245 shares of newly designated Series A Convertible Preferred Stock (the "Series A Convertible Preferred Stock") at a purchase price of $1,000 per share (which Preferred Shares are convertible into approximately 7,622,372 shares of our common stock, subject to limitations on conversion until the approval by our stockholders as required in accordance with the NASDAQ Global Select Market rules), and warrants to purchase up to 9,432,000 shares of our Common Stock at an exercise price of $2.00 per share (the "Warrants"), in a private placement (the "Private Placement"). The Warrants will become exercisable following stockholder approval, are subject to certain ownership limitations, and expire five years after the date of such Stockholder approval. The aggregate gross proceeds for the Private Placement were approximately $18.9 million. We intend to use the net proceeds from the Private Placement for general corporate and working capital purposes.

#### Strategy

Our goal is to build a high-growth organization focused on innovation and value delivery. By working with world class surgeons to simplify procedures and deliver better outcomes, we believe that we will be 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, we are committed to attracting, engaging and retaining the best talent in the industry, and investing in the following "vital few" strategies:

- ***U.S. Commercial Execution and Growth – Dedicated and Loyal Sales Channel***

Currently, we market and sell our products in the U.S. through a network of non-exclusive independent distributors and direct sales representatives. Our goal is to deliver consistent, predictable growth through a durable brand commitment. To accomplish this, we believe there is significant opportunity for us to partner closely with distributors to create a more dedicated and loyal sales channel for the future. We are eliminating our stocking distributors and are moving our existing distributor relationships to more dedicated and non-competitive partnerships. As part of this strategy we intend to add new, high-quality distributors to enable 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 further penetrate existing accounts and territories. We feel that the recent consolidation in the industry has afforded us the opportunity to partner with large, seasoned distributors that are looking to re-enter the spine market with our robust product portfolio that is solely focused in spine solutions.

We also employ a national accounts team that is responsible for securing access at hospitals and group purchasing organizations, or GPOs, across the U.S. We have had strong success with securing access to hospitals and GPOs and today much of our business is achieved through these accounts. We believe that this access is a key differentiator for us. We will continue to focus our efforts and investment in 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.

As part of this effort we are also significantly enhancing our specialized sales training and education programs for independent distributors and direct sales representatives to enhance overall sales productivity.

- ***Reduce Costs and Drive Fiscal Responsibility Across the Organization – Financial Health and Wellness***

We plan to embed fiscal responsibility throughout our culture with the goal of remaining disciplined to sustainable standards and accountability at every level of planning and execution throughout the organization. We are evaluating our existing processes in order to drive efficiency throughout the organization. We will actively manage our cash and will work to ensure that all cash across the business is deployed with the goal of increasing free cash flow. We are also striving to drive additional revenue by focusing our capital spend towards making strategic investments in commercializing our new products.

- ***Product Innovation Focus and Position in Spine***

We are dedicated to the development, launch and promotion of innovative products that simplify procedures for surgeons and improve patient outcomes. We support these products through comprehensive sales force and surgeon training and technical support. Our short-term and long-term pipeline is designed to offer us increased revenue opportunities by addressing the core market segments of spinal fusion, including both open and minimally invasive surgical, or MIS, pedicle screw systems, interbody devices, cervical plates and a comprehensive biologics offering.

We are focusing our development and commercialization efforts on differentiated products that we can market through our sales channel. These innovative products are designed to drive penetration within specific growth segments of the overall spine market, including the complex spine, deformity, and lateral markets. In Q1 of 2017 we delivered limited market releases of the Arsenal™ Deformity Adolescent Scoliosis (AIS) System, the Battalion Lateral Spacer System, and the Squadron Lateral Retractor. We also plan to expand our distribution of these offerings as well as broaden our biologics portfolio through structural allograft, tissue and synthetic bone graft products to support surgeons during the surgical procedure with the goal of achieving high fusion rates.

**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 your 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 in the hip region, 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 enable people to sit and stand upright. Vertebrae in the cervical, thoracic and lumbar regions are separated from each other and cushioned by a rubbery soft tissue called the intervertebral disc. 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 are affected by strain, injury or disease.

**The Alphatec Solution**

Our principal product offering includes a wide variety of spinal solutions comprised of components such as access systems, interbody implants, fixation plates, thoracolumbar and cervico/thoracic screws and rods, best-in-class instruments, and various biologics offerings all designed to enhance and promote spinal fusion. Our business is focused on treating conditions from degenerative to complex deformity and trauma through a variety of MIS and traditional procedure.

The chart below illustrates the principal products in our broad portfolio of spine systems currently available for sale by market segment. Certain systems and products are described in greater detail below the chart.

| | Degenerative Lumbar | Deformity | Cervical | Biologics | MIS/ Lateral |
|---|---|---|---|---|---|
| Market Size* | $2.1B | $650M | $1.5B | $1.5B | $1.5B |
|  | - Arsenal<br>- Zodiac<br>- Aspida<br>- Battalion PLIF/TLIF<br>- Novel Tapered TL, SD PLIF/TLIF<br>- Novel AIS<br>- Solus ALIF | - Arsenal Adult<br>- ***Arsenal AIS*****  | - Trestle Luxe<br>- Solanas<br>- Avalon<br>- Novel CIS, XS Cervical | - Neocore<br>- 3D Profuse<br>- Cervical Allografts<br>- AlphaGRAFT DBM<br>- Amnioshield | - Illico<br>- Bridgepoint<br>- ***Battalion Lateral*****<br>- ***Squadron Retractor*****<br>- ***XYCor Expandable Interbody****** |

* Source: Biomed GPS (SmartTraks), iData, Spine Market, Management estimates
** New product, currently in limited release
*** New product, limited release expected mid-2017

***MIS Products***

***Battalion Lateral Spacer System and Squadron Lateral Retractor***

The Battalion Lateral Spacer System with the Alphatec Squadron Lateral Retractor provides surgeons with a next-generation lateral system with innovative, unique design characteristics including, total blade control technology that allows the surgeon to maintain approach aperture throughout the procedure, in-situ blade height adjustment and blade replacement, combined with the Battalion Lateral Spacer is available in 0°and 15° lordosis with a variety of width and height options for lumbar and thoracic approaches. Our Battalion lateral spacer system and Squadron lateral retractor received clearance of a FDA 510-(k) premarket notification from the U.S. Food and Drug Administration, or FDA, in 2016 and we began a limited market release launch in February 2017.

***XYcor Expandable Spinal Spacer System***

The XYcor Expandable Spinal Spacer System provides surgeons with a minimally invasive inspired solution for PLIF and TLIF procedures by utilizing a smaller, more compact ALIF sized implant that can accommodate a variety of patient pathologies. The system provides nearly five times the amount of bone graft potential compared to standard PLIF and TLIF cages. Our XYcor system received FDA 510-(k) clearance in 2016 and we are preparing for limited market release launch in mid 2017.

***Illico Minimally Invasive Surgery System***

The Illico Minimally Invasive Surgery System is a cannulated pedicle screw system that is designed to be inserted via a minimally invasive surgical procedure. Access to the spine is gained through a small incision. The surgeon is then able to see the surgical site by using a small canal through which implants are inserted into the patient with a minimum amount of disruption to the surrounding tissue. We believe that the Illico Minimally Invasive Surgery System limits trauma to the tissue surrounding the location of the surgery, which is designed to enable patients to recover faster.

***BridgePoint Spinous Process Fixation System***

The BridgePoint system is a spinous process fixation system that was developed to address the disadvantages of traditional stabilization devices. The system allows surgeons to fixate the spine using a less invasive approach by attaching a plate to the spinous process of the vertebral body during spinal fusion surgery.

***Thoracolumbar Fixation Products***

***Arsenal Degenerative System***

Arsenal Degenerative Spinal Fixation System is a comprehensive system for both simple and complex degenerative spinal fusion procedures. The Arsenal Degenerative Spinal Fixation System was designed to provide operational efficiency, biomechanical strength, and surgical simplicity while providing a complete solution to combat most complex degenerative pathologies. We believe the combination of low-profile implants, intuitive instrumentation and proven strength of this system are significant advantages. The Arsenal Degenerative System was designed to be the platform for future development in other spinal fusion segments of the market including the deformity, MIS and cervico-thoracic segments of the market.

***Arsenal Deformity System***

The Arsenal Deformity System expands the Arsenal platform to address complex deformity including adult and adolescent diopathic scoliosis, or AIS, spinal deformity pathologies. The system was thoughtfully designed to provide surgeons with a complete solution to address complex deformity procedures. The system provides surgeons with unique uniplanar screws, which enable easier screw positioning and rod placement through a tulip that has 360 degrees of rotation while restricting motion in the medial/lateral plane for derotation correction. Additionally, the system includes a wide variety of low-profile implants providing a better anatomical fit and increased ability to address patient pathologies, ergonomically designed instrumentation to improve surgical efficiency and comfort during complex surgeries and proven biomechanical strength necessary to achieve a solid fusion.

***Arsenal CBx Cortical Bone Fixation System***

Arsenal CBx is the first extension to the Arsenal platform. An alternative to traditional pedicle screw placement, Arsenal CBx Cortical Bone Fixation System utilizes a midline approach and cortical bone trajectory to achieve maximum fixation through a less-invasive procedure. This system leverages the strengths of the Arsenal product platform with the benefits of a minimally disruptive procedure to enhance patient outcomes.

Due to the midline approach and inward-outward screw trajectory, soft tissue and muscle exposure requirements are greatly reduced compared to the approach for traditional screw trajectory. Arsenal CBx is a compatible fixation option for both posterior lumbar interbody fusion or transforaminal lumbar interbody fusion, or PLIF and TLIF, respectively. Additionally, it can be a unique muscle sparing approach to revision surgery.

***Zodiac Degenerative Spinal Fixation System***

Our Zodiac Degenerative Spinal Fixation System is a comprehensive spinal system that can be used to address both degenerative spinal conditions, as well as deformity correction. The system offers polyaxial pedicle screws, accompanying implants and advanced instruments for the stabilization of the thoracolumbar spine, as well as deformity specific instrumentation and implants that are designed to enable the surgeon to address patient-specific spinal deformity correction procedures.

***Cervical and Cervico-Thoracic Products***

***Trestle Luxe Anterior Cervical Plate System***

Our Trestle Luxe Anterior Cervical Plate System has a large window that enables the surgeon to have improved graft site and end plate visualization, which is designed to allow for better placement of the plate. The Trestle Luxe Anterior Cervical Plate System also has a low-profile design, which we believe is among the lowest in the spine market. Low-profile cervical plates are intended to reduce the irritation of the tissue adjacent to the plate following surgery. Other key features of the Trestle Luxe Anterior Cervical Plate include a self-retaining screw-locking mechanism that is designed to ensure quick and easy locking of the plate and a flush profile after the screws are inserted.

***Solanas Posterior Cervico/Thoracic Fixation System and Avalon Occipital Plate***

Our Solanas Posterior Cervico/Thoracic Fixation System consists of rods, polyaxial screws, hooks, and connectors that provide a solution for posterior cervico/thoracic fusion procedures. We also designed the Solanas Posterior Cervico/Thoracic System to be used in combination with our existing Zodiac Degenerative Spinal Fixation System and our 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 superior fusion, including three points of plate rotation and translation, which is designed to ease the placement of the plate.

***Interbody Systems***

***Battalion Universal Spacer System***

The Battalion Universal Spacer System offers comfort, control and innovative design for surgeons performing PLIF/TLIF procedures. The Battalion implants introduce a new alternative to interbody fusion by combining the elasticity and radiolucency of polyetheretherketone, or PEEK, with a titanium coating for potential osseointegration.

The implants, which come in both a straight and curved footprint, feature a bulleted nose for easy insertion. The Battalion System also features an intuitive and innovative 180-degree locking inserter that assists with protection of neural elements during insertion of the implant. To further market potential, the Battalion System features state-of-the-art instrumentation for disc prep, access and implantation.

***Novel PEEK and Titanium Spinal Spacers***

Our family of Novel spinal spacers addresses the surgical need to accommodate varying patient anatomies, surgical approaches and composite material options. We offer multiple unique implant designs, each of which is available in numerous shapes and heights. Certain of our Novel spinal spacers are made of titanium and others are made of PEEK.

***Alphatec Solus Locking ALIF Spinal Spacer***

Our Alphatec Solus locking ALIF spinal spacer, or Alphatec Solus, is a zero-profile PEEK and titanium device offering four points of fixation for improved stability. Alphatec Solus features a one-step insertion and deployment feature and is used in ALIF procedures. We believe that Alphatec Solus' locking mechanism is a substantial improvement over similar products currently on the market.

***Biologics***

***AlphaGraft Structural Allograft Spacers***

We offer a broad portfolio of allograft spacers available in a wide range of shapes and sizes, each with corresponding instrumentation, which are intended for use in the cervical, thoracic, and lumbar regions of the spine. In addition, many of our allograft spacers are packaged in our vacuum-infusion packaging system, or VIP System. The VIP System is a packaging and fluid delivery system that allows for fast and efficient infusion of the surgeon's choice of hydration fluid. The VIP System provides rapid and uniform hydration, which may reduce the brittleness of the graft and shorten the length of the surgical procedure.

***AlphaGraft ProFuse Demineralized Bone Scaffold***

Our AlphaGraft 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 AlphaGraft 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. The AlphaGraft ProFuse Demineralized Bone Scaffold is pre-packaged in our proprietary VIP System.

***Amnioshield Amniotic Tissue Barrier***

Our 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.

***Alphagraft Demineralized Bone Matrix***

Our Alphagraft Demineralized Bone Matrix consists of demineralized human tissue that is mixed with a bioabsorbable carrier and intended for use in surgery for bone grafting.

***Neocore Osteoconductive Matrix***

Our 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, or 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.

**Research and Development**

Our research and development department seeks to continually improve our core product offering and introduce new products to increase our penetration in the U.S. spine market. We are focused on developing technology platforms that span the largest market segments addressing degenerative and deformity spine pathologies. We have transformed our development process by focusing our resources on two major development programs per year and leveraging integrated teams focused on the key platforms 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. 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 exclusive and non-exclusive independent distributors and employee direct sales representatives. We employ a team of regional sales managers 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 and regional sales managers through salaries and incentive bonuses based on performance measures.

In late 2016 we evaluated our sales distribution channel and are currently in the process of making significant changes to drive a more dedicated and loyal sales channel. Moving forward we intend to eliminate our traditional stocking distributors, move our existing distributor relationships to more exclusive partnerships and attract new, high-quality distributors to enable future growth. We believe these changes will provide us with significant opportunity for future growth as we secure more exclusive distribution partners that can further penetrate existing and new geographic markets.

We evaluate and select our distribution partners and sales employees based on 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 on the entire spinal fusion procedure through a peer-to-peer approach to qualified surgeon customers. Well-timed surgeon education programs drive customer conversion and loyalty through leadership and excellence by focusing on delivering value through improved surgeon 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 in 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, or FDA, and International Organization for Standardization, or 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 fail 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.

**Divestiture of International Business**

On September 1, 2016, we closed a sale of our international distribution operations and agreements to Globus Medical Ireland, Ltd., or the Buyer, a subsidiary of Globus Medical, Inc., or Globus, or the Globus Transaction. Pursuant to the Globus Transaction, Globus acquired: (i) all of the stock of our wholly-owned subsidiaries in Japan, Brazil, Australia, China and Singapore; (ii) substantially all of the assets of our other sales operations in the United Kingdom and Italy; and (iii) all of the other assets that are related to the business of the design, development, marketing, promotion and sale of products for the surgical treatment of spine disorders that we market and sell outside of the United States. The Globus Transaction was completed pursuant to a purchase and sale agreement, dated as of July 25, 2016, as amended, or the Purchase and Sale Agreement. Pursuant to the Purchase and Sale Agreement we have agreed to not market and sell spinal implant products outside of the United States for a period beginning after the closing of the Globus Transaction and ending two years following the termination of the Supply Agreement defined below.

Under the terms of the Purchase and Sale Agreement, at the closing of the Globus Transaction the Buyer paid us $80 million in cash, subject to a working capital adjustment. In addition, at the closing of the Globus Transaction we entered into a five-year term credit facility agreement, or the Globus Facility Agreement, with Globus, pursuant to which Globus agreed to loan us up to $30 million.

In addition, at the closing of the Globus Transaction, we and Globus entered into a product manufacture and supply agreement, or the Supply Agreement, pursuant to which, at agreed-upon prices, we agreed to supply to Globus certain of our 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 will be responsible for ensuring that all of the products delivered to Globus meet all agreed-upon specifications for such products. The Supply Agreement has an initial term of three years, and Globus has the right to renew the Supply Agreement for two additional 12-month periods; subject to Globus meeting certain purchase requirements.

**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/Synthes), Stryker, NuVasive, Zimmer, Biomet, Globus, K2M Medical, SeaSpine 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 March 14, 2017, we and our affiliates owned, or exclusively owned 111 issued U.S. patents, 72 pending U.S. patent applications and 231 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 March 14, 2017, we and our affiliates owned 72 registered U.S. trademarks and 148 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, or FDCA, and in the case of our tissue products, also under the Public Health Service Act, or 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 Federal Food, Drug and Cosmetic Act, or FDCA, also referred to as a 510(k) clearance, or approval of a premarket approval application, or 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, or 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 postmarket 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, or 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, or 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, or 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, or 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, or 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, or 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, or 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 anti-kickback 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. From time to time, we review these arrangements to determine whether they are in compliance with applicable laws and regulations. In addition, physician-owned distribution companies, or PODs, have increasingly become 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", or 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, or 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, or 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", or 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, or 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 the new Presidential administration and U.S. Congress will seek 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, or the 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. While 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, it is clear that concrete steps are being taken to repeal and replace certain aspects of the ACA.

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.

**Employees**

As of December 31, 2016, we had 162 employees in the U.S., approximately 140 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. 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. On February 1, 2017, we implemented a workforce reduction, aimed at further aligning our employee count and operating expense with our current revenues. As of March 21, 2017, we have 142 employees, all located within the U.S., of which 119 are based in our Carlsbad, California headquarters.

**Corporate and Available Information**

We are a Delaware corporation. We were incorporated in March 2005. Our principal executive office is located at 5818 El Camino Real, Carlsbad, California 92008. Our Internet address is www.alphatecspine.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, or 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 ones facing us. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect us. If any of such risks or the risks described below, 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 our design, development, marketing, management and financial resources based on our business plan, which includes assumptions about various demographic trends and trends in the treatment of spine disorders and the resulting demand for our products. However, these trends are uncertain. There can be no assurance that our assumptions with respect to an aging population with broad medical coverage and longer life expectancy, which we expect to lead to increased spinal injuries and degeneration, are accurate. In addition, an increasing awareness and use of non-invasive means for the prevention and treatment of back pain and rehabilitation purposes may reduce demand for, or slow the growth of sales of, spine fusion products. A significant shift in technologies or methods used in the treatment of back pain or damaged or diseased bone and tissue could adversely affect demand for some or all of our products. For example, pharmaceutical advances could result in non-surgical treatments gaining more widespread acceptance as a viable alternative to spine fusion. The emergence of new biological or synthetic materials to facilitate regeneration of damaged or diseased bone and to repair damaged tissue could increasingly minimize or delay the need for spine fusion surgery and provide other biological alternatives to spine fusion. New surgical procedures could diminish demand for some of our products. The increased acceptance of emerging technologies that do not require spine fusion, such as artificial discs and nucleus replacement, for the surgical treatment of spine disorders would reduce demand for, or slow the growth of sales of, spine fusion products. If our assumptions regarding these factors prove to be incorrect or if alternative treatments to those offered by our products 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 for spine fusion products and procedures is intensely competitive, subject to rapid technological change and significantly affected by new product introductions and other market activities of industry participants. In 2016, a significant percentage of global spine implant product revenues was generated by Medtronic Sofamor Danek, a subsidiary of Medtronic, Inc.; Depuy Spine, a subsidiary of Johnson & Johnson; and Stryker Spine. Our competitors also include numerous other publicly-traded and privately-held companies such as NuVasive, Zimmer, Biomet, Globus, K2M Medical and SeaSpine.

Several of our competitors enjoy competitive advantages over us, including:

- more established relationships with spine surgeons;
- more established distribution networks;
- broader spine surgery product offerings;
- stronger intellectual property portfolios;
- greater financial and other resources for product research and development, sales and marketing, and patent litigation;
- greater experience in, and resources for, launching, marketing, distributing and selling products;
- significantly greater name recognition as well as more recognizable trademarks for products similar to the products that we sell;
- more established relationships with healthcare providers and payors;
- products supported by more extensive clinical data; 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 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.

***The sale of our international distribution operations and agreements will reduce our revenue, and we may not be successful in executing on our business strategy to solely focus on the U.S. marketplace.***

Prior to the sale of our International operations in September 2016, our international revenue represented approximately 35% of our total revenue for the six months ended June 30, 2016 and year ended December 31, 2015. Following the closing of the Globus Transaction, our revenues have been and will continue to be materially reduced as we will no longer be generating the same level of revenue from the operations and assets sold in the transaction. There can be no assurance that the proceeds from the Globus Transaction will be sufficient for us to grow our U.S. business. In addition, our future growth will depend on our ability to successfully implement our strategy to focus solely on the U.S. marketplace. If we are unable to successfully execute on this business strategy or otherwise compete effectively within the U.S. marketplace, our business, financial condition, results of operations and growth prospects would be materially and adversely affected.

***We may face indemnity and other liability claims pursuant to the Globus Purchase and Sale Agreement.***

Under the purchase and sale agreement for the Globus Transaction, we will indemnify Globus against damages arising from, among other things, breaches of our representations, warranties or obligations under the agreement and liabilities not assumed by Globus. The indemnification period generally runs for a period of 18 months from the Closing, with longer survival periods for certain specified representations and warranties. Our indemnification obligations are subject to a deductible in certain cases of $500,000, and our aggregate liability under such indemnification claims is generally limited to $12.0 million, $20.0 million for certain specified representations and warranties, and the full purchase price for breaches of certain specified representations and warranties, breaches of covenants and certain other matters. If Globus makes an indemnification claim, we may incur liability and/or expenses, which could harm our operating results. In addition, such indemnity claims may divert management attention from our continuing business.

***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% of our net sales for 2016 and 2015. A decline in sales of these systems, due to lower market demand, the introduction by a third party of a competitive product, an intellectual property dispute involving these systems, or otherwise, would have a significant adverse impact on our business, financial condition and results of operations. Some of the technology related to our polyaxial pedicle screw systems is licensed to us. Any action that would prevent us from manufacturing, marketing and selling our polyaxial pedicle screw 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 free to market products that compete with our products.***

Many of our independent distributors also market and sell the products of our competitors, and those competitors may have the ability to influence the products that our independent distributors choose to market and sell. 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.

***If pricing pressures cause us to 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 have experienced and may continue to experience decreasing prices for our goods and services we offer due to pricing pressure exerted by our customers in response to increased cost containment efforts from managed care organizations and other third-party payors 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.

***To be commercially successful, we must convince the spine surgeon community that our products are an attractive alternative to our competitors' products. If the spine surgeon community does not use our products, our sales will decline and we will be unable to increase our sales and profits.***

In order for us to sell our products, 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 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.

There is a learning process involved for spine surgeons to become proficient in the use of our products. Although most spine surgeons may have adequate knowledge on how to use most of our products based on their clinical training and experience, we believe that the most effective way to introduce and build market demand for our products is by directly training spine surgeons in the use of our products. If surgeons are not properly trained, they may misuse or ineffectively use our products. This may also 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 must retain the current distributors of our products and attract new distributors of our products.***

We plan to increase our network of independent distributors. The establishment and development of a broader distribution network may be expensive and time consuming. Because of the intense competition for their services, we may be unable to recruit or retain additional qualified independent distributors. Often, our competitors enter into distribution agreements with independent distributors that require such distributors to exclusively sell the products of our competitors. Further, we may not be able to enter into agreements with independent distributors on commercially reasonable terms, if at all. Even if we do enter into agreements with additional independent distributors, it often takes 90 to 120 days for new distributors to reach full operational effectiveness and such distributors may not generate revenue as quickly as we expect them to, commit the necessary resources to effectively market and sell our products or ultimately be successful in selling our products. Our business, financial condition and results of operations will be materially adversely affected if we do not retain our existing independent distributors and attract new, additional independent distributors or if the marketing and sales efforts of our independent distributors and our own direct sales representatives are unsuccessful.

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

We rely on third party suppliers for the manufacture of our implants and instruments. We currently rely on a limited number of third party suppliers and any prolonged disruption in the operations of our third party suppliers could have a significant negative impact on our ability to supply our products to customers and to perform our obligations under the Supply Agreement with Globus, and would cause us to seek additional third-party manufacturing contracts, which may not be available on acceptable terms, if at all. We may suffer losses as a result of business interruptions that exceed coverage under our manufacturer's insurance policies. Events beyond our control, such as natural disasters, fire, sabotage or business accidents could have a significant negative impact on our operations by disrupting our product development and commercialization efforts until such third-party supplier can repair its facility or put in place third-party contract manufacturers to assume this manufacturing role, which we may not be able to do on reasonable terms, if at all. 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. The 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 various third-party suppliers, and in one case a single third-party supplier, for key raw materials used in the manufacturing processes for our products 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 use a number of raw materials, including titanium, titanium alloys, stainless steel, PEEK, and human tissue. We rely from time to time on a number of suppliers and in one case on a single source vendor, Invibio. 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 U.S. for use in implantable devices. During 2016 and 2015, approximately 20% of our revenues were derived from products manufactured using PEEK.

We depend on a limited number of sources of human tissue for use in our biologics products, and any failure to obtain tissue from these sources or to have the tissue processed by these entities for us in a timely manner will interfere with our ability to meet demand for our biologics products effectively. The processing of human tissue into biologics products is labor intensive and it is therefore difficult to maintain a steady supply stream. In addition, due to seasonal changes in mortality rates, some scarce tissues used for our biologics products are at times in particularly short supply. We cannot be certain that our supply of human tissue from our current suppliers and our current inventory of biologics products will be available at current levels or will 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. In addition, any supply interruption in a limited or sole sourced component or raw material, such as PEEK or human tissue, could materially harm the ability of our third party manufacturers to manufacture our products until a new source of supply, if any, 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.

***Our tissue-based products and related technologies could become subject to significantly greater regulation by the FDA, which could disrupt our business.***

The FDA regulates human cells, tissues, and cellular and tissue-based products or HCT/Ps, but the extent to which they are regulated depends on how they are manufactured and used and whether they meet other criteria for minimal regulation. These criteria include but are not limited to the use of the HCT/Ps for homologous use only and minimal manipulation of the HCT/Ps. These HCT/Ps are regulated by the FDA solely under Section 361 of the Public Health Service Act and are referred to as "Section 361 HCT/Ps," while other HCT/Ps are subject to FDA's regulatory requirements applicable to medical devices or biologics. Section 361 HCT/Ps do not require 510(k) clearance, PMA approval, licensure of a biologics license application, or BLA, or other premarket authorization from FDA before marketing. We believe our HCT/Ps are regulated solely under Section 361 of the PHSA, and therefore, we have not sought or obtained 510(k) clearance, PMA approval, or licensure through a BLA. The FDA could disagree with our determination that our tissue-based products are Section 361 HCT/Ps and could determine that these products are biologics requiring a BLA or medical devices requiring 510(k) clearance or PMA approval, and could require that we cease marketing such products and/or recall them pending appropriate clearance, approval or license from the FDA. If the FDA determines that any of our current or future products contain HCT/Ps that do not meet the criteria for regulation as a Section 361 HCT/P, it could subject some of our products to additional review and regulatory oversight. If this were to happen, further distribution of the affected products could be interrupted for a substantial period of time, which would reduce our revenues and hurt our profitability.

***If we or our suppliers fail to comply with the FDA's quality system and good tissue practice regulations, the manufacture of our products could be delayed.***

We and our suppliers are required to comply with the FDA's QSR, which covers, among other things, the methods and documentation of the design, testing, production, control, quality assurance, labeling, packaging, sterilization, record keeping, storage and shipping of our products. In addition, suppliers and processors of products derived from HCT must comply with the FDA's current good tissue practice requirements, or cGTPs, which govern the methods used in and the facilities and controls used for the manufacture of HCT/Ps, record keeping and the establishment of a quality program. The FDA audits compliance with the QSR and cGTPs through inspections of manufacturing and other facilities. 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 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.

On July 17, 2015, Alphatec Spine, Inc., our wholly owned subsidiary, received a Warning Letter from the FDA in connection with the FDA's inspection of our manufacturing facilities located in Carlsbad, California that occurred from February 4, 2015 until March 13, 2015, or the Inspection. In the Warning Letter, the FDA cited eight deficiencies in our responses to investigator's observations on the FDA Form 483, which was issued to us at the end of the Inspection. The deficiencies relate to our internal procedures for quality planning, design control, document control and corrective and preventive actions. The Warning Letter does not restrict production or shipment of our products from our facilities, or the sale or marketing of our products. On November 16, 2015, we responded to the FDA regarding the deficiencies set forth in the Warning Letter. We believe we have effectively addressed the FDA concerns in the Warning Letter, but are awaiting an inspection or other response from the FDA to validate our resolution of such deficiencies. Until the resolution of the deficiencies set forth in the Warning Letter are validated by the FDA, we may be subject to additional regulatory action by the FDA, and any such actions could significantly disrupt our ongoing business and operations and have a material adverse impact on our financial position and operating results. There can be no assurance that the FDA will be satisfied with our response or proposed resolutions.

***Healthcare policy changes, including recent federal legislation to reform the U.S. healthcare system, may have a material adverse effect on us.***

In response to perceived increases in health care costs in recent years, there have been and continue to be proposals by the federal government, state governments, regulators and third-party payors to control these costs and, more generally, to reform the U.S. healthcare system. Certain of these proposals could limit the prices we are able to charge for our products or the amounts of reimbursement available for our products, limit the acceptance and availability of our products, and have a material adverse effect on our financial position and results of operations. 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.

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

Sales of our products depend in part on the availability of adequate coverage and reimbursement from governmental and private payors. In the U.S., healthcare providers that purchase our products generally rely on third-party payors, 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. In addition, several million individuals were able to purchase health insurance in 2014 for the first time through health insurance "exchanges" established under the ACA. While procedures using our currently marketed products are eligible for reimbursement in the U.S., if surgical procedures utilizing our products are performed on an outpatient basis, it is possible that private payors 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 payors 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.

Furthermore, healthcare costs have risen significantly over the past decade. There have been and may continue to be proposals by legislators, regulators and third-party payors to contain these costs. Several such proposals were enacted as part of ACA, and include numerous provisions to limit Medicare spending through reductions in various fee schedule payments and sweeping payment reforms. Other federal and state cost-control measures include prospective payment systems, capitated rates, group purchasing, redesign of benefits, requiring pre-authorizations or second opinions prior to major surgery, encouragement of healthier lifestyles and exploration of more cost-effective methods of delivering healthcare. Some healthcare providers in the U.S. have adopted or are considering a managed care system in which the providers contract to provide comprehensive healthcare for a fixed cost per person. Healthcare providers may also attempt to control costs by authorizing fewer elective surgical procedures or by requiring the use of the least expensive devices possible. These cost-control methods also potentially limit the amount which healthcare providers may be willing to pay for medical devices. In addition, in the U.S., no uniform policy of coverage and reimbursement for medical technology exists among all these payors. Therefore, coverage of and reimbursement for medical technology can differ significantly from payor to payor. The continuing efforts of third-party payors, whether governmental or commercial, whether inside or outside the U.S., to contain or reduce these costs, combined with closer scrutiny of such costs, could restrict our customers' ability to obtain adequate coverage and reimbursement from these third-party payors. The cost containment measures contained in ACA and other measures being considered at the federal and state level, as well as internationally, could harm our business by adversely affecting the demand for our products or the price at which we can sell our products.

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

Because healthcare costs have risen significantly over the past decade, numerous initiatives and reforms initiated by legislators, regulators and third-party payors to curb these costs have resulted in a consolidation trend in the healthcare industry to create new companies with greater market power, including hospitals. As the healthcare industry consolidates, competition to provide products and services to industry participants has become and will continue 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 group purchasing organizations, 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 Medicare, Medicaid, or other third-party payors for our products or the procedures in which our products are used, healthcare regulation by federal and state governments 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 constrains our marketing practices and those of our independent sales agents and distributors, educational programs, pricing policies, and relationships with healthcare providers by prohibiting, 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);
- the federal ban, as well as state analogs, on physician self-referrals, which prohibits, subject to certain exceptions, physician referrals of Medicare and Medicaid patients to an entity providing certain "designated health services" if the physician or an immediate family member of the physician has any financial relationship with the entity;
- federal false claims laws which prohibit, among other things, knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;
- 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 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;
- state laws analogous to each of the above federal laws, such as anti-kickback and false claims laws that may apply to items or services reimbursed by any third-party payor, including commercial insurers, and state laws governing the privacy of certain health information, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts;
- the Administrative Simplification provisions of HIPAA, specifically, privacy and security provisions including recent amendments under HITECH which impose stringent restrictions on uses and disclosures of protected health information such as for marketing or clinical research purposes and impose significant 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 information beyond health information, such as employee information or any class of information combining name with state issued identification numbers, social security numbers, credit card, bank or other financial information and which require reporting to state officials in the event of breach or violation and which impose both civil and criminal penalties.

ACA includes various provisions designed to strengthen significantly fraud and abuse enforcement, such as increased funding for enforcement efforts and the lowering of the intent requirement of the federal Anti-Kickback Statute and criminal healthcare fraud statute such that a person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them.

If our past or present operations, or those of our independent sales agents and distributors are found to be in violation of any of such laws or any other governmental regulations that may apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from federal healthcare programs and/or the curtailment or restructuring of our operations. Similarly, if the healthcare providers, sales agents, distributors or other entities with which we do business are found to be non-compliant with 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. The risk of our being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the Courts, and their provisions are open to a variety of interpretations. 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.

The sales and marketing practices of our industry have been the subject of increased scrutiny from federal and state government agencies, and we believe that this trend will continue. For example, on March 26, 2013 the OIG issued a Special Fraud Alert entitled "Physician-Owned Entities" related to physician-owned distributors, or PODS. 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. Prosecutorial scrutiny and governmental oversight over some major device companies regarding the retention of healthcare professionals as consultants has affected and may continue to affect the manner in which medical device companies may retain healthcare professionals as consultants. Any precautions we take to detect and prevent noncompliance with applicable laws may not be effective in controlling unknown or unmanaged risks or losses or 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 obtain, or experience significant delays in obtaining, 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 numerous other federal, state and foreign governmental authorities. The process of obtaining regulatory clearances or approvals to market a medical device, particularly from the FDA, can be costly and time consuming, and there can be no assurance that such clearances or approvals will be granted on a timely basis, if at all. In particular, the FDA permits commercial distribution of most new medical devices only after the devices have received clearance under Section 510(k) of the Federal Food, Drug and Cosmetic Act, or 510(k), or are the subject of an approved premarket approval application, or a PMA. The 510(k) process generally takes three to nine months, but can take significantly longer, especially if the FDA requires a clinical trial to support the 510(k) application. Currently, we do not know whether the FDA will require clinical data in support of any 510(k)s that we intend to submit for other products in our pipeline. In addition, the FDA continues to re-examine its 510(k) clearance process for medical devices and published several draft guidance documents that could change that process. Any changes that make the process more restrictive could increase the time it takes for us to obtain clearances or could make the 510(k) process unavailable for certain of our products. A PMA must be submitted to the FDA if the device cannot be cleared through the 510(k) process or is not exempt from premarket review by the FDA. A PMA 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, and generally takes between one and three years, if not longer. 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.

Modifications to products that are approved through a PMA application generally need FDA approval. Similarly, some modifications made to products cleared through a 510(k) may require a new 510(k). 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, because we cannot assure you that any new products or any product modifications we develop will be subject to the shorter 510(k) clearance process, the regulatory approval process for our new products or product modifications may take significantly longer than anticipated. There is no assurance that the FDA will 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;
- the disagreement of the FDA or the applicable foreign 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 device 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;

- our inability to demonstrate that the clinical and other benefits of the device outweigh the risks;
- the manufacturing process or facilities we use may not meet applicable requirements; or
- the potential for approval policies or regulations of the FDA or applicable foreign regulatory bodies to 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.

To date, all of our non-biologic medical device products that have required FDA review that are being sold in the U.S. have been cleared through the 510(k) process without any required clinical trials. However, the FDA may require clinical data in support of any future 510(k)s or PMAs that we intend to submit for products in our pipeline. We have limited experience in performing clinical trials that might be required for a 510(k) clearance or PMA approval. If any of our products require clinical trials, the commercialization of such products could be delayed which could have a material adverse effect on our business, financial condition and results of operations.

***The safety of our products is not yet supported by long-term clinical data and may therefore prove to be less safe and effective than initially thought.***

We obtained clearance to offer all of our current non-biologic medical device products through the 510(k) route. The ability to obtain a 510(k) clearance is generally based on the FDA's agreement that a new product is substantially equivalent to certain already marketed products. Because most 510(k)-cleared products were not the subject of pre-market clinical trials, surgeons may be slow to adopt our 510(k)-cleared products, we may not have the comparative data that our competitors have or are generating, and we may be subject to greater regulatory and product liability risks. With the passage of the American Recovery and Reinvestment Act of 2009, funds have been appropriated for the U.S. Department of Health and Human Services' Healthcare Research and Quality to conduct comparative effectiveness research to determine the effectiveness of different drugs, medical devices, and procedures in treating certain conditions and diseases. Some of our products or procedures performed with our products could become the subject of such research. It is unknown what effect, if any, this research may have on our business. Further, future research or experience may indicate that treatment with our products does not improve patient outcomes or improves patient outcomes less than we initially expect. Such results would reduce demand for our products and this could cause us to withdraw our products from the market. Moreover, if future research or experience indicate that our products cause unexpected or serious complications or other unforeseen negative effects, we could be subject to significant legal liability, significant negative publicity, damage to our reputation and a dramatic reduction in sales of our products, all of which would have a material adverse effect on our business, financial condition and results of operations.

***Failure to comply with post-marketing regulatory requirements could subject us to enforcement actions, including substantial penalties, and might require us to recall or withdraw a product from the market.***

Once a medical device is cleared or approved, a manufacturer must notify the FDA of any modifications to the device. Any modification to a device that has received FDA clearance that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, design or manufacture, requires premarket clearance or possibly approval of a PMA. The FDA requires every manufacturer to make the determination in the first instance regarding whether a modification to a cleared or approved device necessitates the filing of a new 510(k) notification or PMA supplement. The FDA may review any manufacturer's decision and can disagree. If the FDA disagrees with any future determination by us that a new clearance or approval is not required, we may need to cease marketing or to recall the modified product until and unless we obtain clearance or approval. In addition, we could also be subject to significant regulatory fines or penalties. Any of these outcomes would harm our business.

The regulations to which we are subject are complex and have become more stringent over time. Regulatory changes could result in restrictions on our ability to continue or expand our operations, higher than anticipated costs, or lower than anticipated sales. Even after we have obtained the proper regulatory clearance or approval to market a product, we have ongoing responsibilities under FDA regulations and applicable foreign laws and regulations. The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. For example, in December 2016, the 21st Century Cures Act, or 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. The FDA, state and foreign regulatory authorities have broad enforcement powers. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may be subject to enforcement action by the FDA, state or foreign regulatory authorities, which may include any of the following sanctions:

- untitled letters or warning letters;
- fines, injunctions, consent decrees and civil penalties;
- recalls, termination of distribution, administrative detention, or seizure of our products;
- customer notifications or repair, replacement or refunds;
- operating restrictions or partial suspension or total shutdown of production;
- delays in or refusal to grant our requests for future 510(k) clearances, PMA approvals or foreign regulatory approvals of new products, new intended uses, or modifications to existing products;
- withdrawals or suspensions of current 510(k) clearances or PMAs or foreign regulatory approvals, resulting in prohibitions on sales of our products;
- FDA refusal to issue certificates to foreign governments needed to export products for sale in other countries; and/ or
- criminal prosecution.

Any of these sanctions could result in higher than anticipated costs or lower than anticipated sales and have a material adverse effect on our reputation, business, results of operations and financial condition.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, certain policies of the new Presidential administration may impact our business and industry. Namely, the new Presidential administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. Notably, on January 23, 2017, the new Presidential administration ordered a hiring freeze for all executive departments and agencies, including the FDA, which prohibits the FDA from filling employee vacancies or creating new positions. Under the terms of the order, the freeze will remain in effect until implementation of a plan to be recommended by the Director for the Office of Management and Budget, or OMB, in consultation with the Director of the Office of Personnel Management, to reduce the size of the federal workforce through attrition. An under-staffed FDA could result in delays in FDA's responsiveness or in its ability to review submissions or applications, issue regulations or guidance, or implement or enforce regulatory requirements in a timely fashion or at all. Moreover, on January 30, 2017, the new Presidential administration issued an Executive Order, applicable to all executive agencies, including the FDA, that requires that for each notice of proposed rulemaking or final regulation to be issued in fiscal year 2017, the agency shall identify at least two existing regulations to be repealed, unless prohibited by law. These requirements are referred to as the "two-for-one" provisions. This Executive Order includes a budget neutrality provision that requires the total incremental cost of all new regulations in the 2017 fiscal year, including repealed regulations, to be no greater than zero, except in limited circumstances. For fiscal years 2018 and beyond, the Executive Order requires agencies to identify regulations to offset any incremental cost of a new regulation and approximate the total costs or savings associated with each new regulation or repealed regulation. In interim guidance issued by the Office of Information and Regulatory Affairs within OMB on February 2, 2017, the administration indicates that the "two-for-one" provisions may apply not only to agency regulations, but also to significant agency guidance documents. In addition, on February 24, 2017, the new Presidential administration issued an executive order directing each affected agency to designate an agency official as a "Regulatory Reform Officer" and establish a "Regulatory Reform Task Force" to implement the two-for-one provisions and other previously issued executive orders relating to the review of federal regulations, however it is difficult to predict how these requirements will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

***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 in response to changing customer demands, competitive pressures and technologies and our ability to increase our market share. 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, or whether we will be able to successfully integrate any acquired business, product or technology into our business or retain any key personnel, suppliers or distributors. Our ability to successfully grow through acquisitions depends upon our ability to identify, negotiate, complete and integrate suitable acquisitions and to obtain any necessary financing. 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. For example, an acquisition could materially impair our operating results by causing us to incur debt or requiring us to amortize significant amounts of expenses, including non-cash acquisition costs, and acquired assets.

***We may not be able to timely develop new products or product enhancements that will be accepted by the market.***

We sell our products in a market that is characterized by technological change, product innovation, evolving industry standards, competing patent claims, patent litigation and intense competition. Our success will depend in part on our ability to develop and introduce new products and enhancements or modifications to our existing products, which we will need to do before our competitors do so and in a manner that does not infringe issued patents of third parties from which we do not have a license. We cannot assure you that we will be able to successfully develop or market new, improved or modified products, or that any of our future products will be accepted by even the surgeons who use our current products. Our competitors' product development capabilities could be more effective than our capabilities, and their new products may get to market before our products. In addition, the products of our competitors may be more effective or less expensive than our products. The introduction of new products by our competitors may lead us to have price reductions, reduced margins or loss of market share and may render our products obsolete or noncompetitive. The success of any of our new product offerings or enhancement or modification to our existing products will depend on several factors, including our ability to:

- properly identify and anticipate surgeon and patient needs;
- develop new products or enhancements in a timely manner;
- obtain the necessary regulatory approvals for new products or product enhancements;
- provide adequate training to potential users of new products;
- receive adequate reimbursement approval of third-party payors such as Medicaid, Medicare and private insurers; and
- develop an effective marketing and distribution network.

Developing products in a timely manner can be difficult, in particular because product designs change rapidly to adjust to third-party patent constraints and to market preferences. As a result, we may experience delays in our product launches which may significantly impede our ability to enter or compete in a given market and may reduce the sales that we are able to generate from these products. We may experience delays in any phase of a product launch, including during research and development, clinical trials, manufacturing, marketing and the surgeon training process. In addition, our suppliers of products or components can suffer similar delays, which could cause delays in our product introductions. If we do not develop new products or product enhancements in time to meet market demand or if there is insufficient demand for these new products or enhancements, it could have a significant adverse effect on our business financial condition and results of operations.

***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. While we have entered into employment agreements with all members of our senior management team, none of these agreements guarantees the services of the individual for a specified period of time. We would be adversely affected if we fail to adequately prepare for future turnover of our senior management team. Our ability to grow or at least maintain our sales levels depends in large part on our ability to attract and retain sales and marketing personnel and for these sales people to maintain their relationships with surgeons directly and through our distributors. We rely on our engineering team to research, design and develop potential products for our product pipeline. We also rely on our surgeon advisors to advise us on our products, our product pipeline, long-term scientific planning, research and development and industry trends. We compete for personnel and advisors with other companies and other organizations, many of which are larger and have greater name recognition and financial and other resources than we do. We recently implemented numerous changes in our

management team, including in the roles of Chief Executive Officer, Chief Financial Officer, Executive Vice President, People & Culture, and General Counsel, which could have an adverse effect on our retention of our employees, advisors and distributors. 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 conditions and results of operations.

***Compliance with laws and regulations and standards for accounting, corporate governance and public disclosure is time consuming and results in significant expenses.***

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, The Dodd-Frank Wall Street Reform and Consumer Protection Act, other SEC regulations, NASDAQ Stock Market listing rules, and new accounting pronouncements create uncertainty and additional complexities for companies such as ours. Our management and other personnel need to devote a substantial amount of time to these compliance initiatives. Moreover these rules and regulations increase our legal and financial compliance costs and make some activities more time consuming and costly.

If we fail to maintain effective internal controls and procedures for financial reporting, we could be unable to provide timely and accurate financial information and therefore be subject to delisting from The NASDAQ Global Select Market, an investigation by the SEC, and civil or criminal sanctions. Additionally, ineffective internal control over financial reporting would place us at increased risk of fraud or misuse of corporate assets and could cause our stockholders, lenders, suppliers and others to lose confidence in the accuracy or completeness of our financial reports. This, in turn could adversely affect our ability to access the capital markets.

***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.***

In the ordinary course of our business, we collect and store sensitive data, including legally protected patient health information, credit card information, personally identifiable information about our employees, intellectual property, 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 including research and development information, commercial information and business and financial 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 due to employee error or malfeasance, terrorist attacks, earthquakes, fire, flood, other natural disasters, power loss, computer systems failure, data network failure, Internet failure, or lapses in compliance with privacy and security mandates. Any such attack, virus, breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, publicly disclosed, lost or stolen. We have measures in place that are designed to detect and respond to such security incidents and breaches of privacy and security mandates. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, such as HIPAA, government enforcement actions and regulatory penalties. Unauthorized access, loss or dissemination could also interrupt our operations, including our ability to bill our customers, provide customer support services, conduct research and development activities, process and prepare company financial information, manage various general and administrative aspects of our business and damage our reputation, any 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 currently conduct nearly all of our development and management activities in Carlsbad, California 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.

***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, including Alphatec Spine and Scient'x, 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 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 surgeons using our products, the types of products we offer and the geographic regions where our products are sold. Such anticipated growth has placed and will continue to place significant demands on our managerial, operational and financial resources and systems. Future growth would impose significant added responsibilities on members of management, including the need to identify, recruit, maintain, motivate and integrate additional personnel. Also, our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these anticipated growth activities. We are currently focused on increasing the size and effectiveness of our sales force and distribution network, marketing activities, research and development efforts, inventory management systems, management team and corporate infrastructure. 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. We must attract and retain qualified personnel and third-party distributors and manage and train them effectively. Personnel qualified in the design, development, production and marketing of our products are difficult to find and hire, and enhancements of information technology systems to support our growth are difficult to implement. We will also need to carefully monitor and manage our surgeon services, our third-party manufacturing resources, quality assurance and efficiency, and the quality assurance and efficiency of our suppliers and distributors. This managing, training and monitoring will require allocation of valuable management resources and significant expense. If our management is unable to effectively manage our expected growth, our expenses may increase more than expected, our ability to generate and/or grow revenues could be reduced and we may not be able to implement our business strategy.

***Our announced workforce reduction may cause undesirable consequences and our results of operations may be harmed.***

Since September 2016, we have reduced our workforce by approximately 30%. This workforce reduction may yield unintended consequences, such as attrition beyond our intended reduction in workforce and reduced employee morale, which may cause our employees who were not affected by the reduction in workforce to seek alternate employment. Additional attrition could impede our ability to meet our operational goals, which could have a material adverse effect on our financial performance. In addition, as a result of the reductions in our workforce, we may face an increased risk of employment litigation. Furthermore, employees whose positions will be eliminated in connection with these trends may seek future employment with our competitors. Although all our employees are required to sign a confidentiality agreement with us at the time of hire, we cannot assure you that the confidential nature of our proprietary information will be maintained in the course of such future employment. We cannot assure you that we will not undertake additional reduction activities, that any of our efforts will be successful, or that we will be able to realize the cost savings and other anticipated benefits from our previous or any future reduction plans. In addition, if we continue to reduce our workforce, it may adversely impact our ability to respond rapidly to any new product, growth or revenue opportunities.

**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, 2016, our principal sources of liquidity consisted of cash of $19.6 million and accounts receivable, net of $18.5 million. Together with the proceeds of our approximately $18.9 million private placement in March 2017, we currently estimate this will provide sufficient capital to fund our operations through at least the next 12 months.

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. Our capital requirements will depend on many factors, including:

- the payments due in connection with the settlement of the Orthotec matter;
- 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. However, under the securities purchase agreement we entered into in March 2017 in connection with our private placement of common stock, Series A Convertible Preferred Stock and warrants to purchase common stock, or the March 2017 private placement, we are prohibited from issuing or entering into any agreement to issue any shares of our common stock or other securities, subject to certain permitted exceptions, until the later of (a) 90 days after the effective date of the resale registration statement we are required to file registering the resale of the shares of common stock issued or issuable in the private placement or (b) the date of stockholder approval of the March 2017 private placement. 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. For example, under current SEC regulations, at any time during which the aggregate market value of our common stock held by non-affiliates, or our public float, is less than $75 million, the amount that we can raise through primary public offerings of securities in any twelve-month period using one or more registration statements on Form S-3 will be limited to an aggregate of one-third of our public float. As of March 29, 2017, our public float was $26 million.

In addition, upon the effectiveness of the resale registration statement we are required to file as part of the March 2017 private placement, all of the 1,809,628 shares of common stock, 7,622,372 shares of common stock issuable upon the conversion of an aggregate of approximately 15,245 shares of our Series A Convertible Preferred Stock and 9,432,000 shares of common stock issuable upon exercise of warrants issued in the March 2017 private placement will become available for resale to the public, which will result in dilution to our existing stockholders. In addition, if we fail to meet the specified filing deadlines for such resale registration statement or maintain its effectiveness or do not comply with the current public information requirements to allow resales of the shares pursuant to Rule 144 under the Securities Act, in each case subject to certain permitted exceptions, we may be required to pay liquidated damages to the purchasers in the private placement, in amount of 1.5% of the original subscription amount per month, subject to an aggregate maximum of 12% per calendar year in the case of the effectiveness of the resale registration statement.

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, or Orthotec, would give Orthotec the right to declare all of the future payments to be immediately payable. As of March 17, 2017, the outstanding amount to be paid to Orthotec through January 2024 is $30.4 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, 2016, we had an accumulated deficit of $457.2 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, equity financings and debt financings. As we have incurred losses, 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, there is no guarantee that we will be able to obtain further financing, or do so on reasonable terms. 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 facilities.***

We must comply with certain affirmative and negative covenants, including financial covenants, in our Amended Credit Facility and affirmative and negative covenants under the Globus Facility Agreement. We failed to comply with the fixed charge coverage ratio for January and June 2016, the fixed charge coverage ratio, senior leverage ratio and total leverage ratio covenants for March 2016, and the fixed charge coverage ratio and total leverage ratio covenants for April and May 2016, under our Amended Credit Facility. We also did not meet a minimum requirement for the percentage of our total cash held in U.S. accounts for January, February, March, April, May and June 2016. MidCap and Deerfield, pursuant to the Deerfield Facility Agreement which has been terminated, provided waivers with respect to our non-compliance during such periods. There can be no assurance that at all times in the future we will satisfy all such financial or other covenants of the Amended Credit Facility or the Globus Facility Agreement, or obtain any required waiver or amendment, in which event of default the lenders party to the Amended Credit Facility could refuse to make further extensions of credit to us and MidCap and/or Globus could require all amounts borrowed under the Amended Credit Facility and/or the Globus Facility Agreement, respectively, together with accrued interest and other fees, to be immediately due and payable. In addition to allowing the lenders to accelerate the loan, several events of default under the Amended Credit Facility or Globus Facility Agreement, such as our failure to make required payments of principal and interest and the occurrence of certain bankruptcy or insolvency events, could require us to pay interest at a rate which is up to five percentage points higher than the interest rate effective immediately before the event of default.

An event of default under the Amended Credit Facility or the Globus Facility Agreement could have a material adverse effect on us. Upon an event of default, if the lenders under the Amended Credit Facility or Globus Facility Agreement accelerate the repayment of all amounts borrowed, together with accrued interest and other fees, or if the lenders elect to charge us additional interest, we cannot assure you that we will have sufficient cash available to repay the amounts due, and we may be forced to seek to amend the terms of the Amended Credit Facility or the Globus Facility Agreement 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 Amended Credit Facility or the Globus Facility Agreement or upon the occurrence of another event of default, the lenders under the Amended Credit Facility or the Globus Facility Agreement could proceed against the collateral granted to them pursuant to the MidCap Amended Credit Facility and the Globus Facility Agreement. We have granted to the lenders under the Amended Credit Facility a first priority security interest in substantially all of our assets, including all accounts receivable and all securities evidencing our interests in our subsidiaries, as collateral under the Amended Credit Facility. We have granted Globus under the Globus Facility Agreement a first lien security interest in substantially all of our assets, other than accounts receivable and related assets, which will secure the Globus Facility Agreement on a second lien basis. If Globus 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 surgeons, patients, hospitals and third-party payors;
- demand and pricing of our products;
- 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;
- 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 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.

Many of the products we may seek to develop and introduce in the future will require FDA approval or clearance. We cannot begin to commercialize any such products in the U.S. 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. We cannot assure you that our revenue will increase or be sustained in future periods or that we will be profitable in any future period. Any shortfalls in revenue or earnings from levels expected by our stockholders or by securities or industry analysts could have an immediate and significant adverse effect on the trading price of our common stock in any given period.

**Risks Related to Our Intellectual Property Regulatory Penalties and Potential 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 of the technologies used in our products. We rely on patent protection, as well as a combination of copyright, trade secret and trademark laws, and nondisclosure, confidentiality and other contractual restrictions to protect our proprietary technology. However, 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, we cannot assure you that any of our pending patent applications will result in the issuance of patents to us. The U.S. Patent and Trademark Office, or 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. Our issued patents and those that may be issued in the future could subsequently be successfully challenged by others and invalidated or rendered unenforceable, which could limit our ability to stop 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 be able to 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, the components of those products, the methods of using those products, or the methods we employ in manufacturing or processing 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, including treble, or triple, damages if an infringement is found to be willful, and/or royalties and we could be prevented from selling our products unless we could obtain a license or were able to redesign our products to avoid infringement. Any such license may not be available on reasonable terms, if at all, and there can be no assurance that we would be able to redesign our products in a way that would not infringe those patents, 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 or technologies, 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, in order to further our product development efforts, from time to time we enter into agreements with surgeons to develop new products. As consideration for product development activities rendered pursuant to these agreements, in certain instances we have agreed to pay such surgeons royalties on products developed by cooperative involvement between us and such surgeons. There can be no assurance that surgeons with whom we have entered into such an arrangement will not claim to be entitled to a royalty even if we do not believe that such products were developed by cooperative involvement between us and such surgeons. 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 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 testing, design, manufacture and sale of medical devices for spine surgery procedures. Spine surgery involves significant risk of serious complications, including bleeding, nerve injury, paralysis and even death. To date, our products have not been the subject of any material product liability claims. Currently, we carry product liability insurance in the amount of $20 million per occurrence and $20 million in the aggregate. Our existing product liability insurance coverage may be inadequate to satisfy liabilities we might incur. Any product liability claim brought against us, with or without merit, 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 at all. In addition, if our product liability insurance proves to be inadequate to pay a damage award, we may have to pay the excess 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 a risk of additional product liability claims because of 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 foreign, federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials and waste products. Although we believe that our safety procedures for handling and disposing of these materials 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. This liability could exceed our resources and any applicable insurance. In addition, under some environmental laws and regulations, we could also be held responsible for all of the costs relating to any contamination at our past or present facilities and at third-party waste disposal sites, even if such contamination

was not caused by us. We may incur significant expenses in the future relating to any failure to comply with environmental laws. Any such future expenses or liability could have a significant negative impact on our business, financial condition and results of operations.

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

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

**Risks Related to Our Common Stock**

***If we fail to continue to meet all applicable NASDAQ Global Select Market requirements and our common stock is delisted, the delisting could adversely affect the market liquidity of our common stock, impair the value of your investment and harm our business.***

Our common stock is currently listed on the NASDAQ Global Select Market. In order to maintain that listing, we must satisfy minimum financial and other requirements. On September 17, 2015, we received written notice from the Listing Qualifications Department of the NASDAQ Stock Market LLC, or NASDAQ, notifying us that for the preceding 30 consecutive business days, our common stock did not maintain a minimum closing bid price of $1.00 per share as required for continued inclusion on The NASDAQ Global Select Market under NASDAQ Listing Rule 5450(a)(1). On August 24, 2016, we effected a 1-for-12 reverse stock split of our common stock in order to regain compliance with the applicable NASDAQ Listing Rules that required us to maintain a minimum closing bid price of $1.00 per share for a minimum of 10 consecutive trading days.

Accordingly, although we are currently in compliance with applicable NASDAQ Global Select Market 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 may result in the potential loss of confidence by investors, suppliers, customers and employees and fewer business development opportunities. Additionally, the market price of our common stock may decline further and stockholders may lose some or all of their investment.

***We expect that the price of our common stock will fluctuate substantially and the market price of our common stock may decline in value in the future.***

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 products, product enhancements, significant contracts, number of distributors, number of hospitals and 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 U.S.;
- product liability claims or other litigation involving us;

- sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders;
- changes in governmental regulations or in the status of our regulatory approvals, clearances or applications;
- disputes or other developments with respect to intellectual property rights;
- changes in the availability of third-party reimbursement in the U.S.;
- 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 extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, the market prices of securities of medical device companies have been particularly volatile. In the past, following periods of volatility in the market price of a particular company's securities, securities class action litigation has often been brought against that company. We may become involved in this type of litigation in the future. 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 continue to 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 continue to provide research coverage of our common stock. If securities analysts do not cover our common stock, the lack of research coverage may cause the market price of our common stock to decline. The trading market for our common stock may be affected in part by the research and reports that industry or financial analysts publish about our business. If one or more of the analysts who elects to cover us downgrades our stock, our stock price would 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. In addition, it may be difficult for companies such as ours, with smaller market capitalizations, to attract independent financial analysts that will cover our common stock. This could have a negative effect on the market price of our stock.

***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 17, 2017, our executive officers, directors and stockholders holding more than 5% of our outstanding common stock and their affiliates, in the aggregate, beneficially own approximately 35% 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, among other things:

- delaying, deferring or preventing our change in control;
- impeding a merger, consolidation, takeover or other business combination involving us;
- 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.

***Certain members of our Board of Directors also serve as officers and directors of HealthpointCapital, its affiliates and other portfolio companies.***

Three members of our Board of Directors also serve as officers and directors of our largest stockholder, HealthpointCapital, or its related entities and of other companies in which HealthpointCapital invests, including companies with which we compete or may in the future compete. As of March 17, 2017, HealthpointCapital owned approximately 31% of our outstanding common stock. The Chairman of our Board of Directors, Mortimer Berkowitz III, is a managing member of HGP, LLC and HGP II, LLC, the general partners of HealthpointCapital Partners, LP and HealthpointCapital Partners II, LP, respectively. Our directors R. Ian Molson and Stephen E. O'Neil also serve on the board of managers of HealthpointCapital, LLC. Each of Messrs. Berkowitz, O'Neil and Molson, also have financial interests in HealthpointCapital investment funds.

Because of these possible conflicts of interest, such directors may direct potential business and investment opportunities to other entities rather than to us or such directors may undertake or otherwise engage in activities or conduct on behalf of such other entities that is not in, or which may be adverse to, our best interests. Whether a director directs an opportunity to us or to another company, our directors may face claims of breaches of fiduciary duty and other duties relating to such opportunities. Our amended and restated certificate of incorporation requires us to indemnify our directors to the fullest extent permitted by law, which may require us to indemnify them against claims of breaches of such duties arising from their service on our Board of Directors. HealthpointCapital or its affiliates may pursue acquisition opportunities that may be complementary to our business and, as a result, those acquisition opportunities may not be available to us. Furthermore, HealthpointCapital may have an interest in us pursuing acquisitions, divestitures, financings or other transactions that, in its judgment, could enhance its equity investment, even though such transactions might involve risks to us and our stockholders generally. In addition, if we were to seek a business combination with a target business with which one or more of our existing stockholders or directors may be affiliated, conflicts of interest could arise in connection with negotiating the terms of and completing the business combination. Conflicts that may arise may not be resolved in our favor.

***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.

Some of our employment agreements and all of our restricted stock agreements, incentive stock option agreements, performance-based stock units and restricted common stock provide for accelerated vesting of benefits, including full vesting of restricted stock and options, upon a change of control. A limited number of our agreements with our distributors include a provision that extends the term of the distribution agreement upon a change in control and makes 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 stockholders will not receive any distribution of the proceeds from the sale of our international distribution operations and we do not anticipate paying any cash dividends in the foreseeable future, and stockholders may never receive any return of value.***

We did not distribute to stockholders any cash proceeds from the Globus Transaction. Instead, we used a portion of the proceeds from the Globus Transaction to repay in full all amounts outstanding and due under our Deerfield Facility Agreement and repay certain of our outstanding indebtedness under our Amended Credit Facility with MidCap, and we intend to use the remainder of the proceeds to fund our future business activities and for general working capital purposes. Any future decision for the use of those funds will be made by our Board of Directors.

In addition, we have not declared any cash dividends and do not intend to declare or pay any cash dividends in the foreseeable future. Future earnings, if any, will be used to finance the future operation and growth of our business. Any determination to pay dividends in the future will be at the discretion of our Board of Directors and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our Board of Directors deems relevant. In addition, our ability to pay dividends is currently restricted by the terms of our Amended Credit Facility with MidCap and Globus Facility Agreement. Stockholders will not receive any liquidity from the Globus Transaction and the only return to them will be based on any future appreciation in our stock price or upon a future sale or liquidation of our company, which may never occur. Much depends on our future business, including the success or failure of our U.S. business. There are no assurances that we will be successful, and current stockholders may never get a return on their investment.

***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 financial covenants under our credit facilities;
- our ability to ensure that we have effective disclosure controls and procedures;
- our not realizing the full economic benefit from the Globus Transaction, including as a result of indemnification claims under the definitive agreement and the retention by us of certain liabilities associated with the international business, and our ability to meet our obligations under the Globus supply agreement;
- our ability to meet and potential liability from not meeting the payment obligations under the Orthotec settlement agreement;
- our ability to regain and 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 expectations about the timing, costs and benefits of the restructuring and outsourcing of our manufacturing operations;
- our beliefs about the ability of our supplier relationships and quality processes to fulfill our production requirements;
- 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 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;

- our management team's ability to accommodate growth and manage a larger organization;
- our ability to protect our intellectual property, and to not infringe upon the intellectual property of third parties;
- the effects of the escalating cost of medical products and services and the effects of market demand, government regulation, third-party reimbursement policies and societal pressures on the healthcare industry and our business;
- our ability to meet or exceed the industry standard in clinical and legal compliance and corporate governance programs;
- our beliefs about our competitors and the principal competitive factors in our market and the effect of non-operative treatments on demand for our products;
- potential liability resulting from litigation;
- our beliefs about our employee relations;
- potential liability resulting from a governmental review of our business practices;
- our beliefs about the usefulness of the non-GAAP financial measures included in this Annual Report on Form 10-K;
- our beliefs with respect to our critical accounting policies and the reasonableness of our estimates and assumptions; and
- 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 | Corporate headquarters and product design | 76,693 | July 2021 |

## Item 3. Legal Proceedings

We are and may become involved in various legal proceedings arising from our business activities. While management is not aware of any litigation matter that in and of itself would have a material adverse impact on our 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 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.

## 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." The following table sets forth the high and low sales prices for our common stock as reported on The NASDAQ Global Select Market for the periods indicated.

On August 24, 2016, we effected a 1-for-12 reverse stock split of our issued and outstanding common stock. The per-share amounts listed in the table below are adjusted for all periods to reflect our 1-for-12 reverse stock split.

| Year Ended December 31, 2016 | High | Low |
|---|---|---|
| First quarter | $ 6.96 | $ 1.80 |
| Second quarter | 4.56 | 2.16 |
| Third quarter | 9.65 | 2.64 |
| Fourth quarter | 9.27 | 3.12 |

| Year Ended December 31, 2015 | High | Low |
|---|---|---|
| First quarter | $ 18.48 | $ 15.36 |
| Second quarter | 17.76 | 15.36 |
| Third quarter | 17.16 | 3.84 |
| Fourth quarter | 5.40 | 2.16 |

**Stockholders**

As of March 24, 2017, there were approximately 210 holders of record of an aggregate 9,048,145 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 Amended Credit Facility with MidCap and the Globus Facility Agreement.

**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 Plan and are available for future awards under the terms of the Stock Plan. There were no shares of common stock repurchased during the year ended December 31, 2016.

## Item 6. Selected Financial Data

The following table sets forth consolidated financial data with respect to the Company for each of the five years in the period ended December 31, 2016. The selected consolidated financial data set forth below have been derived from our audited consolidated financial statements, and may not be indicative of future operating results. The results of operations for the year ended December 31, 2015 include a goodwill and intangible assets impairment charge of $164.3 million. The results of operations for the year ended December 31, 2013 include litigation settlement expenses of $46.0 million. The selected consolidated financial data set forth below should be read in conjunction with our audited consolidated financial statements and related notes thereto found at "Item 8 Financial Statements and Supplementary Data" and "Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Annual Report on Form 10-K.

The following amounts related to earnings per share and shares outstanding have been adjusted for all periods reported for the 1-for-12 reverse stock split that we effected on August 24, 2016.

As a result of the Globus Transaction, our International Business (as defined in Item 7 below) has been excluded from continuing operations for all periods presented in this report and is reported as discontinued operations. See Note 4 for additional information on the divestiture of the International Business.

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2016 | 2015 | 2014 | 2013 | 2012 |
| | (in thousands, except per share amounts) | | | | |
| **Consolidated Statement of Operations Data:** | | | | | |
| Revenues | $ 120,248 | $ 134,388 | $ 154,625 | $ 148,263 | $ 141,355 |
| Income (Loss) from continuing operations | (26,301) | (171,253) | (98) | (63,629) | (5,616) |
| Loss from discontinued operations | (3,624) | (7,423) | (12,784) | (18,598) | (9,843) |
| Net loss | $ (29,925) | $ (178,676) | $ (12,882) | $ (82,227) | $ (15,459) |
| Net loss per basic share | $ (3.49) | $ (21.53) | $ (1.59) | $ (10.25) | $ (2.06) |
| Net loss per diluted share | $ (3.49) | $ (21.53) | $ (1.90) | $ (10.25) | $ (2.06) |
| Weighted-average shares used in computing net loss per share: | | | | | |
| Shares used in calculating basic net loss per share | 8,582 | 8,298 | 8,112 | 8,020 | 7,518 |
| Shares used in calculating diluted net loss per share | 8,582 | 8,298 | 8,145 | 8,020 | 7,518 |

| | As of December 31, | | | | |
|---|---|---|---|---|---|
| | 2016 | 2015 | 2014 | 2013 | 2012 |
| | | | (in thousands) | | |
| **Consolidated Balance Sheet Data:** | | | | | |
| Cash | $ 19,593 | $ 6,295 | $ 12,595 | $ 16,102 | $ 16,921 |
| Restricted cash | — | 2,350 | 4,400 | — | — |
| Working capital (deficit) | 32,689 | (23,542) | 49,511 | 34,026 | 65,264 |
| Total assets | 94,188 | 146,341 | 113,112 | 365,630 | 382,127 |
| Total debt, including current portion | 46,205 | 80,222 | 82,673 | 54,888 | 41,619 |
| Redeemable preferred stock | 23,603 | 23,603 | 23,603 | 23,603 | 23,603 |
| Total stockholders' (deficit) equity | (41,504) | (36,576) | 148,954 | 171,676 | 245,816 |

## 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 promotion of products for the surgical treatment of spine disorders. Our mission is to improve patient lives by delivering advancements in spinal fusion technologies. We have a comprehensive product portfolio and pipeline that addresses the cervical, thoracolumbar and intervertebral regions of the spine and covers a variety of spinal disorders and surgical procedures. Our principal product offerings are focused on the U.S. market for fusion-based spinal disorder solutions. We believe that our products and systems are attractive to surgeons and patients due to innovative features and benefits that simplify surgical procedures for the surgeon and improve patient outcomes.

Currently, we market and sell our products in the United States through a network of non-exclusive independent distributors and direct sales representatives. We believe there is significant opportunity for us to partner closely with distributors to create a more dedicated and loyal sales channel for the future. We are eliminating our stocking distributors and are moving our existing distributor relationships to more dedicated and non-competitive partnerships and we intend to add new, high-quality distributors to enable future growth.

We believe this will allow us to reach an untapped market of surgeons, hospitals and national accounts across the United States, as well as further penetrate existing accounts and territories.

We also employ a national accounts team that is responsible for securing access at hospitals and group purchasing organizations, or GPOs, across the United States. We have had strong success with securing access to hospitals and GPOs. We believe that 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 in order to secure favorable contracts and develop strategies to convert or grow business within existing accounts.

We are also striving to drive additional revenue by focusing our capital spend on making strategic investments in commercializing our new products. We are focusing our development and commercialization efforts on differentiated products that we can market through our sales channel. These innovative products are designed to drive penetration within specific segments within the overall spine market, including the complex spine, deformity, and lateral markets. We also plan to expand our biologics portfolio through structural allograft, tissue and synthetic bone graft products to support surgeons during the surgical procedure with the goal of achieving high fusion rates.

### Recent Developments

On March 29, 2017, we completed a Private Placement of our securities to certain institutional and accredited investors, including certain directors and executive officers of the Company, providing for the sale by the Company of 1,809,628 shares of our common stock at a purchase price of $2.00 per share, 15,245 shares of newly designated Series A Convertible Preferred Stock (the "Series A Convertible Preferred Stock") at a purchase price of $1,000 per share (which Preferred Shares are convertible into approximately 7,622,372 shares of our common stock, subject to limitations on conversion until the approval by our stockholders as required in accordance with the NASDAQ Global Select Market rules), and warrants to purchase up to 9,432,000 shares of our Common Stock at an exercise price of $2.00 per share (the "Warrants"), in a private placement (the "Private Placement"). The Warrants will become exercisable following stockholder approval, are subject to certain ownership limitations, and expire five years after the date of such Stockholder approval. The aggregate gross proceeds for the Private Placement were approximately $18.9 million. We intend to use the net proceeds from the Private Placement for general corporate and working capital purposes.

On September 1, 2016, we completed the sale of our international distribution operations and agreements, including our wholly-owned subsidiaries in Japan, Brazil, Australia, China and Singapore and substantially all of the assets of our other sales operations in the United Kingdom and Italy, or collectively the International Business, to an affiliate of Globus. Following the closing of the Globus Transaction, we now operate in the U.S. market only and are prohibited from marketing and selling our products in foreign markets pursuant to the terms and conditions, and for the time periods, set forth in the definitive documents related to the Globus Transaction.

At the closing of the Globus Transaction on September 1, 2016, Globus paid us $80 million in cash, subject to a working capital adjustment. On September 1, 2016, we used approximately $66 million of the consideration received to (i) repay in full all amounts outstanding and due under the Deerfield Facility Agreement, and (ii) repay certain of our outstanding indebtedness under our Amended Credit Facility, in each case, including debt-related costs. Also on September 1, 2016, we entered into the credit, security and guaranty agreement with Globus, or the Globus Facility Agreement, pursuant to which Globus has agreed to loan us up to $30 million, subject to the terms and conditions set forth in the Globus Facility Agreement.

As a result of the sale of our International Business, we have retrospectively revised the consolidated statements of operations for the years ended December 31, 2016, 2015 and 2014, the consolidated statements of cash flows for the years ended December 31, 2016, 2015 and 2014, and the consolidated balance sheets as of December 31, 2016 and 2015, to reflect the financial results from the International Business, and the related assets and liabilities, as discontinued operations.

On August 24, 2016, we filed a certificate of amendment to the Company's certificate of incorporation with the Secretary of State of the state of Delaware to effectuate a 1-for-12 reverse stock split of our issued and outstanding common stock. The share and per share amounts in the discussion below gives retrospective effect to the 1-for-12 reverse stock split for all periods presented.

**Revenue and Expense Components**

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

*Revenues*. We derive our revenues 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 revenues are 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 revenues until the time of collection if circumstances related to payment terms, regional market risk or customer history indicate that collectability is not reasonably assured.

*Cost of revenues*. Cost of revenues consists of direct product costs, royalties, milestones, depreciation of our surgical instruments, 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*. Research and development expense consists of costs associated with the design, development, testing, and enhancement of our products. 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.

*In-process research and development, or IPR&D*. IPR&D expense consists of acquired research and development assets that were not part of an acquisition of a business and were not technically feasible on the date we acquired such technology, provided that such technology also did not have any alternative future use at that date.

*Sales and marketing*. Sales and marketing expense consists primarily of salaries and related employee benefits, sales commissions and support costs, professional service fees, travel, medical education, trade show and marketing costs.

*General and administrative*. General and administrative expense consists primarily of salaries and related employee benefits, professional service fees, insurance and legal expenses.

*Goodwill and intangible assets impairment*. The impairment expense relates to impairment charges related to our goodwill balances and intangible assets.

*Restructuring expenses*. Restructuring expense consists of severance, social plan benefits and related taxes, facility closing costs, manufacturing transfer costs and severance costs incurred following the sale of our International Business and the termination of our manufacturing operations in California.

*Total other income (expense)*. Total other income (expense) includes interest income, interest expense, changes in the fair value of the warrant liabilities, gains and losses from foreign currency exchanges and other non-operating gains and losses.

*Income tax (benefit) provision*. Income tax benefit from continuing operations consists primarily of domestic losses partially offset by state income taxes. ASC 740-20 requires total income tax expense or benefit to be allocated among continuing operations, discontinued operations, extraordinary items, other comprehensive income and items charged directly to shareholders' equity. This allocation is referred to as intra-period tax allocation. The sale of the Company's international distribution operations and several foreign subsidiaries is reported under discontinued operations in the Consolidated Financial Statements. Accordingly, we are required to allocate the provision for income taxes between continuing operations and discontinued operations. For the year ended December 31, 2016, we recognized a gain from discontinued operations before tax, and, as a result, we recorded a tax expense of $6.5 million in discontinued operations and a corresponding tax benefit to continuing operations

**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, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| | | (in thousands) | |
| Revenues | $ 120,248 | $ 134,388 | $ 154,625 |
| Cost of revenues | 44,114 | 46,366 | 44,958 |
| Gross profit | 76,134 | 88,022 | 109,667 |
| Operating expenses: | | | |
| Research and development | 9,248 | 17,615 | 16,593 |
| In-process research and development | — | 274 | 527 |
| Sales and marketing | 50,962 | 51,801 | 55,782 |
| General and administrative | 26,339 | 28,126 | 34,048 |
| Amortization of intangible assets | 934 | 1,200 | 1,232 |
| Goodwill and intangible assets impairment | 1,736 | 164,263 | — |
| Restructuring expenses | 2,292 | 597 | — |
| Total operating expenses | 91,511 | 263,876 | 108,182 |
| Operating (loss) income | (15,377) | (175,854) | 1,485 |
| Other income (expense): | | | |
| Interest income | 3 | 11 | 10 |
| Interest expense | (5,368) | (4,001) | (3,022) |
| Loss on debt extinguishment | (9,478) | — | — |
| Other income (expense), net | (715) | 7,445 | 1,836 |
| Total other income (expense) | (15,558) | 3,455 | (1,176) |
| Pretax income (loss) from continuing operations | (30,935) | (172,399) | 309 |
| Income tax (benefit) provision | (4,634) | (1,146) | 407 |
| Loss from continuing operations | (26,301) | (171,253) | (98) |
| Loss from discontinued operations, net of taxes | (3,624) | (7,423) | (12,784) |
| Net loss | $ (29,925) | $ (178,676) | $ (12,882) |

***Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015***

*Revenues*. Revenues were $120.2 million for the year ended December 31, 2016 compared to $134.4 million for the year ended December 31, 2015, representing a decrease of $14.1 million, or 10.5%. The decrease was the result of a decline in the sales amounts to former subsidiaries that are classified in continuing operations ($9.1 million) and a decrease in U.S. revenues ($7.6 million), offset by sales beginning in 2016 to Globus ($2.6 million). The sale of implants and instruments to U.S. hospitals decreased by $1.8 million due to pricing erosion in the mid-single digits, consistent with trends experienced over the past several years, partially offset by an increase in unit volume. The sales to stocking distributors declined from the prior year in the amount of $5.8 million due to the ongoing initiative to eliminate this channel from our U.S. Commercial business.

*Cost of revenues*. Cost of revenues was $44.1 million for the year ended December 31, 2016 compared to $46.4 million for the year ended December 31, 2015, representing a decrease of $2.3 million, or 4.9%. The decrease was the result of an elimination of one-time costs related to 2015 activities ($4.5 million), a reduction in product costs due primarily to lower sales volumes ($1.5 million), a reduction in inventory adjustments ($0.4 million) and a reduction in depreciation and amortization expenses ($0.5 million), offset by an increase in inventory reserves due to excess inventory quantities and product life cycle management activities ($2.9 million), charges related to the discontinuation of a product and the related intangible assets and inventory ($1.6 million) and an increase in royalty expense ($0.2 million). The one-time costs related to 2015 activities include multiple product discontinuations, loss on equipment disposals, and accelerated depreciation related to the restructuring of manufacturing operations, offset by gains recognized in 2016 on the sale of various manufacturing equipment related to the 2015 restructuring of operations.

*Gross profit*. Gross profit was $76.1 million for the year ended December 31, 2016 compared to $88.0 million for the year ended December 31, 2015, representing a decrease of $11.9 million, or 13.5%. The decrease was a combination of a decline in gross profit on sales to former subsidiaries that are classified in continuing operations ($4.1 million) and the effect of lower U.S. revenues combined with an increase in the cost of revenues ($7.8 million), offset by the reduction in cost of sales due to the elimination of one-time costs related to 2015 activities ($4.5 million).

*Gross Margin,* Gross Margin was 63.3% for the year ended December 31, 2016 compared to 65.5% for the year ended December 31 2015. The decrease of 2.2 percentage points was the result of an increase in inventory reserves and adjustments (2.5 percentage points), charges related to the discontinuation of a product and the related intangible assets and inventory (1.3 percentage points), a reduction in pricing related to revenues (1.1 percentage points), an increase in royalty expense (0.5 percentage points) and an increase in depreciation expense (0.4 percentage points), offset by the reduction in cost of sales due to the elimination of one-time costs related to 2015 activities (3.4 percentage points) and a reduction in amortization expense (0.2 percentage points).

Gross Margin, excluding intercompany and Globus revenue of $13.3 million and $19.8 million for the year ended December 31, 2016 and 2015, respectively, was 67.0% for the year ended December 31, 2016 compared to 69.4% for the year ended December 31 2015. The decrease of 2.4 percentage points was the result of an increase in inventory reserves (2.8 percentage points), charges related to the discontinuation of a product and the related intangible assets and inventory (1.5 percentage points), an increase in product costs due primarily to negative costs variances related to reduced sourcing volumes (1.3 percentage points), a reduction in pricing related to revenues (0.9 percentage points), an increase in royalty expense (0.2 percentage points) and an increase in depreciation expense (0.3 percentage points), offset by the reduction in cost of sales due to the elimination of one-time costs related to 2015 activities (4.0 percentage points), a reduction in amortization expense (0.3 percentage points) and a reduction in inventory adjustments (0.3 percentage points).

*Research and development*. Research and development expense was $9.2 million for the year ended December 31, 2016 compared to $17.6 million for the year ended December 31, 2015 representing a decrease of $8.4 million, or 47.5%. The decrease was related to a reduction of development activities ($3.7 million), a reduction in stock-based compensation related costs under a consulting agreement ($2.9 million) and a reduction in personnel related costs ($1.8 million).

*In-process research and development*. IPR&D expense was $0.0 million for the year ended December 31, 2016 compared to $0.3 million for the year ended December 31, 2015. The expense in 2015 relates to initial purchase payments in connection with asset purchase agreements for which the underlying product was not technologically feasible at the time the asset was acquired.

*Sales and marketing*. Sales and marketing expense was $51.0 million for the year ended December 31, 2016 compared to $51.8 million for the year ended December 31, 2015 representing a decrease of $0.8 million, or 1.6%. The decrease was the result of a reduction personnel and related expenses ($2.6 million) and the elimination of the medical device excise tax ($1.2 million), offset by an increase in sales commissions to third party agents ($3.0 million).

*General and administrative*. General and administrative expense was $26.3 million for the year ended December 31, 2016 compared to $28.1 million for the year ended December 31, 2015, representing a decrease of $1.8 million, or 6.4%. The decrease was primarily due to a reduction in personnel and related expenses ($2.6 million), a reduction in expenses related to information technology ($0.5 million), offset by an increase in consulting and professional fees ($1.3 million).

*Amortization of intangible assets*. Amortization of intangible assets was $0.9 million for the year ended December 31, 2016 as compared to $1.2 million for the year ended December 31, 2015. This expense represents amortization in the period for intangible assets associated with general business assets which has declined as those assets have either been impaired or become fully amortized.

*Goodwill and intangible assets impairment*. The goodwill and intangible assets impairment was $1.7 million for the year ended December 31, 2016 compared to $164.3 million for the year ended December 31, 2015. The 2016 impairment charge relates to intangible assets that we found to be impaired as a result of the Globus Transaction. The 2015 impairment charge was primarily the result of our goodwill impairment test performed during the third quarter of 2015 triggered by the decline in our share price which resulted in the write off of all of our goodwill.

*Restructuring expenses*. Restructuring expenses were $2.3 million for the year ended December 31, 2016 compared to $0.6 million for the year ended December 31, 2015. Due to the closing of the Globus Transaction, which eliminated substantially all of our international operations, we began a corporate downsizing initiative to align our cost structure with our current operations. The restructuring costs for the year ended December 31, 2016 consist primarily of severance charges related to headcount reductions ($2.0 million). In July 2015, we announced a restructuring of our manufacturing operations in California in an effort to improve our cost structure. As of December 31, 2016, the manufacturing restructuring was substantially complete and we recorded expenses of approximately $0.3 million in the year ended December 31, 2016 and $0.6 million in the year ended December 31, 2015.

*Interest expense*. Interest expense was $5.4 million for the year ended December 31, 2016 compared to $4.0 million for the year ended December 31, 2015, representing an increase of $1.4 million, or 34.2%. This increase is primarily related to greater costs in connection with various amendments to our credit facilities with MidCap and the new credit facility with Globus.

*Loss on extinguishment of debt.* Loss on extinguishment of debt was $9.5 million for the year ended December 31, 2016. The loss on extinguishment of debt is due to prepayment premium of $5.6 million and the write-off of unamortized debt costs of $3.9 million related to extinguishment of the Deerfield facility.

*Other income (expense), net*. Other income (expense), net was expense of $0.7 million for the year ended December 31, 2016 compared to income of $7.4 million for the year ended December 31, 2015, representing a decrease in income of $8.2 million. The decrease in income is primarily the result of the decrease in warrant valuation in 2015 of $8.0 million due to the decline in the value of our common stock that occurred in July 2015, compared to an expense of the warrant valuation in 2016 of $0.3 million.

*Income tax (benefit) provision*. Income tax (benefit) provision for continuing operations was a benefit of ($4.6) million for the year ended December 31, 2016 compared to a benefit of ($1.1) million for the year ended December 31, 2015, representing an increase benefit of $3.5 million. The 2016 income tax benefit from continuing operations consists of the income tax benefit related to domestic losses partially offset by state income taxes. The 2015 income tax benefit from continuing operations consists primarily of the reversal of deferred tax liabilities associated with tax deductible goodwill, partially offset by state income taxes. We are required allocate the provision for income taxes between continuing operations and other categories of earnings, such as discontinued operations.

*Discontinued operations*. On July 25, 2016, we entered into the Purchase and Sale Agreement with Globus whereby we agreed to sell all of our International Business to Globus, including our wholly-owned subsidiaries in Japan, Brazil, Australia, China and Singapore and substantially all of the assets of our other sales operations in the United Kingdom and Italy, and on September 1, 2016, we completed the sale to Globus. As a result of our strategic decision to sell the International Business and focus on U.S market, our consolidated statements of operations and the consolidated balance sheets reflect the financial results from the International Business as discontinued operations for all periods presented.

For the year ended December 31, 2016, activity presented under discontinued operations in the consolidated statements of operations represents our commercial operations prior to the sale of the International Business in September 2016 including certain intercompany sales transactions as the Company will have continuing involvement due to future sales to Globus under the Supply Agreement. Certain operating expenses were also allocated to the business activities associated with the discontinued operations as well as interest expense related to our debt that we repaid using the proceeds from the sale of the International Business.

***Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014***

*Revenues*. Revenues were $134.4 million for the year ended December 31, 2015 compared to $154.6 million for the year ended December 31, 2014, representing a decrease of $20.2 million, or 13.1%. The decrease was the result of a decrease in U.S. revenues ($22.5 million), offset by an increase in the sales amounts to former subsidiaries ($2.3 million) that are classified in continuing operations. The sale of implants and instruments to U.S. hospitals decreased by $18.9 million due to pricing erosion in the mid-single digits, consistent with trends experienced over the past several years in conjunction with a significant decrease in unit volume. The sales to stocking distributors in the U.S. declined from the prior year in the amount of $3.6 million.

*Cost of revenues*. Cost of revenues was $46.4 million for the year ended December 31, 2015 compared to $45.0 million for the year ended December 31, 2014, representing an increase of $1.4 million, or 3.0%. The increase was the result of one-time charges for the impairment of certain product-related intangible assets and the disposal of manufacturing equipment ($1.9 million), non-recurring favorable royalties and milestones in 2014 ($1.2 million), an increase in manufacturing depreciation expense due to the reduction of useful lives resulting from the manufacturing outsourcing initiative ($1.5 million), offset by a reduction in product costs due primarily to lower sales volumes ($0.9 million), a reduction in reserves and adjustments ($0.8 million), reduced instrument depreciation expense ($0.6 million), a reduction in royalty and milestone expenses due to a reduction sales volume ($0.5 million), and a reduction in amortization expenses ($0.4 million).

*Gross profit*. Gross profit was $88.0 million for the year ended December 31, 2015 compared to $109.7 million for the year ended December 31, 2014, representing a decrease of $21.6 million, or 19.7%. The decrease was a combination of the effect of lower U.S. revenues combined with an increase in the cost of revenues ($23.0 million), offset by an increase in gross profit on sales to former subsidiaries that are classified in continuing operations ($1.4 million).

*Gross margin*. Gross margin, excluding intercompany revenue of $10.5 million and $9.1 million for the years ended December 31, 2016 and 2015, respectively, was 67.7% for the year ended December 31, 2015 compared to 73.4 % for the year ended December 31, 2014. The decrease of 5.7 percentage points was due to increased cost of revenues resulting from one-time charges (3.9 percentage points), unfavorable variation in pricing and product mix (1.2 percentage points), increased royalty costs due to a change in product mix (0.6 percentage points) and an increase in instrument depreciation expense (0.5 percentage points), offset by a decrease in inventory reserves and adjustments (0.3 percentage points) and a decrease in amortization expense (0.2 percentage points).

*Research and development*. Research and development expense was $17.6 million for the year ended December 31, 2015 compared to $16.6 million for the year ended December 31, 2014 representing an increase of $1.0 million, or 6.2%. The increase was primarily due to an increase in stock-based compensation based on a mark-to-market calculation of stock previously provided to outside consultants ($2.9 million), offset by a reduction in personnel costs ($1.5 million) and a reduction related to the timing of development activities and product launch schedules ($0.4 million).

*In-process research and development*. IPR&D expense was $0.3 million for the year ended December 31, 2015 compared to $0.5 million for the year ended December 31, 2014. The expense in 2015 and 2014 relates to initial purchase payments in connection with asset purchase agreements for which the underlying product was not technologically feasible at the time the asset was acquired.

*Sales and marketing*. Sales and marketing expense was $51.8 million for the year ended December 31, 2015 compared to $55.8 million for the year ended December 31, 2014 representing a decrease of $4.0 million, or 7.1%. The decrease was due primarily to a reduction in commission expense due to the reduction in revenue ($3.8 million).

*General and administrative*. General and administrative expense was $28.1 million for the year ended December 31, 2015 compared to $34.0 million for the year ended December 31, 2014, representing a decrease of $5.9 million, or 17.4%. The decrease was due to a reduction in legal expenses associated with the Orthotec litigation ($4.8 million), a reduction in personnel expense ($0.7 million), and a sales tax refund ($0.4 million).

*Amortization of intangible assets*. Amortization of intangible assets was $1.2 million for both of the years ended December 31, 2015 and 2014. This expense represents amortization in the period for intangible assets associated with general business assets.

*Goodwill and intangible assets impairment*. The goodwill and intangible assets impairment of $164.3 million for the year ended December 31, 2015 is a result of our impairment test performed during the third quarter of 2015 triggered by the decline in our share price. The impairment charge represents a full write off of our existing goodwill balance ($164.3 million).

*Restructuring expenses*. Restructuring expenses were $0.6 million for the year ended December 31, 2015. In July 2015, we announced a restructuring of our manufacturing operations in California in an effort to improve our cost structure. The restructuring includes a reduction in workforce and closing the California manufacturing facility.

*Interest expense*. Interest expense was $4.0 million for the year ended December 31, 2015 compared to $3.0 million for the year ended December 31, 2014, representing a decrease of $1.0 million. Interest expense for the years ended December 31, 2015 and 2014 consisted primarily of interest related to loan agreements and lines of credit and the associated amortization expenses related to debt issuance costs. The increase was primarily due to higher debt balance during 2015 as compared to 2014.

*Other income (expense), net*. Other income (expense), net was income of $7.4 million for the year ended December 31, 2015 compared to income of $1.8 million for the year ended December 31, 2014, representing an increase in income of $5.6 million. The increase was due primarily to a decline in the fair value of common stock warrant liability ($5.4 million).

*Income tax (benefit) provision*. Income tax (benefit) provision was a benefit of $1.1 million for the year ended December 31, 2015 compared to a provision of $0.4 million for the year ended December 31, 2014. The 2015 income tax benefit from continuing operations consists primarily of the reversal of deferred tax liabilities associated with tax deductible goodwill, partially offset by state income taxes. The 2014 income tax provision from continuing operations consists primarily of income tax provisions related to state income taxes and the tax effect of changes in deferred tax liabilities associated with tax deductible goodwill.

*Discontinued operations*. On July 25, 2016, we entered into the Purchase and Sale Agreement with Globus whereby we agreed to sell all of our International Business to Globus, including our wholly-owned subsidiaries in Japan, Brazil, Australia, China and Singapore and substantially all of the assets of our other sales operations in the United Kingdom and Italy, and on September 1, 2016, we completed the sale to Globus. As a result of our strategic decision to sell the International Business and focus on the U.S market, our consolidated statements of operations and the consolidated balance sheets reflect the financial results from the International Business as discontinued operations for all periods presented.

For the years ended December 31, 2016, 2015 and 2014, activity presented under discontinued operations in the consolidated statements of operations represents our commercial operations the prior to the sale of the International Business in September 2016 including certain intercompany sales transactions as the Company will have continuing involvement due to future sales to Globus under the Supply Agreement. Certain operating expenses were also allocated to the business activities associated with the discontinued operations as well as interest expense related to our debt that we repaid using the proceeds from the sale of the International Business.

**Non-GAAP Financial Measures**

We utilize certain financial measures that are not calculated based on U.S. Generally Accepted Accounting Principles, or GAAP. Certain of these financial measures are considered "non-GAAP" financial measures within the meaning of Item 10 of Regulation S-K promulgated by the SEC. We believe that non-GAAP financial measures reflect an additional way of viewing aspects of our operations that, when viewed with the GAAP results, provide a more complete understanding of our results of operations and the factors and trends affecting our business. These unaudited non-GAAP financial measures are also used by our management to evaluate financial results and to plan and forecast future periods. However, non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, or superior to, the corresponding measures calculated in accordance with GAAP. Non-GAAP financial measures used by us may differ from the non-GAAP measures used by other companies, including our competitors.

Adjusted EBITDA represents net income (loss) excluding the effects of interest, taxes, depreciation, amortization, stock-based compensation and other non-recurring income or expense items, such as in-process research and development expense and acquisition related transaction expenses, restructuring expenses, litigation exposure expenses, trial related legal costs and litigation settlement expenses. We believe that the most directly comparable GAAP financial measure to adjusted EBITDA is net income (loss). Adjusted EBITDA has limitations, however, and therefore, should not be considered either in isolation or as a substitute for analysis of our results as reported under GAAP. Furthermore, adjusted EBITDA should not be considered as an alternative to operating income (loss) or net income (loss) as a measure of operating performance or to net cash provided by operating, investing or financing activities, or as a measure of our ability to meet cash needs.

The following is a reconciliation of adjusted EBITDA to the most comparable GAAP measure, net loss, for the years ended December 31, 2016, 2015 and 2014 (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Net loss | $ (29,925) | $ (178,676) | $ (12,882) |
| Stock-based compensation | 1,626 | 2,567 | 4,404 |
| Depreciation | 7,387 | 10,802 | 9,542 |
| Amortization of intangible assets | 1,608 | 2,968 | 2,248 |
| Goodwill and intangible assets impairment | 1,736 | 164,263 | — |
| In-process research and development | — | 274 | 527 |
| Stock price guarantee | 1,815 | 4,878 | — |
| Interest expense, net | 5,365 | 3,990 | 3,012 |
| Loss on debt extinguishment | 9,478 | — | — |
| Income tax (benefit) provision | (4,634) | (1,146) | 407 |
| Other (income) expense, net | 715 | (7,445) | (1,836) |
| Restructuring and other expenses | 2,292 | 597 | 36 |
| Net loss from discontinued operations | 3,624 | 7,423 | 12,784 |
| Litigation expenses and trial costs | — | — | 4,779 |
| Adjusted EBITDA | $ 1,087 | $ 10,495 | $ 23,021 |

**Liquidity and Capital Resources**

We have incurred significant net losses since inception and relied on our ability to fund our operations through revenues from the sale of our products, equity financings and debt financings. As we have incurred losses, a 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. At December 31, 2016, our principal sources of liquidity consisted of cash of $19.6 million and accounts receivable, net of $18.5 million. Together with the proceeds of our $18.9 million private placement in March 2017, we currently estimate this will provide sufficient capital to fund our operations through at least the next 12 months.

Historically, our principal sources of cash have included customer payments from the sale of our products, proceeds from the issuance of common and preferred stock and proceeds from the issuance of debt. Our principal uses of cash have included cash used in operations, payments relating to purchases of surgical instruments, repayments of borrowings under the Amended Credit Facility, payments due under the Orthotec settlement agreement and acquisitions of businesses and intellectual property rights. We expect that our principal uses of cash in the future will be these same uses of cash. We expect that, as our revenues grow, our sales and marketing, research and development expenses and our capital expenditures will continue to grow and, as a result, we will need to generate significant net revenues to achieve profitability. Operating losses and negative cash flows may continue for at least the next year as we continue to incur costs related to the execution of our operating plan and introduction of new products.

We may seek additional funds from public and private equity or debt financings, borrowings under new or existing debt facilities or other sources to fund our projected operating requirements. However, there is no guarantee that we will be able to obtain further financing, or do so on reasonable terms. If we are unable to raise additional funds on a timely basis, or at all, we would be materially adversely affected.

On July 6, 2015, we announced a restructuring of our manufacturing operations in California in an effort to improve our cost structure. The restructuring included a reduction in workforce and closing our California manufacturing facility. This restructuring was substantially completed in 2016.

On July 25, 2016, we entered into the Purchase and Sale Agreement, with Globus, pursuant to which, and on the terms and subject to the conditions thereof, among other things, Globus agreed to acquire our International Business. Upon the closing, of the Globus Transaction on September 1, 2016, or the Closing, Globus paid us $80 million in cash, subject to a working capital adjustment, or the Closing Payment. Following the Closing, we have used approximately $66 million of the Closing Payment to (i) repay in full all amounts outstanding and due under our credit facility with Deerfield and (ii) repay certain of our outstanding indebtedness under our Amended Credit Facility with MidCap, in each case, including debt-related costs. At the Closing, we also entered into the Globus Facility Agreement pursuant to which Globus agreed to loan us up to $30 million, of which $25 million was drawn at the Closing and an additional $5 million draw in the fourth quarter of 2016, subject to the terms and conditions set forth in the Globus Facility Agreement.

Following the Globus Transaction, the Company reduced its U.S. workforce by approximately 20%. Our chief executive officer, chief financial officer and SVP, Global Human Resources also departed the Company at that time. As a result of this workforce reduction and such departures, the Company incurred restructuring charges, of approximately $1.9 million, in connection with one-time employee termination costs, including severance and other benefits.

A substantial portion of our available cash funds is held in business accounts with reputable financial institutions. At times, however, our deposits, may exceed federally insured limits and thus we may face losses in the event of insolvency of any of the financial institutions where our funds are deposited. We did not hold any marketable securities as of December 31, 2016.

*Amended Credit Facility and Other Debt*

On August 30, 2013, we entered into the Amended Credit Facility, which amended and restated the prior credit facility that we had with MidCap. On September 1, 2016, we entered into a Fifth Amendment to the MidCap Amended Facility Agreement, or the MidCap Fifth Amendment, that: (a) permitted (i) the Globus Transaction, (ii) the release of Alphatec International LLC and Alphatec Pacific, Inc. as credit parties, (iii) the payment in full of all obligations to Deerfield under the Facility Agreement between us and Deerfield, dated as of March 17, 2014, as amended to date, or the Deerfield Facility Agreement, and (iv) the incurrence of debt under the Globus Facility Agreement and the granting of liens in favor of Globus, (b) reduced the revolving credit commitment to $22.5 million and the term loan commitment to $5 million, (c) revised the existing financial covenant package, and (d) extended the commitment expiry date from December 31, 2016 to December 31, 2019. In connection with the prepayment of the term loan under the Amended Credit Facility, we incurred a prepayment fee of $0.6 million payable to MidCap.

The term loan interest rate is priced at the London Interbank Offered Rate, or LIBOR, plus 8.0%, subject to a 9.5% floor, and the revolving line of credit interest rate remains priced at LIBOR plus 6.0%, reset monthly. At December 31, 2016, the revolving line of credit carried an interest rate of 6.6% and the term loan carries an interest rate of 9.5%. The borrowing base is determined, from time to time, based on the value of domestic eligible accounts receivable and domestic eligible inventory. As collateral for the Amended Credit Facility, we granted MidCap a security interest in substantially all of its assets, including all accounts receivable and all securities evidencing its interests in our subsidiaries. In addition to monthly payments of interest, monthly repayments of $0.2 million in 2017 and $0.3 million in 2018 through maturity are due, with the remaining principal due upon maturity.

The Amended Credit Facility includes traditional lending and reporting covenants including a liquidity calculation and a fixed charge coverage ratio to be maintained by us. The Amended Credit Facility also includes 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 MidCap's right to declare all outstanding obligations immediately due and payable.

On March 11, 2016, we entered into a Third Amendment and Waiver to the Amended Credit Facility with MidCap, or the Third Amendment to the Amended Credit Facility. The Third Amendment to the Amended Credit Facility extended the maturity date of the Amended Credit Facility from August 30, 2016 to December 31, 2016 and contains an amendment fee in the amount of $0.5 million, which is due and payable at the earlier of the termination of the Amended Credit Facility or the maturity date. The Third Amendment to the Amended Credit Facility also contains a waiver of the December 2015 defaults under the Facility Agreement, provides a waiver for the fixed charge coverage ratio for January 2016 and eliminates the fixed charge coverage ratio covenant for February 2016. At December 31, 2016, $1.9 million remains as unamortized debt discount related to the Amended Credit Facility and the prior credit facility with MidCap within the unaudited consolidated balance sheet, which will be amortized over the remaining term of the Amended Credit Facility.

On August 8, 2016, we entered into a Fourth Amendment to the Amended Credit Facility with MidCap, or the Fourth Amendment to the Amended Credit Facility. The Fourth Amendment to the Amended Credit Facility provided for a $2.2 million increase to the borrowing base until September 15, 2016, and includes an amendment fee of $0.2 million, which was due and paid on August 8, 2016. The Fourth Amendment to the Amended Credit Facility also contains a waiver for the May and June 2016 non-compliances.

On March 17, 2014, we entered into the Deerfield Facility Agreement, pursuant to which Deerfield agreed to loan us up to $50 million, subject to the terms and conditions set forth in the Deerfield Facility Agreement. Under the terms of the Deerfield Facility Agreement, we had the option, but were not required, upon certain conditions to draw the entire amount available under the Deerfield Facility Agreement, at any time until January 30, 2015, provided that the initial draw be used for a portion of the payments made in connection with the Orthotec settlement described above, or the Litigation Satisfaction. Following such initial draw down, we had the opportunity to draw down additional amounts under the Deerfield Facility Agreement up to an aggregate of $15.0 million for working capital or general corporate purposes. We agreed to pay Deerfield, upon each disbursement of funds under the Deerfield Facility Agreement, a transaction fee equal to 2.5% of the principal amount of the funds disbursed in addition to the issuance of additional warrants to purchase up to 833,333 shares of our common stock to Deerfield. In connection with the execution of the Deerfield Facility Agreement, we issued to Deerfield warrants to purchase an aggregate of 520,833 shares of our common stock, or the Initial Warrants. Additionally, we agreed that upon each disbursement under the Deerfield Facility Agreement we would issue to Deerfield warrants to purchase up to 833,333 shares of our common stock, in proportion to the amount of draw compared to the total $50 million facility, or the Draw Warrants.

In March 2014, we drew $26 million under the Deerfield Facility Agreement and received net proceeds of $25.4 million to fund a portion of the Orthotec settlement payment obligations. In November 2014, we drew an additional $6 million under the Deerfield Facility Agreement and received net proceeds of $5.9 million to fund additional Orthotec settlement payment obligations. The $0.7 million in transaction fees were recorded as a debt discount and were being amortized over the term of the draw. In connection with this borrowing, we issued Draw Warrants to purchase 433,333 shares of common stock, which were valued at $5.6 million and recorded as a debt discount and were being amortized over the term of the draw.

On February 5, 2016, we entered into a Limited Waiver and Second Amendment to the Deerfield Facility Agreement, or the Deerfield Facility Agreement Second Amendment. The Deerfield Facility Agreement Second Amendment increased the interest rate under the Deerfield Facility Agreement from 8.75% per annum to 14.75% per annum. In addition, under the Deerfield Facility Agreement Second Amendment we had an option to elect to have (i) until August 30, 2016, six percent (6%), and (ii) thereafter, three percent (3%), in each case, of the interest on the outstanding principal amount under the Deerfield Facility Agreement paid in kind, which would be added to the outstanding principal amount under the Deerfield Facility Agreement and bear interest at the interest rate of 14.75% per annum, hereinafter referred to as the PIK Interest. All accrued and unpaid PIK Interest was due and payable when the outstanding amounts under the Deerfield Facility Agreement were due and payable thereunder or were fully repaid, whichever would occur first. The Deerfield Facility Agreement Second Amendment also contained an amendment fee in the amount of $0.6 million,

which was due and payable in installments of $0.2 million in March 2017, March 2018 and March 2019 on the third, fourth and fifth anniversaries of the Deerfield Facility Agreement; provided, that all unpaid amendment fees shall be due and payable when the outstanding amounts under the Deerfield Facility Agreement were due and payable or were fully repaid, whichever occurs first. The Deerfield Facility Agreement Second Amendment also changed the prior date of March 31, 2017 to March 31, 2018, as the date through which we were obligated to pay interest in the event we prepay amounts outstanding under the Deerfield Facility Agreement prior to such date. The Deerfield Facility Agreement Second Amendment also contained the waivers of the defaults under the Deerfield Facility Agreement for the fixed charge coverage ratio through March 2016, but not for the default under the senior leverage ratio or total leverage ratio financial covenants.

As of December 31, 2016, Orthotec settlement payments of $27.4 million have been made. Additionally, an Orthotec settlement payment of $1.1 million was made on January 1, 2017. As of December 31, 2016, there remains aggregate of $30.4 million of Orthotec settlement payments to be paid by us.

In September 2016, in connection with the Globus Transaction, Deerfield exercised its right to convert all outstanding Initial Warrants and Draw Warrants into shares of our common stock based on the Black-Scholes value of the warrants. The outstanding warrants were converted into 268,614 shares of our common stock. Prior to the conversion, the outstanding warrants were periodically revalued to their fair value, included in other income/expense. The change in the fair value of the warrants resulted in an expense of $0.4 million and a gain of $8.0 million for the years ended December 31, 2016 and 2015, respectively, which is included in other non-cash items in the consolidated statements of cash flows.

On September 1, 2016, in connection with the Globus Transaction, we repaid in full all amounts outstanding and due under the Deerfield Facility Agreement and terminated the Deerfield Facility Agreement. Pursuant to the Globus Facility Agreement and the MidCap Fifth Amendment, we made a final payment of $33.5 million to Deerfield, consisting of outstanding principal and accrued interest of $27.9 million, a prepayment premium of $5.6 million and other related fees and expenses and wrote-off $3.9 million of unamortized expenses resulting in a loss on debt extinguishment of $9.5 million, which is included other income (expense) for the years ended December 31, 2016 and 2015. The interest expense historically incurred in connection with the Deerfield Facility of $4.0 million and $4.7 million for the years ended December 31, 2016 and 2015, respectively, is included in the loss from discontinued operations to the extent these debt facilities were repaid using the proceeds from the Globus transaction.

On September 1, 2016, we entered into the Globus Facility Agreement, pursuant to which Globus agreed to loan us up to $30 million, subject to the terms and conditions set forth in the Globus Facility Agreement. We made an initial draw of $25 million under the Globus Facility Agreement and a subsequent draw of $5 million. The remaining amount may be advanced in up to two additional draws, each in an aggregate amount of no less than $2 million, as requested by us at any time prior to December 31, 2017. As of December 31, 2016, the outstanding balance under the Globus Facility Agreement was $30.0 million, which becomes due and payable in quarterly payments of $0.8 million starting November 2018 and the final payment due on September 30, 2021. The term loan interest rate is priced at LIBOR plus 8.0% through September 1, 2018, and LIBOR plus 13.0%, thereafter.

As collateral for the Globus Facility Agreement, we granted Globus a first lien security interest in substantially all of our assets, other than accounts receivable and related assets, which will secure the Globus Facility Agreement on a second lien basis. The Globus Facility Agreement includes traditional lending and reporting covenants including a liquidity calculation and a fixed charge coverage ratio to be maintained by us that are consistent with the covenants under the Amended Credit Facility. The financial covenants of the Globus Facility Agreement are not effective until April 2017. There is no assurance that we will be in compliance with the financial covenants of the Globus Facility Agreement in the future. The Globus Facility Agreement also includes 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 Globus's right to declare all outstanding obligations immediately due and payable.

We have various capital lease arrangements. The leases bear interest at rates ranging from 6.6% to 9.6%, are generally due in monthly principal and interest installments, are collateralized by the related equipment, and have various maturity dates through September 2018. As of December 31, 2016, the balance of these capital leases, net of interest totaled $0.7 million.

*Operating Activities*

We used net cash of $10.0 million from operating activities for the year ended December 31, 2016. During this period, net cash used by operating activities primarily consisted of a net loss of $29.9 million and working capital and other assets used cash of $2.5 million, which were offset by $22.5 million of non-cash costs including amortization, depreciation, gain on sale of business, loss on extinguishment of debt, deferred income taxes, stock-based compensation, provision for doubtful accounts, provision for excess and obsolete inventory, and interest expense related to amortization of debt discount and issuance costs. Working capital and other assets used cash of $2.6 million primarily consisted of an increase in inventories of $5.7 million and a decrease in accounts payable of $4.9 million and accrued expenses and other of $3.5 million, partially offset by a decrease accounts receivable of $8.0 million, restricted cash of $2.4 million, prepaid expenses and other current assets of $1.3 million. The decrease in accounts receivable is primarily due to the sale of the International Business to Globus. The decrease in accounts payable is primarily due to use of the cash proceeds from the Globus Transaction to pay down payables.

*Investing Activities*

We provided cash of $62.0 million in investing activities for the year ended December 31, 2016, primarily due to the $69.8 million of net proceeds we received from the sale of our International Business and cash from the sale of assets of $1.3 million. We used $8.9 million of cash primarily for the purchase of surgical instruments.

*Financing Activities*

Financing activities used net cash of $43.4 million for the year ended December 31, 2016. Under the Amended Credit Facility with MidCap, we made net principal payments totaling $16.3 million during the year ended December 31, 2016. We made principal payments on notes payable and capital leases totaling $54.4 million in the year ended December 31, 2016 for the payoff of the Deerfield Facility and substantially all of the term debt with Midcap. We received proceeds from notes payable of $30 million from the Globus Facility Agreement.

*Contractual obligations and commercial commitments*

Total contractual obligations and commercial commitments as of December 31, 2016 are summarized in the following table (in thousands):

| | Payment Due by Year | | | | | | |
|---|---|---|---|---|---|---|---|
| | Total | 2017 | 2018 | 2019 | 2020 | 2021 | Thereafter |
| Amended Credit Facility with MidCap | $ 17,873 | $ 2,400 | $ 2,379 | $ 13,094 | $ — | $ — | $ — |
| Facility Agreement with Globus | 30,000 | — | 1,667 | 3,333 | 3,333 | 21,667 | — |
| Interest expense | 19,347 | 4,063 | 4,573 | 5,223 | 3,460 | 2,028 | — |
| Note payable for insurance premiums | 1,395 | 1,395 | — | — | — | — | — |
| Capital lease obligations | 505 | 437 | 68 | — | — | — | — |
| Operating lease obligations | 7,246 | 1,589 | 1,557 | 1,544 | 1,585 | 971 | — |
| Litigation settlement obligations | 30,433 | 4,400 | 4,400 | 4,400 | 4,400 | 4,000 | 8,833 |
| Guaranteed minimum royalty obligations | 9,397 | 2,165 | 2,006 | 1,231 | 943 | 918 | 2,134 |
| Stock price guarantee [1] | 6,704 | 2,228 | 2,238 | 2,238 | — | — | — |
| New product development milestones [2] | 400 | — | 200 | — | 200 | — | — |
| Total | $123,300 | $ 18,677 | $ 19,088 | $ 31,063 | $ 13,921 | $ 29,584 | $ 10,967 |

(1) Based on our closing stock price as of December 30, 2016, the last trading date of the fiscal year, of $3.21 per share. Pursuant to a three-year collaboration agreement, we agreed to make three annual payments to the collaborator as sole consideration for services provided, paid in our common stock at a per share price of $23.35, which was equal to the average NASDAQ closing price of the common stock on the five days leading up to and including the date of signing the collaboration agreement. The actual number of shares issued each year will be determined by the fair market value of the services provided over the prior 12 months. The actual amount of cash settlement will vary depending on the price of our common stock at the respective settlement dates.

(2) This commitment represents payments in cash, and is subject to attaining certain sales milestones, development milestones such as FDA approval, product design and functionality testing requirements, which we believe are reasonably likely to be achieved during the period from 2018 through 2020.

*Real Property Leases*

In February 2008, we entered into a sublease agreement, or the Sublease, for office, engineering, and research and development space in Carlsbad, California. The Sublease term commenced May 2008 and ended on January 31, 2016. In January 2016, we entered into a new lease agreement, or the Building Lease, for the same property with the lease term through July 31, 2021. Under the original Sublease agreement, we were obligated to pay base rent and certain operating costs and taxes. Monthly base rent payable by us was approximately $80,500 during the first year of the Sublease, increasing annually at a fixed annual rate of 2.5% to approximately $93,500 per month in the final year of the Sublease. Our rent was abated for months one through seven of the Sublease. Under the Sublease, we were required to provide the sublessor with a security deposit in the amount of approximately $93,500. Under the new 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.

**Off-Balance Sheet Arrangements**

As of December 31, 2016, 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, goodwill and intangible assets, stock-based compensation and income taxes. We base our estimates on historical experience and on various other assumptions that are believed 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 assumptions 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*

We recognize revenue when all four of the following criteria are met: (i) persuasive evidence that an arrangement exists; (ii) delivery of the products and/or services has occurred; (iii) the selling price is fixed or determinable; and (iv) collectability is reasonably assured. In addition, we account for revenue under provisions which set forth guidelines for the timing of revenue recognition based upon factors such as passage of title, installation, payment and customer acceptance. Determination of criteria (iii) and (iv) are based on management's judgment regarding the fixed nature of the fee charged for products delivered and the collectability of those fees. Specifically, our revenue from sales of spinal and other surgical implants is recognized upon receipt of 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 implant. Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenues recognized for any reporting period could be adversely impacted.

The application of the multiple element guidance requires subjective determinations, and requires us to make judgments about the individual deliverables and whether such deliverables are separable from the other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that: (1) the delivered items has value to the customer on a stand-alone basis and (2) if the arrangement includes a general right of return relative to the delivered items, delivery or performance of the undelivered items is considered probable and substantially in our control. In determining the units of accounting, we evaluate certain criteria, including whether the deliverables have stand-alone value, based on the consideration of the relevant facts and circumstances for each arrangement. In addition, we consider whether the buyer can use the other deliverables for their intended purpose without the receipt of the remaining elements, whether the value of the deliverable is dependent on the undelivered items, and whether there are other vendors that can provide the undelivered elements.

Revenue arrangements with multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer. The consideration received is allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria are applied to each of the separate units. Arrangement consideration that is fixed or determinable is allocated among the separate units of accounting using the relative selling price method, and the applicable revenue recognition criteria are applied to each of the separate units of accounting in determining the appropriate period or pattern of recognition. We determine the estimated selling price for deliverables within each agreement using vendor-specific objective evidence (VSOE) of selling price, if available, third-party evidence (TPE) of selling price if VSOE is not available, or management's best estimate of selling price (BESP) if neither VSOE nor TPE is available. Determining the BESP for a unit of accounting requires significant judgment. In developing the BESP for a unit of accounting, we consider applicable market conditions and relevant entity-specific factors, including factors that were contemplated in negotiating the agreement with the customer and estimated costs.

*Inventories*

Inventories are stated at the lower of cost or market, with cost primarily determined under the first-in, first-out method. We review the components of inventory on a periodic basis for excess, obsolete and impaired inventory, and record a reserve for the identified items. We calculate an inventory reserve for estimated excess and obsolete inventory based upon historical turnover and assumptions about future demand for our products and market conditions. Our biologics product inventories are subject to demand fluctuations based on the availability and demand for alternative implant products. Our estimates and assumptions for excess and obsolete inventory are subject to uncertainty as we are continually reviewing our existing products and introducing new products. 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 inventory component.

*Valuation of Goodwill and Intangible Assets*

We assess the impairment of our goodwill and 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. In the third quarter of 2015, the market value of our common stock substantially declined. This decline was considered to be a triggering indicator of potential impairment of our goodwill, and a goodwill impairment test was performed. We analyzed the carrying amount of goodwill for impairment under a two-part test in accordance with authoritative guidance.

We estimate the fair value in step one of the goodwill impairment test based on a combination of the income approach which includes discounted cash flows as well as a market approach that utilizes the market information. The fair value measurements utilized to perform the impairment analysis are categorized within Level 3 of the fair value hierarchy. The discounted cash flow projections require management judgment with respect to forecasted sales, launch of new products, gross margins, selling, general and administrative expenses, capital expenditures and the selection and use of an appropriate discount rate and terminal growth rate. For purposes of calculating the discounted cash flows, in the third quarter of 2015 we used estimated revenue growth rates between 3% and 13% for the discrete forecast period. Cash flows beyond the discrete forecast period were estimated using a terminal value calculation, which incorporated historical and forecasted financial trends and considered long-term earnings growth rates for publicly traded peer companies. Future cash flows were then discounted to present value at a discount rate of 13.5%, and terminal value growth rate of 3%. Our market capitalization is also considered in assessing the reasonableness of the Company's fair value as determined in step one of the goodwill impairment test. Our assessment resulted in a fair value that was lower than the Company's carrying value of net assets.

Based on the result of step one of the impairment test, we determined that our goodwill was impaired and step two of the test was performed to measure the amount of goodwill impairment. As a result of step two, in the third quarter of 2015 we recorded a goodwill impairment charge of $164.3 million, representing the write-off of the remaining balance of goodwill.

Significant management judgment is required in the forecast of future operating results that are used in our impairment analysis. The estimates we used are consistent with the plans and estimates that we use to manage our business. Significant assumptions utilized in our income approach model included the growth rate of sales for recently introduced products and the introduction of anticipated new products similar to our historical growth rates. Another important assumption involved in forecasted sales is the projected mix of higher margin U.S. based sales and lower margin non-U.S. based sales. Additionally, we have projected an improvement in our gross margin similar to our historical improvements in gross margins, as a result of forecasted mix in U.S. sales versus non-U.S. based sales and lower manufacturing cost per unit based on the increase in forecasted volume to absorb applied overhead over the next 10 years.

*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, 2016 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, 2016 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 statement 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.

Share-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 compensation has been classified as follows in the accompanying consolidated statements of operations (in thousands, except per share data):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Cost of revenues | $ 36 | $ 72 | $ 274 |
| Research and development | 438 | 286 | 2,080 |
| Sales and marketing | 258 | 316 | 385 |
| General and administrative | 894 | 1,893 | 1,665 |
| Total | $ 1,626 | $ 2,567 | $ 4,404 |
| Effect on basic and diluted net loss per share | $ (0.19) | $ (0.31) | $ (0.54) |

*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**

In May 2014, the Financial Accounting Standards Board, or FASB, issued new accounting guidance related to revenue recognition. This new standard replaces all current U.S. GAAP guidance on this topic and eliminates all industry-specific guidance. The new revenue recognition standard provides a unified model to determine when and how revenue is recognized. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration for which the entity expects to be entitled in exchange for those goods or services. This guidance, including all subsequent clarifications, is effective for our annual and interim reporting periods in fiscal years beginning after December 15, 2017 and can be applied either retrospectively to each period presented or as a cumulative-effect adjustment as of the date of adoption. We performed a preliminary assessment of the impact of adopting the new standard on the Consolidated Financial Statements and considered all items outlined in the standard. In assessing the impact, we have outlined all revenue generating activities, mapped those activities to performance obligations and traced those performance obligations to the standard. We are now assessing what impact the change in standard will have on those performance obligations. We will continue to evaluate the future impact and method of adoption of the new standard and related amendments on the Consolidated Financial Statements and related disclosures throughout 2017.

In August 2014, the FASB issued guidance related to disclosures of uncertainties about an entity's ability to continue as a going concern. The guidance requires management to evaluate whether there are conditions and events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the financial statements are issued. Management will be required to make this evaluation for both annual and interim reporting periods and will have to make certain disclosures if it concludes that substantial doubt exists or when its plans alleviate substantial doubt about the entity's ability to continue as a going concern. Substantial doubt exists when relevant conditions and events, considered in the aggregate, indicate that it is probable that the entity will be unable to meet its obligations as they become due within one year after the date that the financial statements are issued. The guidance is effective for annual periods ending after December 15, 2016 and for interim reporting periods thereafter. We adopted the standard for the annual reporting period ending December 31, 2016.

In April 2015, the FASB issued guidance, which amends current presentation guidance by requiring that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. Prior to the issuance this guidance, debt issuance costs were required to be presented as an asset in the balance sheet. We adopted the provisions of the new guidance during the interim period ended March 31, 2016 and prior period amounts have been reclassified to conform to the current period presentation. As of December 31, 2015, $0.4 million of debt issuance costs were reclassified in the consolidated balance sheet from prepaid expenses and other current assets to current portion of long-term debt. The adoption of this guidance did not impact our consolidated statement of operations, comprehensive loss or cash flows.

In July 2015, the FASB issued new accounting guidance, which changes the measurement principle for inventory from the lower of cost or market to lower of cost and net realizable value for entities that do not measure inventory using the last-in, first-out or retail inventory method. The guidance also eliminates the requirement for these entities to consider replacement cost or net realizable value less an approximately normal profit margin when measuring inventory. The guidance is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. We are currently evaluating the impact of adopting this new accounting standard on our financial statements.

In February 2016, the FASB issued new accounting guidance, which changes several aspects of the accounting for leases, including the requirement that all leases with durations greater than twelve months to be recognized on the balance sheet. The guidance is effective for annual periods and interim periods in fiscal years beginning after December 15, 2018. We are currently evaluating the impact of adopting this new accounting standard on our financial statements.

In March 2016, the FASB issued new accounting guidance, which changes several aspects of the accounting for share-based payment award transactions, including accounting and cash flow classification for excess tax benefits and deficiencies, forfeitures, and tax withholding requirements and cash flow classification. The guidance is effective for annual periods and interim periods in fiscal years beginning after December 15, 2016. We are currently evaluating the impact of adopting this new accounting standard on our financial statements.

In August 2016, the FASB issued new accounting guidance, which eliminates the diversity in practice related to the classification of certain cash receipts and payments in the statement of cash flows, by adding or clarifying guidance on eight specific cash flow issues. The guidance is effective for annual and interim reporting periods beginning after December 15, 2017, with early adoption permitted. The amendments in this update should be applied retrospectively to all periods presented, unless deemed impracticable, in which case, prospective application is permitted. We are currently evaluating the new guidance and have not determined the impact this standards update may have on our financial statements.

## Item 7A. Quantitative and Qualitative Disclosures About Market Risk

*Interest Rate Risk*

Our borrowings under our line of credit expose us to market risk related to changes in interest rates. As of December 31, 2016, our outstanding floating rate indebtedness totaled $47.3 million. The primary base interest rate is LIBOR. 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. Other outstanding debt consists of fixed rate instruments, including notes payable and capital leases.

*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 revenues, 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 a material impact on our results of operations for the year ended December 31, 2016.

## 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

Not applicable.

## Item 9A. Controls and Procedures

*Evaluation of Disclosure Controls and Procedures*

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in the reports we file or submit pursuant to the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and is accumulated and communicated to our management, including our Chief Executive Officer and Principal Financial Officer, or persons performing similar functions, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Under the supervision and with the participation of our management, including our Chief Executive Officer and our Principal Financial Officer, we carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our Chief Executive Officer and Principal Financial Officer concluded that our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act, is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our Chief Executive Officer and Principal Financial Officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

*Management's Annual Report on Internal Control Over Financial Reporting*

Our management, including our Chief Executive Officer and Principal Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f)) and 15d-15(f) under the Exchange Act.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

Our management, including our Chief Executive Officer and Principal Financial Officer, has performed an assessment of our internal control over financial reporting described in "Internal Control—Integrated Framework" (2013 framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The objective of this assessment was to determine whether our internal control over financial reporting was effective as of December 31, 2016. Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2016.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. We were not required to have, nor have we, engaged our independent registered public accounting firm to perform an audit of internal control over financial reporting pursuant to SEC rules that permit us to provide only management's report in this Annual Report on Form 10-K.

*Remediation of Previously Reported Material Weakness*

In our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 15, 2016, we reported a material weakness in our internal control over financial reporting in which we failed to design effective controls over the release of inventory cost through cost of goods sold at our significant wholly owned subsidiary. To address the material weakness described above, during the first quarter of 2016, we designed and implemented new and enhanced compensating controls at the consolidated level to ensure that the calculation of inventory cost release is accurate and that the appropriate level of review is performed. During the third quarter of 2016, as part of our transaction to sell our International Business to Globus, we sold the subsidiary where the respective material weakness previously existed.

We believe that these remediation measures have strengthened our internal control over financial reporting and remediated the material weakness we had identified.

*Changes in Internal Control over Financial Reporting*

There were no changes in our internal control over financial reporting identified in connection with our evaluation of such internal control that occurred during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information**

On March 30, 2017, Alphatec Holdings, Alphatec Spine and Midcap entered into a Sixth Amendment (the "Midcap Sixth Amendment") to the Amended Credit Facility with Midcap. The Midcap Sixth Amendment amends the defined time periods during which we are required to calculate the fixed charge coverage ratio in order to determine our compliance with the applicable covenants of the Amended Credit Facility with Midcap.

On March 30, 2017, Alphatec Holdings, Alphatec Spine and Globus entered into a First Amendment (the "Globus First Amendment") to the Globus Facility Agreement. The Globus First Amendment amends the defined time periods during which we are required to calculate the fixed charge coverage ratio in order to determine our compliance with the applicable covenants of the Globus Facility Agreement.

The foregoing descriptions do not purport to be complete and is qualified in its entirety by reference to the Midcap Sixth Amendment and the Globus First Amendment, copies of which will be filed with the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2017.

## PART III

### Item 10. Directors, Executive Officers and Corporate Governance

The information required by Item 10 of this Annual Report on Form 10-K is incorporated by reference from the discussion responsive thereto under the captions "Management," "Corporate Governance Matters," "Compliance with Section 16(a) of the Securities Exchange Act of 1934," and "Code of Conduct and Ethics" in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

### Item 11. Executive Compensation

The information required by Item 11 of this Annual Report on Form 10-K is incorporated by reference from the discussion responsive thereto under the captions "Executive Officer and Director Compensation," "Compensation Discussion and Analysis," "Compensation Committee Interlocks and Insider Participation," "Compensation Committee Report," and "Compensation Practices and Policies Relating to Risk Management" in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

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

The information required by Item 12 of this Annual Report on Form 10-K is incorporated by reference from the discussion responsive thereto under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" and the planned proposal entitled "Adoption of Equity Incentive Plan" in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

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

The information required by Item 13 of this Annual Report on Form 10-K is incorporated by reference from the discussion responsive thereto under the captions "Certain Relationships and Related Transactions," "Management" and "Corporate Governance Matters" in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

### Item 14. Principal Accounting Fees and Services

The information required by Item 14 of this Annual Report on Form 10-K is incorporated by reference from the discussion responsive thereto under the caption "Independent Public Accountants" in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

## 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:



(2) Financial Statement Schedules:



All other financial statement schedules have been omitted because they are not applicable, not required or the information required is included in the consolidated financial statements or the notes thereto.

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 2.1) | 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. | X | | | |
| 3.1 | Restated Certificate of Incorporation | | Amendment No. 2 to Form S-1 (Exhibit 3.2) | 04/20/06 | 333-131609 |
| 3.2 | Amendment to Restated Certificate of Incorporation | | Form 8-K (Exhibit 3.1(B)) | 08/24/16 | 000-52024 |
| 3.3 | Restated Bylaws | | Amendment No. 5 to Form S-1 (Exhibit 3.4) | 05/26/06 | 333-131609 |
| 4.1 | Form of Common Stock Certificate | | Form 10-K (Exhibit 4.1) | 03/20/14 | 333-131609 |

| Exhibit Number | Exhibit Description | Filed with this Report | Incorporated by Reference herein from Form or Schedule | Filing Date | SEC File/ Reg. Number |
|---|---|---|---|---|---|
| 4.2 | Corporate Governance Agreement, dated December 17, 2009, between the Company and certain shareholders of Scient'x Groupe S.A.S. and Scient'x S.A. | | Form 8-K (Exhibit 10.1) | 12/22/09 | 000-52024 |
| 4.3 | Registration Rights Agreement, dated March 26, 2010, by and among Alphatec Holdings, Inc. and the other signatories thereto | | Form 8-K (Exhibit 4.1) | 03/31/10 | 000-52024 |
| 4.4 | Warrant with Silicon Valley Bank as the Warrantholder, dated December 16, 2011 | | Form 10-K (Exhibit 4.8) | 03/05/12 | 000-52024 |
| 4.5 | Form of Warrant to Purchase Common Stock issued to each of Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P. and Deerfield Special Situations International Master Fund, L.P. (collectively, "Deerfield") on each of March 17, 2014 and November 21, 2014. | | Form 8-K (Exhibit 4.1) | 03/19/14 | 000-52024 |
| | Real Property Lease Agreements | | | | |
| 10.1 | Lease Agreement by and between Alphatec Holdings, Inc. and Fenton Property Company., dated as of January 21, 2016 | | Form 10-K (Exhibit 10.2) | 03/15/16 | 000-52024 |
| | Loan Agreements | | | | |
| 10.2† | Amended and Restated Credit, Security and Guaranty Agreement dated August 30, 2013 by and among Alphatec Holdings, Inc., Alphatec Spine, Inc., Alphatec International LLC, Alphatec Pacific, Inc. and MidCap Funding IV, LLC | | Form 10-Q/A (Exhibit 10.1) | 10/21/15 | 000-52024 |
| 10.3† | First Amendment to Amended and Restated Credit, Security and Guaranty Agreement, dated March 17, 2014, with MidCap Funding IV, LLC as Administrative Agent and lender and other lenders from time to time a party thereto | | Form 8-K/A (Exhibit 10.3) | 10/21/15 | 000-52024 |
| 10.4† | Second Amendment to the Amended and Restated Credit, Security and Guaranty Agreement, dated July 10, 2015, with MidCap Funding IV Trust, as a lender and other lenders from time to time a party thereto | | Form 10-Q (Exhibit 10.1) | 11/03/15 | 000-52024 |
| 10.5† | Third Amendment to the Amended and Restated Credit, Security and Guaranty Agreement, dated March 11, 2016, with MidCap Funding IV Trust, as a lender and other lenders from time to time a party thereto | | Form 10-Q (Exhibit 10.3) | 11/09/16 | 000-52024 |
| 10.6† | Fourth Amendment to the Amended and Restated Credit, Security and Guaranty Agreement, dated August 8, 2016, with MidCap Funding IV Trust, as a lender and other lenders from time to time a party thereto | X | | | |

| Exhibit Number | Exhibit Description | Filed with this Report | Incorporated by Reference herein from Form or Schedule | Filing Date | SEC File/ Reg. Number |
|---|---|---|---|---|---|
| 10.7† | Consent and Fifth Amendment to the Amended and Restated Credit, Security and Guaranty Agreement, dated September 1, 2016 with MidCap Funding IV Trust, as a lender and other lenders from time to time a party thereto | | Form 10-Q (Exhibit 10.3) | 11/09/16 | 000-52024 |
| 10.8 | Amended and Restated Term Loan Note, dated July 10, 2015, with MidCap Funding IV Trust | | Form 10-Q (Exhibit 10.3) | 11/03/15 | 000-52024 |
| 10.9† | Facility Agreement, dated March 17, 2014, by and among Alphatec Holdings, Inc., Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P., and Deerfield Special Situations International Master Fund, L.P. | | Form 8-K/A (Exhibit 10.1) | 10/21/15 | 000-52024 |
| 10.10 | First Amendment to the Facility Agreement, dated July 10, 2015, by and among Alphatec Holdings, Inc., Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., and Deerfield Special Situations Fund, L.P. | | Form 10-Q (Exhibit 10.2) | 10/03/15 | 000-52024 |
| 10.11 | Limited Waiver and Second Amendment to the Facility Agreement, dated February 5, 2016, by and among Alphatec Holdings, Inc., Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., and Deerfield Special Situations Fund, L.P. | | Form 10-Q (Exhibit 10.1) | 05/06/16 | 000-52024 |
| 10.12 | Guaranty and Security Agreement, dated March 17, 2014 by and among Alphatec Holdings, Inc., Alphatec Spine, Inc., Alphatec International LLC, Alphatec Pacific, Inc., Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P., and Deerfield Special Situations International Master Fund, L.P. | | Form 8-K (Exhibit 10.2) | 03/19/14 | 000-52024 |
| 10.13† | Credit, Security and Guaranty Agreement, dated September 1, 2016 with Globus Medic, Inc. | | Form 10-Q (Exhibit 10.1) | 11/09/16 | 000-52024 |
| | Agreements with Respect to Product Supply, Collaborations, Licenses, Research and Development | | | | |
| 10.14† | 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 |
| 10.15† | Letter Amendment between Alphatec Spine, Inc. and Invibio, Inc., dated November 24, 2010 | | Form 10-Q (Exhibit 10.3) | 05/06/11 | 000-52024 |
| 10.16† | Collaboration Agreement by and among Alphatec Spine, Inc., Elite Medical Holdings, LLC and Pac 3 Surgical Products, LLC, dated as of October 22, 2013 | | Form 10-K (Exhibit 10.26) | 03/20/14 | 333-18790 |

| Exhibit Number | Exhibit Description | Filed with this Report | Incorporated by Reference herein from Form or Schedule | Filing Date | SEC File/ Reg. Number |
|---|---|---|---|---|---|
| 10.17 | First Amendment to the Collaboration Agreement by and among Alphatec Spine, Inc., Elite Medical Holdings, LLC and Pac 3 Surgical Products, LLC, dated November 2, 2015 | | Form 10-K (Exhibit 10.16) | 03/15/16 | 000-52024 |
| 10.18† | 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 | | | | |
| 10.19* | Employment Agreement by and among Alphatec Spine, Inc., Alphatec Holdings, Inc. and Michael O'Neill, dated October 11, 2010 | | Form 10-Q (Exhibit 10.2) | 11/08/10 | 000-52024 |
| 10.20* | Michael O'Neill Separation of Employment Agreement, effective as of September 15, 2016 | | Form 10-Q (Exhibit 10.7) | 11/09/16 | 000-52024 |
| 10.21* | Employment Agreement, dated February 26, 2012, by and among Alphatec Holdings, Inc., Alphatec Spine, Inc, and Leslie Cross | | Form 10-Q (Exhibit 10.1) | 05/08/12 | 000-52024 |
| 10.22* | Amendment to the Employment Agreement by and among Les Cross, Alphatec Holdings, Inc. and Alphatec Spine, Inc., dated May 1, 2014 | | Form 10-K (Exhibit 10.23) | 02/27/15 | 000-52024 |
| 10.23* | Amendment to the Employment Agreement by and among Les Cross, Alphatec Holdings, Inc. and Alphatec Spine, Inc., dated September 15, 2016 | | Form 10-Q (Exhibit 10.4) | 11/09/16 | 000-52024 |
| 10.24* | Amended and Restated Employment Agreement by and among Alphatec Holdings, Inc., Alphatec Spine, Inc. and Ebun S. Garner, Esq., dated July 17, 2006 | | Form 10-K (Exhibit 10.20) | 03/07/08 | 000-52024 |
| 10.25* | Employment Agreement by and among James M. Corbett, Alphatec Holdings, Inc. and Alphatec Spine, Inc., dated April 25, 2014 | | Form 10-Q (Exhibit 10.1) | 07/31/14 | 000-52024 |
| 10.26* | James M. Corbett Separation of Employment Agreement, effective as of September 15, 2016 | | Form 10-Q (Exhibit 10.6) | 11/09/16 | 000-52024 |
| 10.27* | Employment Agreement by and among Michael Plunkett, Alphatec Spine, Inc., and Alphatec Holdings, Inc., dated February 17, 2014 | | Form 10-Q (Exhibit 10.4) | 05/01/14 | 000-52024 |
| 10.28* | Amendment to the Employment Agreement, by and among Michael Plunkett, Alphatec Holdings, Inc. and Alphatec Spine, Inc., effective as of September 15, 2016 | | Form 10-Q (Exhibit 10.5) | 11/09/16 | 000-52024 |
| 10.29* | Employment Agreement by and among Terry Rich, Alphatec Spine, Inc., and Alphatec Holdings, Inc., dated , 2016 | X | | | |
| 10.30* | Form of Indemnification Agreement entered into with each of the Company's non-employee directors | | Form 10-Q (Exhibit 10.5) | 05/05/09 | 000-52024 |

| Exhibit Number | Exhibit Description | Filed with this Report | Incorporated by Reference herein from Form or Schedule | Filing Date | SEC File/ Reg. Number |
|---|---|---|---|---|---|
| 10.31* | Vesting Acceleration Agreement by and between James Glynn and Alphatec Holdings, Inc., dated November 2, 2015 | | Form 10-K (Exhibit 10.25) | 03/15/16 | 000-52024 |
| | Equity Compensation Plans | | | | |
| 10.32* | Amended and Restated 2005 Employee, Director and Consultant Stock Plan | | Form S-8 (Exhibit 99.1) | 03/23/13 | 333-187190 |
| 10.33* | Amendment to the Amended and Restated 2005 Employee, Director and Consultant Stock Plan | | Schedule 14A (Appendix B) | 06/11/13 | 000-52024 |
| 10.34* | Amendment to the Alphatec Holdings, Inc. Amended and Restated 2005 Employee, Director and Consultant Stock Plan | | Form 10-Q (Exhibit 10.1) | 10/30/14 | 000-52024 |
| 10.35* | Form of Non-Qualified Stock Option Agreement issued under the Amended and Restated 2005 Stock Plan | | Form 10-K (Exhibit 10.40) | 03/05/13 | 000-52024 |
| 10.36* | Form of Incentive Stock Option Agreement issued under the Amended and Restated 2005 Stock Plan | | Form 10-K (Exhibit 10.41) | 03/05/13 | 000-52024 |
| 10.37* | Form of Restricted Stock Agreement issued under the Amended and Restated 2005 Stock Plan | | Form 10-K (Exhibit 10.42) | 03/05/14 | 000-52024 |
| 10.38* | Form of Performance-Based Restricted Unit Agreement issued under the Amended and Restated 2005 Employee, Director and Consultant Stock Plan, as amended. | | Form 10-Q (Exhibit 10.2) | 10/30/14 | 000-52024 |
| 10.39* | Amended and Restated 2007 Employee Stock Purchase Plan | | Schedule 14A (Appendix C) | 06/11/13 | 000-52024 |
| 10.40* | Alphatec Holdings, Inc. 2016 Equity Incentive Plan | | Form S-8 (Exhibit 10.1) | 10/05/16 | 333-213981 |
| 10.41* | Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan | | Form S-8 (Exhibit 10.2) | 10/05/16 | 333-213981 |
| 10.42* | First Amendment to the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan | | Form S-8 (Exhibit 10.2) | 12/12/16 | 333-215036 |
| 10.43* | Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Award Agreement under the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan | | Form S-8 (Exhibit 10.3) | 10/05/16 | 333-213981 |
| 10.44* | Form of Stock Option Grant Notice and Stock Option Agreement under the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan | | Form S-8 (Exhibit 10.4) | 10/05/16 | 333-213981 |
| 10.45* | Form of Performance Stock-Based Award Grant Notice and Performance Stock-Based Award Agreement under the Alphatec Holdings, Inc. 2016 Employment Inducement Award Plan | | Form S-8 (Exhibit 10.5) | 10/05/16 | 333-213981 |

| Exhibit Number | Exhibit Description | Filed with this Report | Incorporated by Reference herein from Form or Schedule | Filing Date | SEC File/ Reg. Number |
|---|---|---|---|---|---|
| | Settlement Agreements | | | | |
| 10.46 | 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 | | | |
| 101.1 | XBRL Instance Document** | | | | |
| 101.2 | XBRL Taxonomy Extension Schema Document** | | | | |
| 101.3 | XBRL Taxonomy Extension Calculation Linkbase Document** | | | | |
| 101.4 | XBRL Taxonomy Extension Definition Linkbase Document** | | | | |
| 101.5 | XBRL Taxonomy Extension Label Linkbase Document** | | | | |
| 101.6 | XBRL Taxonomy Extension Presentation Linkbase Document** | | | | |

(*) Management contract or compensatory plan or arrangement.

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

(**) Confidential treatment is being requested as to certain portions of this exhibit.

## SIGNATURES

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

**ALPHATEC HOLDINGS, INC.**

Dated: March 30, 2017

By: /S/ TERRY M. RICH
Name: **Terry M. Rich**
Title: **Chief Executive Officer**

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/ MORTIMER BERKOWITZ III<br>**Mortimer Berkowitz III** | Chairman of the Board of Directors, | March 30, 2017 |
| /S/ TERRY M. RICH<br>**Terry M. Rich** | Director and Chief Executive Officer,<br>(Principal Executive Officer) | March 30, 2017 |
| /S/ DENNIS T. NELSON<br>**Dennis T. Nelson** | Vice President, Finance and Controller,<br>(Principal Financial Officer and Principal Accounting Officer) | March 30, 2017 |
| /S/ LESLIE H.CROSS<br>**Leslie H. Cross** | Director | March 30, 2017 |
| /S/ DAVID R. MOWRY<br>**David R. Mowry** | Director | March 30, 2017 |
| /S/ R. IAN MOLSON<br>**R. Ian Molson** | Director | March 30, 2017 |
| /S/ STEPHEN E. O'NEIL<br>**Stephen E. O'Neil** | Director | March 30, 2017 |
| /S/ DONALD A. WILLIAMS<br>**Donald A. Williams** | Director | March 30, 2017 |

**ALPHATEC HOLDINGS, INC.**

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
Alphatec Holdings, Inc.

We have audited the accompanying consolidated balance sheets of Alphatec Holdings, Inc. as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive loss, stockholders' (deficit) equity, and cash flows for each of the three years in the period ended December 31, 2016. Our audits also included the financial statement schedule listed in the Index at Item 15(a)(2). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Alphatec Holdings, Inc. at December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ Ernst & Young LLP

San Diego, California
March 30, 2017

**ALPHATEC HOLDINGS, INC.**

**CONSOLIDATED BALANCE SHEETS**
(In thousands, except par value data)

| | December 31, 2016 | December 31, 2015 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash | $ 19,593 | $ 6,295 |
| Restricted cash | — | 2,350 |
| Accounts receivable, net | 18,512 | 26,870 |
| Inventories, net | 30,093 | 32,632 |
| Prepaid expenses and other current assets | 4,262 | 3,138 |
| Current assets of discontinued operations | 364 | 30,210 |
| Total current assets | 72,824 | 101,495 |
| Property and equipment, net | 15,076 | 16,081 |
| Intangibles, net | 5,711 | 8,806 |
| Other assets | 516 | 502 |
| Noncurrent assets of discontinued operations | 61 | 19,457 |
| Total assets | $ 94,188 | $ 146,341 |
| **Liabilities and Stockholders' Deficit** | | |
| Current liabilities: | | |
| Accounts payable | $ 8,701 | $ 13,542 |
| Accrued expenses | 27,589 | 21,175 |
| Common stock warrant liabilities | — | 687 |
| Current portion of long-term debt | 3,113 | 79,742 |
| Current liabilities of discontinued operations | 732 | 9,891 |
| Total current liabilities | 40,135 | 125,037 |
| Long-term debt, less current portion | 43,092 | 480 |
| Other long-term liabilities | 28,862 | 32,281 |
| Long-term liabilities of discontinued operations | — | 1,516 |
| Redeemable preferred stock, $0.0001 par value; 20,000 authorized at December 31, 2016 and 2015; 3,319 shares issued and outstanding at both December 31, 2016 and 2015 | 23,603 | 23,603 |
| Commitments and contingencies | | |
| Stockholders' deficit: | | |
| Common stock, $0.0001 par value; 200,000 authorized; 9,049 and 8,513 shares issued and outstanding at December 31, 2016 and 2015, respectively | 1 | 1 |
| Treasury stock, 2 shares | (97) | (97) |
| Additional paid-in capital | 419,787 | 416,948 |
| Shareholder note receivable | (5,000) | (5,000) |
| Accumulated other comprehensive income (loss) | 970 | (21,188) |
| Accumulated deficit | (457,165) | (427,240) |
| Total stockholders' deficit | (41,504) | (36,576) |
| Total liabilities and stockholders' deficit | $ 94,188 | $ 146,341 |

See accompanying notes to consolidated financial statements.

**ALPHATEC HOLDINGS, INC.**

**CONSOLIDATED STATEMENTS OF OPERATIONS**

(In thousands, except per share amounts)

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Revenues | $ 120,248 | $ 134,388 | $ 154,625 |
| Cost of revenues | 44,114 | 46,366 | 44,958 |
| Gross profit | 76,134 | 88,022 | 109,667 |
| Operating expenses: | | | |
| Research and development | 9,248 | 17,615 | 16,593 |
| In-process research and development | — | 274 | 527 |
| Sales and marketing | 50,962 | 51,801 | 55,782 |
| General and administrative | 26,339 | 28,126 | 34,048 |
| Amortization of intangible assets | 934 | 1,200 | 1,232 |
| Goodwill and intangible assets impairment | 1,736 | 164,263 | — |
| Restructuring expenses | 2,292 | 597 | — |
| Total operating expenses | 91,511 | 263,876 | 108,182 |
| Operating (loss) income | (15,377) | (175,854) | 1,485 |
| Other income (expense): | | | |
| Interest income | 3 | 11 | 10 |
| Interest expense | (5,368) | (4,001) | (3,022) |
| Loss on debt extinguishment | (9,478) | — | — |
| Other income (expense), net | (715) | 7,445 | 1,836 |
| Total other income (expense) | (15,558) | 3,455 | (1,176) |
| Income (loss) from continuing operations before taxes | (30,935) | (172,399) | 309 |
| Income tax (benefit) provision | (4,634) | (1,146) | 407 |
| Loss from continuing operations | (26,301) | (171,253) | (98) |
| Loss from discontinued operations, net of applicable taxes | (3,624) | (7,423) | (12,784) |
| Net loss | $ (29,925) | $ (178,676) | $ (12,882) |
| | | | |
| Loss per share, basic: | | | |
| Continuing operations | $ (3.06) | $ (20.64) | $ (0.01) |
| Discontinued operations | (0.42) | (0.89) | (1.58) |
| Net loss per share, basic | $ (3.49) | $ (21.53) | $ (1.59) |
| Net loss per share, diluted: | | | |
| Continuing operations | $ (3.06) | $ (20.64) | $ (0.33) |
| Discontinued operations | (0.42) | (0.89) | (1.57) |
| Net loss per share, diluted | $ (3.49) | $ (21.53) | $ (1.90) |
| Shares used in calculating basic net loss per share | 8,582 | 8,298 | 8,112 |
| Shares used in calculating diluted net loss per share | 8,582 | 8,298 | 8,145 |

See accompanying notes to consolidated financial statements.

**ALPHATEC HOLDINGS, INC.**

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**
**(in thousands)**

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Net loss | $ (29,925) | $ (178,676) | $ (12,882) |
| Foreign currency translation adjustments related to continuing operations | 3,635 | (9,872) | (15,193) |
| Foreign currency translation realized to discontinued operations | 18,523 | — | — |
| Comprehensive loss | $ (7,767) | $ (188,548) | $ (28,075) |

See accompanying notes to consolidated financial statements.

**ALPHATEC HOLDINGS, INC.**

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' (DEFICIT) EQUITY**

(In thousands)

| | Common stock | | Additional paid-in capital | Shareholder note receivable | Treasury stock | Accumulated other comprehensive income (loss) | Accumulated deficit | Total stockholders' (deficit) equity |
|---|---|---|---|---|---|---|---|---|
| | Shares | Amount | | | | | | |
| **Balance at December 31, 2013** | 8,133 | $ 1 | $ 403,577 | $ — | $ (97) | $ 3,877 | $ (235,682) | $ 171,676 |
| Stock-based compensation | — | — | 2,690 | — | — | — | — | 2,690 |
| Exercise of stock options | 2 | — | 29 | — | — | — | — | 29 |
| Repurchase and/or forfeiture of common stock | (22) | — | (3) | — | — | — | — | (3) |
| Shares issued for consulting services | 111 | — | 1,864 | — | — | — | — | 1,864 |
| Issuance of common stock for employee stock purchase plan | 51 | — | 671 | — | — | — | — | 671 |
| Issuance of common stock for restricted share awards granted to employees | 41 | — | — | — | — | — | — | — |
| Shareholder note receivable | — | — | 5,000 | (5,000) | — | — | — | — |
| Issuance of common stock for acquired technology | 6 | — | 102 | — | — | — | — | 102 |
| Foreign currency translation adjustments | — | — | — | — | — | (15,193) | — | (15,193) |
| Net loss | — | — | — | — | — | — | (12,882) | (12,882) |
| **Balance at December 31, 2014** | 8,321 | 1 | 413,930 | (5,000) | (97) | (11,316) | (248,564) | 148,954 |
| Stock-based compensation | — | — | 2,562 | — | — | — | — | 2,562 |
| Exercise of stock options | — | — | — | — | — | — | — | — |
| Repurchase and/or forfeiture of common stock | (22) | — | — | — | — | — | — | — |
| Shares issued for consulting services | 110 | — | 81 | — | — | — | — | 81 |
| Issuance of common stock for employee stock purchase plan | 72 | — | 375 | — | — | — | — | 375 |
| Issuance of common stock for restricted share awards granted to employees | 24 | — | — | — | — | — | — | — |
| Issuance of common stock for acquired technology | 6 | — | — | — | — | — | — | — |
| Foreign currency translation adjustments | — | — | — | — | — | (9,872) | — | (9,872) |
| Net loss | — | — | — | — | — | — | (178,676) | (178,676) |
| **Balance at December 31, 2015** | 8,513 | 1 | 416,948 | (5,000) | (97) | (21,188) | (427,240) | (36,576) |
| Stock-based compensation | — | — | 1,626 | — | — | — | — | 1,626 |
| Repurchase and/or forfeiture of common stock | (1) | — | — | — | — | — | — | — |
| Shares issued for consulting services | 210 | — | 25 | — | — | — | — | 25 |
| Issuance of common stock for employee stock purchase plan | 58 | — | 114 | — | — | — | — | 114 |
| Warrant conversion | 269 | — | 1,074 | — | — | — | — | 1,074 |
| Foreign currency translation adjustments | — | — | — | — | — | 22,158 | — | 22,158 |
| Net loss | — | — | — | — | — | — | (29,925) | (29,925) |
| **Balance at December 31, 2016** | 9,049 | $ 1 | $ 419,787 | $ (5,000) | $ (97) | $ 970 | $ (457,165) | $ (41,504) |

See accompanying notes to consolidated financial statements.

**ALPHATEC HOLDINGS, INC.**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**
(In thousands)

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| **Operating activities:** | | | |
| Net loss | $ (29,925) | $ (178,676) | $ (12,882) |
| Adjustments to reconcile net loss to net cash (used in) provided by operating activities: | | | |
| Depreciation and amortization | 12,364 | 19,031 | 18,385 |
| Goodwill and intangible assets impairment | 2,189 | 165,171 | — |
| Stock-based compensation | 1,626 | 2,643 | 4,554 |
| Interest expense related to amortization of debt discount and debt issuance costs | 3,630 | 4,695 | 6,700 |
| In-process research and development | — | 98 | 102 |
| Provision for doubtful accounts | 620 | 584 | 522 |
| Provision for excess and obsolete inventory | 5,663 | 2,156 | 3,539 |
| Deferred income tax provision (benefit) | 10 | (333) | 251 |
| Gain on sale of business | (7,935) | — | — |
| Loss on extinguishment of debt | 3,863 | — | — |
| Other non-cash items | 426 | (4,363) | 1,913 |
| Changes in operating assets and liabilities: | | | |
| Restricted cash | 2,350 | 4,400 | (6,750) |
| Accounts receivable | 8,000 | 1,197 | (1,028) |
| Inventories | (5,742) | (5,456) | (4,348) |
| Prepaid expenses and other current assets | 1,074 | 2,472 | 4,863 |
| Other assets | 191 | (6) | (276) |
| Accounts payable | (4,865) | 3,209 | (1,042) |
| Accrued expenses and other | (3,498) | (6,698) | (34,774) |
| Net cash (used in) provided by operating activities | (9,959) | 10,124 | (20,271) |
| **Investing activities:** | | | |
| Purchases of property and equipment | (8,897) | (12,247) | (11,300) |
| Purchase of intangible assets | (250) | — | — |
| Proceeds from sale of business, net | 69,790 | — | — |
| Cash received from sale of assets | 1,316 | — | 300 |
| Net cash provided by (used in) investing activities | 61,959 | (12,247) | (11,000) |
| **Financing activities:** | | | |
| Issuance of common stock | 114 | 375 | 26 |
| Borrowings under lines of credit | 118,482 | 141,583 | 163,067 |
| Repayments under lines of credit | (134,792) | (144,567) | (156,106) |
| Principal payments on capital lease obligations | (798) | (747) | (766) |
| Proceeds from issuance of notes payable | 28,046 | 5,000 | 30,350 |
| Principal payments on notes payable | (54,444) | (8,176) | (5,837) |
| Net cash (used in) provided by financing activities | (43,392) | (6,532) | 30,734 |
| Effect of exchange rate changes on cash | (85) | 149 | (1,073) |
| Net increase (decrease) in cash | 8,523 | (8,506) | (1,610) |
| Cash at beginning of year, including discontinued operations | 11,229 | 19,735 | 21,345 |
| Cash at end of year, including discontinued operations | $ 19,752 | $ 11,229 | $ 19,735 |

See accompanying notes to consolidated financial statements.

**ALPHATEC HOLDINGS, INC.**

**CONSOLIDATED STATEMENTS OF CASH FLOWS—(Continued)**
(in thousands)

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Supplemental disclosure of cash flow information: | | | |
| Cash paid for interest | $ 7,368 | $ 7,627 | $ 5,885 |
| Cash paid for income taxes | $ 920 | $ 621 | $ 565 |
| Purchases of property and equipment in accounts payable | $ 2,668 | $ 2,323 | $ 1,638 |
| Purchase of property and equipment through capital leases | $ — | $ 243 | $ 1,212 |
| Cashless warrant conversion | $ 1,074 | $ — | $ — |
| Non-cash debt discount | $ — | $ — | $ 650 |
| Initial fair value of warrant liability | $ — | $ — | $ 11,280 |

See accompanying notes to consolidated financial statements.

## 1. The Company and Basis of Presentation

### *The Company*

Alphatec Holdings, Inc. (“Alphatec,” “Alphatec Holdings” or the “Company”), through its wholly owned subsidiary, Alphatec Spine, Inc. and its subsidiaries (“Alphatec Spine”), is a medical technology company focused on the design, development and promotion of products for the surgical treatment of spine disorders. The Company has a comprehensive product portfolio and pipeline that addresses the cervical, thoracolumbar and intervertebral regions of the spine and covers a variety of spinal disorders and surgical procedures. The Company’s principal product offerings are focused on the U.S. market for fusion-based spinal disorder solutions.

Prior to September 1, 2016, the Company marketed its products in the U.S. market and in over 50 international markets through the distribution channels of Alphatec Spine and its affiliate, Scient’x S.A.S., and its subsidiaries (“Scient’x”), via a direct sales force in Italy and the United Kingdom and via independent distributors in the rest of Europe, the Middle East and Africa. In South America and Latin America, the Company conducted its operations through its Brazilian subsidiary, Cibramed Productos Medicos. In Japan, the Company marketed its products through its subsidiary, Alphatec Pacific, Inc. and its subsidiaries (“Alphatec Pacific”).

On September 1, 2016, the Company completed the sale of its international distribution operations and agreements to Globus Medical Ireland, Ltd., a subsidiary of Globus Medical, Inc., and its affiliated entities (collectively “Globus”), including the Company’s wholly-owned subsidiaries in Japan, Brazil, Australia and Singapore and substantially all of the assets of the Company’s other sales operations in the United Kingdom and Italy (collectively, the “International Business”), pursuant to a purchase and sale agreement, dated as of July 25, 2016 (as amended, the “Purchase and Sale Agreement”) (the “Globus Transaction”). As a result of the Globus Transaction, the Company's International Business has been excluded from continuing operations for all periods presented in this report and is reported as discontinued operations. See Note 4 for additional information on the divestiture of the International Business. The sale of the international operations represents a strategic shift and has a significant impact on the Company's operations and financial results.

### *Basis of Presentation*

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

On August 24, 2016, the Company filed a certificate of amendment to its certificate of incorporation with the Secretary of State of the state of Delaware to effectuate a 1-for-12 reverse stock split of the Company’s issued and outstanding common stock. The accompanying consolidated financial statements and notes thereto give retrospective effect to the reverse stock split for all periods presented. All issued and outstanding common stock, options exercisable for common stock, warrants exercisable for common stock, restricted stock units, and per share amounts contained in the Company’s consolidated financial statements have been retroactively adjusted to reflect this reverse stock split for all periods presented.

As a result of the sale of the International Business, the Company has retrospectively revised the consolidated statements of operations for the years ended December 31, 2016, 2015 and 2014 and the consolidated balance sheets as of December 31, 2016 and 2015, to reflect the financial results from the International Business, and the related assets and liabilities, as discontinued operations.

The Company has incurred significant net losses since inception and has relied on its ability to fund its operations through revenues from the sale of its products, equity financings and debt financings. As the Company has historically incurred losses, successful transition to profitability is dependent upon achieving a level of revenues adequate to support the Company’s cost structure. This may not occur and, unless and until it does, the Company will continue to need to raise additional capital. Operating losses and negative cash flows may continue for at least the next year as the Company continues to incur costs related to the execution of its operating plan and introduction of new products.

For the year ended December 31, 2016, the Company has adopted, as required, FASB Accounting Standard Codification (ASC) Topic 205-40, Presentation of Financial Statements – Going Concern, which requires that management evaluate whether there are relevant conditions and events that in aggregate raise substantial doubt about the entity’s ability to continue as a going concern and to meet its obligations as they become due within one year from the date that the financial statements are issued.

The Company's Board approved annual operating plan projects that its existing working capital at December 31, 2016 of $32.7 million (including cash of $19.6 million), along with the proceeds of the $18.9 million private placement that closed on March 29, 2017 (see Note 15) and the amendments to its debt facilities (see Note 15), allows the Company to fund its operations through one year subsequent to the date the financial statements are issued.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern and do not include any adjustments that might result from the outcome of this uncertainty. A going concern basis of accounting contemplates the recovery of the Company's assets and the satisfaction of its liabilities in the normal course of business.

**2. Summary of Significant Accounting Policies**

*Use of Estimates*

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant items subject to such estimates and assumptions include the useful lives of property and equipment; allowances for doubtful accounts and sales returns, the valuation of share based liabilities, deferred tax assets, fixed assets, inventory, investments, notes receivable and stock-based compensation; and reserves for employee benefit obligations, 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, 2016, 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 and no single customer represented greater than 10 percent of consolidated revenues or accounts receivable for any of the periods presented. Credit to customers is granted based on an analysis of the customers' credit worthiness and credit losses have not been significant.

*Revenue Recognition*

The Company derives its revenues primarily from the sale of spinal surgery implants 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 all four of the following criteria are met: (i) persuasive evidence of an arrangement exists; (ii) delivery of the products and/or services has occurred; (iii) the selling price is fixed or determinable; and (iv) collectability is reasonably assured. In addition, the Company accounts for revenue under provisions which set forth guidelines for the timing of revenue recognition based upon factors such as passage of title, installation, payment and customer acceptance.

The Company's revenue from sales of spinal and other surgical implant products is recognized upon receipt of 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.

The application of the multiple element guidance requires subjective determinations, and requires the Company to make judgments about the individual deliverables and whether such deliverables are separable from the other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that: (1) the delivered items has value to the customer on a stand-alone basis and (2) if the arrangement includes a general right of return relative to the delivered items, delivery or performance of the undelivered items is considered probable and substantially in the Company's control. In determining the units of accounting, the Company evaluates certain criteria, including whether the deliverables have stand-alone value, based on the consideration of the relevant facts and circumstances for each arrangement. In addition, the Company considers whether the buyer can use the other deliverables for their intended purpose without the receipt of the remaining elements, whether the value of the deliverable is dependent on the undelivered items, and whether there are other vendors that can provide the undelivered elements.

Revenue arrangements with multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer. The consideration received is allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria are applied to each of the separate units. Arrangement consideration that is fixed or determinable is allocated among the separate units of accounting using the relative selling price method, and the applicable revenue recognition criteria are applied to each of the separate units of accounting in determining the

appropriate period or pattern of recognition. The Company determines the estimated selling price for deliverables within each agreement using vendor-specific objective evidence ("VSOE") of selling price, if available, third-party evidence ("TPE") of selling price if VSOE is not available, or management's best estimate of selling price ("BESP") if neither VSOE nor TPE is available. Determining the BESP for a unit of accounting requires significant judgment. In developing the BESP for a unit of accounting, the Company considers applicable market conditions and relevant entity-specific factors, including factors that were contemplated in negotiating the agreement with the customer and estimated costs.

*Restricted Cash*

In March and November 2014, the Company borrowed and set aside cash for the payment of a portion of the Orthotec litigation settlement, which is subject to the terms of the facility agreement that it entered into with Deerfield on March 17, 2014. The Company classified this cash as restricted, because it may not be used for purposes other than payments of amounts due under the Orthotec litigation settlement agreement. As of December 31, 2016, the Company had no cash classified as restricted cash.

*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.

*Inventories, net*

Inventories are stated at the lower of cost or market, 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 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. Approximately $12.9 million and $16.2 million of inventory was held at consigned locations as of December 31, 2016 and 2015, respectively.

*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 terms of the related leases.

*Goodwill and Other Intangible Assets*

The Company accounts for goodwill and other intangible assets in accordance with provisions which require that goodwill and other identifiable intangible assets with indefinite useful lives be tested for impairment at least annually. The Company tests goodwill and intangible assets for impairment in December of each year, or more frequently if events and circumstances warrant. These assets are considered impaired if the Company determines that their carrying values may not be recoverable based on an assessment of certain events or changes in circumstances. If the assets are considered to be impaired, the Company recognizes the amount by which the carrying value of the assets exceeds the fair value of the assets as an impairment loss. In the third quarter of 2015, the market value of the Company's common stock substantially declined. As a result of this decline, the Company determined that it had an indicator of impairment of the goodwill, and an interim test of goodwill impairment was performed. The Company analyzed the carrying amount of goodwill for impairment under a two-part test in accordance with authoritative guidance.

The Company estimated the fair value in step one of the goodwill impairment test based on a combination of the income approach which included discounted cash flows as well as a market approach that utilized the Company's market information. The fair value measurements utilized to perform the impairment analysis are categorized within Level 3 of the fair value hierarchy. Significant management judgment is required in the forecast of future operating results that are used in the Company's impairment analysis. The estimates the Company used were consistent with the plans and estimates that it uses to manage its business. Significant

assumptions utilized in the Company's income approach model included the growth rate of sales for recently introduced products and the introduction of anticipated new products similar to its historical growth rates. Another important assumption involved in forecasted sales was the projected mix of higher margin U.S. based sales and lower margin non-U.S. based sales. Additionally, the Company projected an improvement in its gross margin, similar to its historical improvement in gross margins, as a result of its forecasted mix in U.S. sales versus non-U.S. sales and lower manufacturing cost per unit based on the increase in forecasted volume to absorb applied overhead over the next ten years.

The Company's discounted cash flows required management judgment with respect to forecasted sales, launch of new products, gross margins, selling, general and administrative expenses, capital expenditures and the selection and use of an appropriate discount rate and terminal growth rate. For purposes of calculating the discounted cash flows, the Company used estimated revenue growth rates averaging between 3% and 13% for the discrete forecast period. Cash flows beyond the discrete forecast period were estimated using a terminal value calculation, which incorporated historical and forecasted financial trends and considered long-term earnings growth rates for publicly traded peer companies. Future cash flows were then discounted to present value at a discount rate of 13.5%, and terminal value growth rate of 3%. The Company's market capitalization was also considered in assessing the reasonableness of the Company's fair value as determined in step one of the goodwill impairment test. The Company's assessment resulted in a fair value that was lower than the Company's carrying value of net assets at September 30, 2015.

Based upon step one of the interim impairment test, the Company determined that its goodwill was impaired and that step two of the test was required to measure the amount of goodwill impairment. As a result of step two, in the third quarter of 2015 the Company recorded a charge of $164.3 million, representing the write-off of the entire balance of goodwill. The Company finalized the step two test in the fourth quarter of 2015, which did not change the amount of the impairment charge.

No additional goodwill was recorded in 2016.

The accounting provisions also require that intangible assets with finite useful lives be amortized over their respective estimated useful lives and reviewed for indicators of impairment. The Company is amortizing its intangible assets, other than goodwill, on a straight-line basis over a one to fifteen-year period.

*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.

*Foreign Currency*

The Company's results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. As of December 31, 2016, the Company's primary functional currency is the U.S. dollar, while the functional currency of the Company's foreign subsidiaries include the Euro and the Hong Kong Dollar. Prior to the sale of the International Business the Company's primary functional currency is the U.S. dollar, while the functional currency of the Company's foreign subsidiaries included the Japanese Yen, the Euro, the Brazilian Real, the British Pound and the Hong Kong Dollar. Assets and liabilities denominated in foreign currencies are translated at the rate of exchange on the balance sheet date. Revenues and expenses are translated using the average exchange rate for the period. Net gains and losses resulting from the translation of foreign financial statements are recorded as accumulated other comprehensive income (loss) in stockholders' (deficit) equity. Net foreign currency gains or (losses) resulting from transactions in currencies other than the functional currencies are included in other income (expense), net and discontinued operations in the accompanying consolidated statements of operations. For the years ended December 31, 2016, 2015 and 2014, the Company recorded net foreign currency losses in continuing operations of approximately $0.4 million, $0.7 million and a gain of $0.8 million, respectively.

*Warrants to Purchase Common Stock*

Common stock warrants that contain compliance covenants and cash payment obligations are classified as common stock warrant liabilities on the consolidated balance sheet. In September 2016, in connection with the Globus Transaction, Deerfield exercised its right to convert all outstanding Initial Warrants and Draw Warrants into shares of the Company's common stock based on the Black-Scholes value of the warrants. The outstanding warrants were converted into 268,614 shares of the Company's common stock. Prior to the conversion, the Company recorded the warrant liability at fair value and adjusted the carrying value of these

common stock warrants to their estimated fair value at each reporting date with the increases or decreases in the fair value of such warrants at each reporting date recorded as other income (expense) in the consolidated statements of operations.

*Fair Value Measurements*

The carrying amount of financial instruments consisting of cash, restricted 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 instruments that are considered to be Level 1, Level 2 or Level 3 instruments as of December 31, 2016. Prior to the conversion of the outstanding warrants, the Company classified its common stock warrant liabilities within Level 3 of the fair value hierarchy because they are valued using valuation models with significant unobservable inputs. The following table provides a reconciliation of liabilities measured at fair value using significant unobservable inputs (Level 3) for the year ended December 31, 2016 (in thousands):

| | Common Stock Warrant Liabilities |
|---|---|
| Balance at December 31, 2013 | $ — |
| Issuance | 11,280 |
| Changes in fair value | (2,578) |
| Balance at December 31, 2014 | 8,702 |
| Changes in fair value | (8,015) |
| Balance at December 31, 2015 | 687 |
| Changes in fair value | 387 |
| Conversion to common stock | (1,074) |
| Balance at December 31, 2016 | $ — |

Prior to the conversion to common stock described in Note 6, the common stock warrant liabilities were measured at fair value using the Black-Scholes option pricing valuation model. The assumptions used in the Black-Scholes option pricing valuation model for the common stock warrant liabilities were: (a) a risk-free interest rate based on the rates for U.S. Treasury zero-coupon bonds with maturities similar to those of the remaining contractual term of the warrants; (b) an assumed dividend yield of zero based on the Company's expectation that it will not pay dividends in the foreseeable future; (c) an expected term based on the remaining contractual term of the warrants; and (d) an expected volatility based upon the Company's historical volatility over the remaining contractual term of the warrants. The significant unobservable input used in measuring the fair value of the common stock warrant liabilities associated with the Deerfield Facility Agreement (described in Note 6 below) was the expected volatility.

*Research and Development*

Research and development expense consists of costs associated with the design, development, testing, and enhancement of the Company's products. Research and development costs also include salaries and related employee benefits, research-related overhead expenses, fees paid to external service providers, and costs associated with the Company's Scientific Advisory Board and Executive Surgeon Panels. Research and development costs are expensed as incurred.

*In-Process Research and Development*

In-process research and development ("IPR&D") consists of acquired research and development assets that are not part of an acquisition of a business and were not technologically feasible on the date the Company acquired them and had no alternative future use at that date or assets acquired in a business acquisition that are determined to have no alternative future use. The Company expects all acquired IPR&D will reach technological feasibility, but there can be no assurance that commercial viability of these products will ever be achieved. The nature of the efforts to develop the acquired technologies into commercially viable products consists principally

of planning, designing, developing and testing products in order to obtain regulatory approvals. If commercial viability were not achieved, the Company would likely look to other alternatives to provide these products. Until the technological feasibility of the acquired research and development assets are established, the Company expenses these costs.

*Leases*

The Company leases its facilities and certain equipment and vehicles under operating leases, and certain equipment under capital leases. For facility leases that contain rent escalation or rent concession provisions, the Company records the total rent payable during the lease term on a straight-line basis over the term of the lease. The Company records the difference between the rent paid and the straight-line rent within accrued expenses in the accompanying consolidated balance sheets.

*Product Shipment Cost*

Product shipment costs are included in sales and marketing expense in the accompanying consolidated statements of operations. Product shipment costs totaled $2.7 million, $3.0 million and $3.0 million for the years ended December 31, 2016, 2015 and 2014, 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, 2016 was based on a weighted-average volatility of its actual historical volatility over a period equal to the expected remaining life of the awards.
- The expected term represents the period of time that awards granted are expected to be outstanding. Through December 31, 2016, 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 used historical data to estimate the number of future stock option forfeitures. Stock-based compensation recorded in the Company's consolidated statement 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 non-employee awards are remeasured at each reporting period end and 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.

*Valuation of Stock Option Awards*

The assumptions used to compute the stock-based compensation costs for the stock options granted during the years ended December 31, 2016, 2015 and 2014 are as follows:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Risk-free interest rate | 1.78% | 1.6-1.8% | 1.8-1.9% |
| Expected dividend yield | — | — | — |
| Weighted average expected life (years) | 5.69 | 5.4-5.5 | 5.4-5.5 |
| Volatility | 78% | 59-68% | 60-71% |

*Stock-Based Compensation Costs*

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

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Cost of revenues | $ 36 | $ 72 | $ 274 |
| Research and development | 438 | 286 | 2,080 |
| Sales and marketing | 258 | 316 | 385 |
| General and administrative | 894 | 1,893 | 1,665 |
| Discontinued operations | — | 76 | 150 |
| Total | $ 1,626 | $ 2,643 | $ 4,554 |

The amounts provided above include stock-based compensation expense of $0.2 million, $0.1 million and $1.9 million during the years ended December 31, 2016, 2015 and 2014, respectively, related to the vesting of stock options and awards granted to non-employees under consulting agreements.

*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 common shares outstanding for the period, as adjusted for the 1-for-12 reverse stock split, 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 common shares outstanding for the period and the weighted average number of dilutive common stock equivalents outstanding for the period determined using the treasury-stock method, as adjusted for the 1-for-12 reverse stock split. For purposes of this calculation, common stock subject to repurchase by the Company, 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, as adjusted for the 1-for-12 reverse stock split stock split (in thousands, except per share data):

| | Year Ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | 2014 | |
| | Continuing operations | Discontinued operations | Continuing operations | Discontinued operations | Continuing operations | Discontinued operations |
| Numerator | | | | | | |
| Net loss, basic | $ (26,301) | $ (3,624) | $ (171,253) | $ (7,423) | $ (98) | $ (12,784) |
| Decrease in fair value of warrants | — | — | — | — | (2,578) | — |
| Diluted net loss attributable to common stockholders | (26,301) | (3,624) | (171,253) | (7,423) | (2,676) | (12,784) |
| Denominator | | | | | | |
| Weighted average common shares outstanding | 8,646 | 8,646 | 8,365 | 8,365 | 8,178 | 8,178 |
| Weighted average unvested common shares subject to repurchase | (64) | (64) | (68) | (68) | (66) | (66) |
| Weighted average common shares outstanding - basic | 8,582 | 8,582 | 8,298 | 8,298 | 8,112 | 8,112 |
| Effect of dilutive securities: | | | | | | |
| Common stock warrants | — | — | — | — | 32 | 32 |
| Weighted average common shares outstanding, diluted | 8,582 | 8,582 | 8,298 | 8,298 | 8,145 | 8,145 |
| Basic net loss per share | $ (3.06) | $ (0.42) | $ (20.64) | $ (0.89) | $ (0.01) | $ (1.58) |
| Diluted net loss per share | $ (3.06) | $ (0.42) | $ (20.64) | $ (0.89) | $ (0.33) | $ (1.57) |

As of December 31, 2016, 2015 and 2014, none of the outstanding shares of redeemable preferred stock were convertible to common stock.

The anti-dilutive securities not included in diluted net loss per share were as follows, as adjusted for the 1-for-12 reverse stock split (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Options to purchase common stock | 604 | 662 | 588 |
| Warrants to purchase common stock | 8 | 962 | 60 |
| Unvested restricted stock awards | 177 | 68 | 66 |
| | 789 | 1,691 | 714 |

*Recent Accounting Pronouncements*

In May 2014, the Financial Accounting Standards Board ("FASB") issued new accounting guidance related to revenue recognition. This new standard replaces all current U.S. GAAP guidance on this topic and eliminates all industry-specific guidance. The new revenue recognition standard provides a unified model to determine when and how revenue is recognized. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration for which the entity expects to be entitled in exchange for those goods or services. This guidance, including all subsequent clarifications, is effective for the Company for annual and interim reporting periods in fiscal years beginning after December 15, 2017 and can be applied either retrospectively to each period presented or as a cumulative-effect adjustment as of the date of adoption. The Company performed a preliminary assessment of the impact of the new standard on the consolidated financial statements, and considered all items outlined in the standard. In assessing the impact, the Company has outlined all revenue generating activities, mapped those activities to deliverables and traced those deliverables to the standard. The Company is now assessing what impact the change in standard will have on those deliverables. The Company will continue to evaluate the future impact and method of adoption of the new standard and related amendments on the consolidated financial statements and related disclosures throughout 2017. The Company will adopt the new standard beginning January 2018.

In August 2014, the FASB issued guidance related to disclosures of uncertainties about an entity's ability to continue as a going concern. The guidance requires management to evaluate whether there are conditions and events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the financial statements are issued. Management is required to make this evaluation for both annual and interim reporting periods and will have to make certain disclosures if it concludes that substantial doubt exists or when its plans alleviate substantial doubt about the entity's ability to continue as a going concern. Substantial doubt exists when relevant conditions and events, considered in the aggregate, indicate that it is probable that the entity will be unable to meet its obligations as they become due within one year after the date that the financial statements are issued. The guidance is effective for annual periods ending after December 15, 2016 and for interim reporting periods thereafter. The Company adopted the standard for the annual reporting period ending December 31, 2016.

In April 2015, the FASB issued guidance, which amends current presentation guidance by requiring that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. Prior to the issuance this guidance, debt issuance costs were required to be presented as an asset in the balance sheet. The Company adopted the provisions of the new guidance during the interim period ended March 31, 2016 and prior period amounts have been reclassified to conform to the current period presentation. As of December 31, 2015, $0.4 million of debt issuance costs were reclassified in the consolidated balance sheet from prepaid expenses and other current assets to current portion of long-term debt. The adoption of ASU 2015-03 did not impact the Company's consolidated statement of operations, comprehensive income (loss) or cash flows.

In July 2015, the FASB issued new accounting guidance, which changes the measurement principle for inventory from the lower of cost or market to lower of cost and net realizable value for entities that do not measure inventory using the last-in, first-out or retail inventory method. The guidance also eliminates the requirement for these entities to consider replacement cost or net realizable value less an approximately normal profit margin when measuring inventory. The guidance is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. The Company is evaluating the impact of adopting this new accounting standard on its financial statements.

In February 2016, the FASB issued new accounting guidance, which changes several aspects of the accounting for leases, including the requirement that all leases with durations greater than twelve months be recognized on the balance sheet. The guidance is effective for annual periods and interim periods in fiscal years beginning after December 15, 2018. The Company is evaluating the impact of adopting this new accounting standard on its financial statements.

In March 2016, the FASB issued new accounting guidance, which changes several aspects of the accounting for share-based payment award transactions, including accounting and cash flow classification for excess tax benefits and deficiencies, forfeitures, and tax withholding requirements and cash flow classification. The guidance is effective for annual periods and interim periods in fiscal years beginning after December 15, 2016. The Company is evaluating the impact of adopting this new accounting standard on its financial statements.

In August 2016, the FASB issued new accounting guidance, which eliminates the diversity in practice related to the classification of certain cash receipts and payments in the statement of cash flows, by adding or clarifying guidance on eight specific cash flow issues. The guidance is effective for annual and interim reporting periods beginning after December 15, 2017, with early adoption permitted. The amendments in this update should be applied retrospectively to all periods presented, unless deemed impracticable, in which case, prospective application is permitted. The Company is currently evaluating the new guidance and has not determined the impact this standards update may have on its financial statements.

## 3. Balance Sheet Details

### *Accounts Receivable, net*

Accounts receivable consist of the following (in thousands):

| | December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Accounts receivable | $ 19,870 | $ 27,639 |
| Less allowance for doubtful accounts | (1,358) | (769) |
| Accounts receivables, net | $ 18,512 | $ 26,870 |

***Inventories, net***

Inventories consist of the following (in thousands):

| | December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Raw materials | $ 7,301 | $ 7,237 |
| Work-in-process | 823 | 1,908 |
| Finished goods | 38,469 | 39,388 |
| | 46,593 | 48,533 |
| Less reserve for excess and obsolete finished goods | (16,500) | (15,901) |
| Inventories, net | $ 30,093 | $ 32,632 |

***Property and Equipment, net***

Property and equipment consist of the following (in thousands except for useful lives):

| | Useful lives (in years) | December 31, | |
|---|---|---|---|
| | | 2016 | 2015 |
| Surgical instruments | 4 | $ 53,095 | $ 52,404 |
| Machinery and equipment | 7 | 5,435 | 14,416 |
| Computer equipment | 3 | 3,511 | 3,816 |
| Office furniture and equipment | 5 | 2,695 | 3,426 |
| Leasehold improvements | various | 3,467 | 3,467 |
| Construction in progress | n/a | 445 | 139 |
| | | 68,648 | 77,668 |
| Less accumulated depreciation and amortization | | (53,572) | (61,587) |
| Property and equipment, net | | $ 15,076 | $ 16,081 |

Total depreciation expense was $7.4 million, $10.8 million and $9.5 million for the years ended December 31, 2016, 2015 and 2014, respectively. At December 31, 2016, assets recorded under capital leases of $2.1 million were included in the machinery and equipment balance. At December 31, 2015, assets recorded under capital leases of $2.6 million were included in the machinery and equipment balance and $0.1 million are included in the construction in progress balance. Amortization of assets under capital leases is included in depreciation expense.

***Intangible Assets***

Intangible assets consist of the following (in thousands except for useful lives):

| | Remaining Avg. Useful lives (in years) | December 31, | |
|---|---|---|---|
| | | 2016 | 2015 |
| Developed product technology | — | $ 13,876 | $ 13,876 |
| Intellectual property | — | 1,004 | 1,004 |
| License agreements | 2 | 5,265 | 5,015 |
| Trademarks and trade names | — | 732 | 732 |
| Customer-related | 8 | 7,458 | 7,458 |
| Distribution network | 8 | 4,027 | 4,027 |
| | | 32,362 | 32,112 |
| Less accumulated amortization | | (26,651) | (23,306) |
| Intangible assets, net | | $ 5,711 | $ 8,806 |

Total expense related to amortization of intangible assets was $1.6 million, $3.0 million and $2.2 million for the years ended December 31, 2016, 2015 and 2014, respectively.

In connection with the sale of the International Business (see Note 4), the Company determined that certain intangible assets related to the Company's previous acquisition of Scient'x, including customer relationships, distribution network and key product tradename intangible assets, no longer had a business purpose and no cash flows associated with these assets are expected in the future. As a result, the Company recorded $1.7 million as intangible impairment expense during the year ended December 31, 2016. Prior to the impairment, amortization of these intangible assets had been recorded in amortization of acquired intangible assets within operating expenses.

During 2016, due to revised marketing strategies for an interbody fusion device, the Company evaluated the related intangible asset for impairment. As a result of this impairment analysis, the Company expensed $0.5 million as an impairment charge in cost of goods sold in 2016 for the write-off of intangible asset related to this product.

During 2015, the Company entered into an exclusive distribution agreement with a third party to market a biologic product. The Company expensed $0.3 million as an impairment charge in cost of goods sold in 2016 for the write-off of an intangible asset related to this product. Additionally, due to a revised marketing strategy for the Company's Epicage interbody fusion device, the Company evaluated the related intangible asset for impairment. As a result of this impairment analysis, the Company expensed $0.9 million as an impairment charge in cost of goods sold in 2015 for the write-off of an intangible asset related to this product.

In connection with the step two goodwill impairment test performed in the third quarter of 2015, the Company determined that the physician education intangible acquired in the Scient’x acquisition was impaired. As a result, the Company expensed $0.9 million included in goodwill and intangible impairment of discontinued operations in the year ended December 31, 2015.

The future expected amortization expense related to intangible assets as of December 31, 2016 is as follows (in thousands):

| Year Ending December 31, | |
|---|---|
| 2017 | $ 936 |
| 2018 | 750 |
| 2019 | 689 |
| 2020 | 688 |
| 2021 | 688 |
| Thereafter | 1,960 |
| Total | $ 5,711 |

***Goodwill***

The changes in the carrying amount of goodwill from December 31, 2015 through December 31, 2016 were as follows (in thousands):

| | 2016 | 2015 |
|---|---|---|
| Balance at January 1 | $ — | $ 171,333 |
| Impairment charge | — | (164,263) |
| Effect of foreign exchange rate on goodwill | — | (7,070) |
| Balance at December 31 | $ — | $ — |

In the third quarter of 2015, the market value of the Company’s common stock substantially declined. As a result of this decline, the Company determined that it had an indicator of impairment of its goodwill, and an interim test of goodwill impairment was required. As a result of this interim test, the Company recorded a charge of $164.3 million, representing the write-off of the remaining balance of goodwill in the third quarter of 2015.

***Accrued Expenses***

Accrued expenses consist of the following (in thousands):

| | December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Commissions and sales milestones | $ 4,202 | $ 3,963 |
| Payroll and payroll related | 2,384 | 3,947 |
| Litigation settlements | 4,400 | 4,400 |
| Globus related accruals | 3,830 | — |
| Accrued professional fees | 3,093 | 1,972 |
| Royalties | 1,347 | 1,199 |
| Restructuring and severance accruals | 1,328 | 505 |
| Accrued taxes | 404 | 765 |
| Guaranteed collaboration compensation, current | 2,228 | — |
| Accrued interest | 387 | 999 |
| Other | 3,986 | 3,425 |
| Total accrued expenses | $ 27,589 | $ 21,175 |

**4. Discontinued Operations**

In order to pay down a portion of its debt and improve its liquidity position and future cash flows, on September 1, 2016, the Company closed the Globus Transaction (described in Note 1). Following the closing of the Globus Transaction, the Company only sells its products in the U.S. market and is prohibited from marketing and selling its products outside the United States and its possessions and territories until the date that is two years following the termination of the Supply Agreement (as described below). As a result of the Globus Transaction, the Company has retrospectively revised the consolidated statements of operations and cash flows for the years ended December 31, 2015 and 2014 and the consolidated balance sheet as of December 31, 2015 to reflect the financial results from the International Business, and the related assets and liabilities, as discontinued operations.

At the closing of the Globus Transaction, Globus paid the Company $80 million in cash, subject to a working capital adjustment. On September 1, 2016, the Company used approximately $66 million of the consideration received to (i) repay in full all amounts outstanding and due under the Company's Deerfield Facility Agreement (described in Note 6 below) and (ii) repay certain of its outstanding indebtedness under the Company's Amended Credit Facility with MidCap (described in Note 6 below), in each case, including debt-related costs. Also on September 1, 2016, the Company entered into a five-year term credit, security and guaranty agreement with Globus (the "Globus Facility Agreement"), as further described in Note 6, pursuant to which Globus agreed to loan the Company up to $30 million, subject to the terms and conditions set forth in the Globus Facility Agreement.

The following table summarizes the preliminary calculation of the gain on sale (in thousands):

| | |
|---|---|
| Consideration received | $ 80,000 |
| Cash included in assets sold | (4,250) |
| Transaction costs | (5,960) |
| Net cash proceeds | 69,790 |
| Less: | |
| Product supply obligation | (1,927) |
| Working capital adjustment | (2,295) |
| Carrying value of business and assets sold | (57,633) |
| Net gain on sale of business | $ 7,935 |

The Company is evaluating certain income tax related items that are pending final resolution.

The results of operations from discontinued operations presented below include certain allocations that management believes fairly reflect the utilization of services provided to the International Business. The allocations do not include amounts related to general corporate administrative expenses. Therefore, the results of operations from the International Business do not necessarily reflect what the results of operations would have been had the International Business operated as a stand-alone entity.

In connection with the Globus Transaction, the Company entered into a product manufacture and supply agreement (the "Supply Agreement") with Globus, pursuant to which the Company agreed to supply to Globus certain of its implants and instruments (the "Products"), 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. In accordance with authoritative guidance, certain intercompany sales transactions have been reported under continuing operations as the Company will have continuing involvement due to future sales to Globus under the Supply Agreement. In connection with the Globus Transaction, Globus received a credit of up to a $2.2 million to be applied against product purchases pursuant to the Supply Agreement during a six-month period commencing one month after the closing of the Globus Transaction, which has been included as a reduction of the consideration received for the sale of the International Business and will be recognized as revenue upon fulfilment by the Company of product purchases by Globus.

The agreements entered into concurrently with the sale of the International Business, including the Transition Services Agreement and the Supply Agreement, contain various elements and, as such, are deemed to be an arrangement with multiple deliverables as defined under authoritative accounting guidance (see Note 2). Several non-contingent deliverables were identified within the agreements. The Company identified the International Business, contract supply services, transition services and the Globus Facility as separate non-contingent deliverables within the arrangement. The Company determined the estimated selling price (fair value) for each of the non-contingent deliverables on a standalone basis by utilizing relevant market data and entity-specific factors. Based on the respective standalone fair values of the deliverables, there was no discount to allocate among the deliverables and the consideration received for each deliverable approximated standalone fair value. As such, none of the purchase consideration was allocated to these elements.

Included in the results of continuing operations for the years ended December 31, 2016, 2015 and 2014 are revenues of $10.3 million, $19.2 and $27.1 million, respectively, and cost of revenue of $8.9 million, $18.5 and $25.7 million, respectively, that represent intercompany transactions that, prior to the Globus Transaction, were eliminated in the Company's consolidated financial statements.

During the year ended December 31, 2016, the Company recorded $2.6 million in revenue and $2.3 million in cost of sales from the Supply Agreement that are included in the continuing operations.

In connection with the Globus Transaction, the Company included interest expense of $7.0 million, $8.6 million and $10.6 million for the years ended December 31, 2016, 2015 and 2014, respectively, under the Deerfield Facility Agreement and Amended Credit Facility (as further described in Note 6) in net loss from discontinued operations to the extent these debt facilities were repaid using the proceeds from the Globus Transaction.

The following table summarizes the results of discontinued operations for the periods presented in the consolidated statements of operations for the years ended December 31, 2016 and 2015 and 2014 (in thousands):

| | Years ended December 31, | | |
|---|---|---|---|
| **Discontinued operations** | **2016** | **2015** | **2014** |
| Revenues | $ 40,130 | $ 50,891 | $ 52,355 |
| Cost of revenues | 19,381 | 17,376 | 16,826 |
| Amortization of acquired intangible assets | 1,291 | 1,453 | 1,787 |
| Gross profit | 19,458 | 32,062 | 33,742 |
| Operating (income) expenses: | | | |
| Research and development | 51 | 152 | 206 |
| Sales and marketing | 12,980 | 19,055 | 21,397 |
| General and administrative | 4,846 | 6,741 | 11,075 |
| Amortization of intangible assets | 622 | 1,200 | — |
| Goodwill and intangible impairment | — | 908 | — |
| Restructuring expenses | 794 | 591 | 706 |
| Net gain on sale of business | (7,935) | — | — |
| Total operating expenses | 11,358 | 28,647 | 33,384 |
| Operating income | 8,100 | 3,415 | 358 |
| Other income (expense): | | | |
| Interest income | 45 | 42 | — |
| Interest expense | (7,004) | (8,588) | (10,594) |
| Other income (expense), net | 1,883 | (466) | (1,869) |
| Total other income (expense) | (5,076) | (9,012) | (12,463) |
| Income (loss) from discontinued operations before taxes | 3,024 | (5,597) | (12,105) |
| Income tax provision | 6,648 | 1,826 | 679 |
| Loss from discontinued operations, net of applicable taxes | $ (3,624) | $ (7,423) | $ (12,784) |

The following table summarizes the assets and liabilities of discontinued operations as of December 31, 2016 and 2015 related to the International Business (in thousands):

| | December 31, 2016 | December 31, 2015 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash | $ 159 | $ 4,934 |
| Accounts receivable, net | — | 11,449 |
| Inventories, net | 48 | 12,276 |
| Prepaid expenses and other current assets | 157 | 1,551 |
| Total current assets of discontinued operations | 364 | 30,210 |
| Property and equipment, net | — | 5,850 |
| Intangible assets, net | — | 12,810 |
| Other assets | 61 | 797 |
| Total assets of discontinued operations | $ 425 | $ 49,667 |
| **Liabilities** | | |
| Current liabilities: | | |
| Accounts payable | $ 43 | $ 627 |
| Accrued expenses | 689 | 8,616 |
| Deferred revenue | — | 648 |
| Total current liabilities of discontinued operations | 732 | 9,891 |
| Other long-term liabilities | — | 1,516 |
| Total liabilities of discontinued operations | $ 732 | $ 11,407 |

Included in the statement of cash flows for the year ended December 31, 2016 and 2015 are the following capital expenditures and non-cash adjustments related to the discontinued operations (in thousands):

| | Year ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Depreciation and amortization | $ 3,836 | $ 5,261 | $ 6,595 |
| Provision for doubtful accounts | $ — | $ 170 | $ — |
| Provision for excess and obsolete inventory | $ 151 | $ 380 | $ 954 |
| Capital expenditures | $ 1,319 | $ 2,975 | $ 2,946 |
| Interest expense related to amortization of debt discount and debt issuance costs | $ 2,052 | $ 2,627 | $ 4,944 |

**5. License and Consulting Agreements**

***OsseoFix Spinal Fracture Reduction System License Agreement***

On April 16, 2009, the Company and Stout Medical Group LP ("Stout") amended the license agreement that the parties had entered into in September 2007 (the "License Amendment") that provides the Company with a worldwide license to develop and commercialize Stout's proprietary intellectual property related to a treatment for vertebral compression fractures. The effective date of the License Amendment is March 31, 2009. Under the License Amendment, the timing of the minimum royalty payments has been adjusted and Stout's ability to terminate the License Amendment was revised. Under the original license agreement, the Company's minimum royalty obligation began in the year ending December 31, 2009 and there are milestones due upon attainment of sales volumes. Pursuant to the License Amendment, the minimum royalty obligation is suspended until a licensed product obtains regulatory approval from the United States Food and Drug Administration (the "FDA"). In addition, under the terms of the License Amendment, Stout has the ability to terminate the License Amendment if the Company is not using commercially reasonable efforts to obtain regulatory approval to market and sell a licensed product; provided that the Company has the right to delay such termination in exchange for making certain payments to Stout. If, during the time period when such payments are made, the Company were to make a regulatory filing for the marketing and sale of a licensed product, such termination will be null and void. Pursuant to the License Amendment, Stout is entitled to retain all up-front payments that had been previously paid to it. The other material terms of the license agreement were not changed in the License Amendment.

In August 2014, the Company entered a third amendment (the "Third Amendment") to the License Agreement. Pursuant to the Third Amendment: (i) the royalty rate paid by the Company for the net sales of licensed products is a fixed amount per quarter through December 31, 2016; (ii) the royalty rate starting in 2017 will be increased from 7.0% to 8.5%; (ii) starting in 2017, the minimum royalty obligation is $0.2 million per year, with such minimum royalty obligation being further reduced stating in 2018; (iii) the territory is amended so that the United States is removed from the territory in which the Company can sell and market licensed products; (iv) all obligations of the Company to pursue a clinical trial in the United States are deleted; and (v) all milestone payments based on the achievement of certain sales milestones are deleted. In connection with this amendment the Company reversed the $1.7 million accrual it had recorded for the sales milestone payment into cost of goods sold for the year ended December 31, 2014.

***Asset Purchase Agreement***

In July 2014, the Company entered into an asset purchase and product development services agreement (the "Asset Agreement") whereby the Company purchased rights to the conceptual design for an intervertebral implant device. The financial terms of the Agreement include payments in cash and the Company's common stock upon achievement of various milestones. The Company accounted for this arrangement as an asset acquisition. In the year ended December 31, 2014, the Company made cash payments totaling $0.2 million and issued 72,992 shares of the Company's common stock valued at $0.1 million. The Company recognized the cash and stock payments of $0.3 million as in-process research and development expense in the year ended December 31, 2014. Under the terms of the Asset Agreement as amended in 2015 the Company was obligated to pay $0.2 million cash compensation and issue 72,992 shares of the Company's common stocks valued at less than $0.1 million. The Company expensed $0.3 million as in-process research and development in the year ended December 31, 2015.

**6. Debt**

***MidCap Facility Agreement***

On August 30, 2013, the Company entered into the amended and restated credit, security and guaranty agreement with MidCap Funding IV, LLC ("MidCap"), as amended to date (the "Amended Credit Facility"), which amended and restated the prior credit facility that the Company had with MidCap. On September 1, 2016, the Company and MidCap entered into a Fifth Amendment to the Amended Credit Facility (the "MidCap Fifth Amendment") that: (a) permitted (i) the Globus Transaction, (ii) the release of Alphatec

International LLC and Alphatec Pacific, Inc. as credit parties, (iii) the payment in full of all obligations to Deerfield Private Design Fund II, L.P., Deerfield Private Design International II, L.P., Deerfield Special Situations Fund, L.P. and Deerfield Special Situations International Master Fund, L.P. (collectively, "Deerfield") under the Facility Agreement between the Company and Deerfield, dated as of March 17, 2014, as amended to date (the "Deerfield Facility Agreement"), and (iv) the incurrence of debt under the Globus Facility Agreement and the granting of liens in favor of Globus; (b) reduced the revolving credit commitment to $22.5 million and the term loan commitment to $5 million; (c) revised the existing financial covenant package; and (d) extended the commitment expiry date from December 31, 2016 to December 31, 2019. In connection with the prepayment of the term loan under the Amended Credit Facility, the Company incurred a prepayment fee of $0.6 million payable to MidCap.

As of December 31, 2016, $12.5 million was outstanding under the revolving line of credit and $4.8 million was outstanding under the term loan.

The term loan interest rate is priced at the London Interbank Offered Rate ("LIBOR") plus 8.0%, subject to a 9.5% floor, and the revolving line of credit interest rate remains priced at LIBOR plus 6.0%, reset monthly. At December 31, 2016, the revolving line of credit carried an interest rate of 6.6% and the term loan carries an interest rate of 9.5%. The borrowing base is determined, from time to time, based on the value of domestic eligible accounts receivable and domestic eligible inventory. As collateral for the Amended Credit Facility, the Company granted MidCap a security interest in substantially all of its assets, including all accounts receivable and all securities evidencing its interests in its subsidiaries. In addition to monthly payments of interest, monthly repayments of $0.2 million in 2017 and $0.3 million in 2018 through maturity are due, with the remaining principal due upon maturity.

The Amended Credit Facility includes traditional lending and reporting covenants including a liquidity calculation and a fixed charge coverage ratio to be maintained by the Company. The Amended Credit Facility also includes 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 MidCap's right to declare all outstanding obligations immediately due and payable. The financial covenants of the Amended Credit Facility are not effective until April 2018 (See Note 15). There is no assurance that the Company will be in compliance with the financial covenants of the Amended Credit Facility in the future.

On March 11, 2016, the Company entered into a third amendment and waiver to the Amended Credit Facility with MidCap (the "Third Amendment to the Amended Credit Facility"). The Third Amendment to the Amended Credit Facility extended the maturity date of the Amended Credit Facility from August 30, 2016 to December 31, 2016 and contained an amendment fee in the amount of $0.5 million, which was due and payable at the earlier of the termination of the Amended Credit Facility or the maturity date. The Third Amendment to the Amended Credit Facility also contained a waiver of the December 2015 defaults under the Amended Credit Facility, provided a waiver for the fixed charge coverage ratio for January 2016 and eliminated the fixed charge coverage ratio covenant for February 2016.

On August 8, 2016, the Company entered into a Fourth Amendment to the Amended Credit Facility with MidCap (the "Fourth Amendment to the Amended Credit Facility"). The Fourth Amendment to the Amended Credit Facility provided for a $2.2 million increase to the borrowing base until September 15, 2016, and included an amendment fee of $0.2 million, which was due and payable on August 8, 2016. The Fourth Amendment to the Amended Credit Facility also contained a waiver for the May and June 2016 non-compliances.

At December 31, 2016, unamortized debt discount related to the prior and Amended Credit Facility within the consolidated balance sheet was $1.9 million, which will be amortized over the remaining term of the Amended Credit Facility.

***Deerfield Facility Agreement***

On March 17, 2014, the Company entered into the Deerfield Facility Agreement, pursuant to which Deerfield agreed to loan the Company up to $50 million, subject to the terms and conditions set forth in the Deerfield Facility Agreement. Under the terms of the Deerfield Facility Agreement, the Company had the option, but was not required, upon certain conditions to draw the entire amount available under the Deerfield Facility Agreement, at any time until January 30, 2015, provided that the initial draw be used for a portion of the payments made in connection with the Orthotec settlement described in Note 8 below. The Company agreed to pay Deerfield, upon each disbursement of funds under the Deerfield Facility Agreement, a transaction fee equal to 2.5% of the principal amount of the funds disbursed.

In connection with the execution of the Deerfield Facility Agreement on March 17, 2014, the Company issued to Deerfield warrants to purchase an aggregate of 520,833 shares of the Company's common stock, which are immediately exercisable and have an exercise price equal to $16.68 per share (the "Initial Warrants"). Additionally, the Company agreed that each disbursement borrowing under the Deerfield Facility Agreement be accompanied by the issuance to Deerfield of warrants to purchase up to 833,333 shares of the Company's common stock, in proportion to the amount of draw compared to the total $50 million facility (the "Draw Warrants").

On March 20, 2014, the Company made an initial draw of $20 million under the Deerfield Facility Agreement and received net proceeds of $19.5 million to fund the portion of the settlement payment obligations that were due in 2014 to Orthotec, LLC. The $0.5 million transaction fee was recorded as a debt discount and was being amortized over the term of the draw, which ends March 20, 2019. In connection with this borrowing, the Company issued Draw Warrants to purchase 333,333 shares of common stock at an exercise price of $16.68 per share, which were valued at $4.7 million and recorded as a debt discount, which were being amortized over the term of the $20 million draw. Additionally, $2.3 million of the value of the Initial Warrants was reclassified as a debt discount and is being amortized through interest expense over the term of the debt using the effective interest method.

On November 21, 2014, the Company made a second draw of $6.0 million under the Deerfield Facility Agreement and received net proceeds of $5.9 million to fund a portion of the Orthotec settlement payments due through 2016. The $0.2 million transaction fee was recorded as a debt discount and was being amortized over the remaining term of the draw, which ends March 20, 2019. In connection with this second draw, the Company issued Draw Warrants to purchase 100,000 shares of common stock at an exercise price of $16.68 per share, which Draw Warrants were valued at $0.9 million and were recorded as a debt discount, which was being amortized over the term of the debt using the effective interest method. Additionally, $0.2 million of the value of the Initial Warrants was reclassified as a debt discount and was being amortized through interest expense over the term of the debt using the effective interest method. No amounts remain available for the Company to borrow under the Facility Agreement.

On February 5, 2016, the Company entered into a Limited Waiver and Second Amendment to the Deerfield Facility Agreement (the "Deerfield Facility Agreement Second Amendment") with Deerfield. The Deerfield Facility Agreement Second Amendment increased the interest rate under the Facility Agreement from 8.75% per annum to 14.75% per annum. In addition, the Deerfield Facility Agreement Second Amendment provided that the Company may elect to have (i) until August 30, 2016, six percent (6%), and (ii) thereafter, three percent (3%), in each case, of the interest on the outstanding principal amount under the Facility Agreement paid in kind, which would be added to the outstanding principal amount under the Deerfield Facility Agreement and bear interest at the interest rate of 14.75% per annum (the "PIK Interest"). All accrued and unpaid PIK Interest was due and payable when the outstanding amounts under the Facility Agreement were due and payable thereunder or were fully repaid, whichever occurs first. The Deerfield Facility Agreement Second Amendment also contained an amendment fee in the amount of $0.6 million, which was due and payable in installments of $0.2 million on each of the third, fourth and fifth anniversaries of the Deerfield Facility Agreement; provided that all unpaid amendment fees shall be due and payable when the outstanding amounts under the Facility Agreement are due and payable or are fully repaid, whichever occurs first. The Deerfield Facility Agreement Second Amendment also changed the date from March 31, 2017 to March 31, 2018, as the date through which the Company must pay interest in the event the Company prepays amounts outstanding under the Deerfield Facility Agreement prior to such date. The Second Amendment also contained a waiver of the defaults under the Deerfield Facility Agreement for the fixed charge coverage ratio for the month of January 2016.

In September 2016, in connection with the Globus Transaction, Deerfield exercised its right to convert all outstanding Initial Warrants and Draw Warrants into shares of the Company's common stock based on the Black-Scholes value of the warrants. The outstanding warrants were converted into 268,614 shares of the Company's common stock valued at $1.1 million.

On September 1, 2016, in connection with the Globus Transaction, the Company repaid in full all amounts outstanding and due under the Deerfield Facility Agreement and terminated the Deerfield Facility Agreement. Pursuant to the Globus Facility Agreement and the MidCap Fifth Amendment, the Company made a final payment of $33.5 million to Deerfield, consisting of outstanding principal and accrued interest of $27.9 million, a prepayment premium of $5.6 million and other related fees and wrote-off $3.9 million of unamortized expenses resulting in a loss on debt extinguishment of $9.5 million.

***Globus Facility Agreement***

On September 1, 2016, the Company and Globus entered into the Globus Facility Agreement, pursuant to which Globus agreed to loan the Company up to $30 million, subject to the terms and conditions set forth in the Globus Facility Agreement. At the closing of the Globus Transaction, the Company made an initial draw of $25 million under the Globus Facility Agreement with an additional draw of $5 million made in the fourth quarter of 2016. As of December 31, 2016, the outstanding balance under the Globus Facility Agreement was $30.0 million, which becomes due and payable in quarterly payments of $0.8 million starting in September 2018, with a final payment of the remaining amount outstanding due on September 1, 2021. The term loan interest rate is priced at LIBOR plus 8.0% through September 1, 2018, and LIBOR plus 13.0%, thereafter. At December 31, 2016, unamortized debt discount related to the Globus Facility Agreement within the consolidated balance sheet was $1.0 million, which will be amortized over the remaining term of the Globus Facility Agreement.

As collateral for the Globus Facility Agreement, the Company granted Globus a first lien security interest in substantially all of its assets, other than accounts receivable and related assets, which will secure the Globus Facility Agreement on a second lien basis. The Globus Facility Agreement includes traditional lending and reporting covenants including a liquidity calculation and a fixed charge coverage ratio to be maintained by the Company that are consistent with the covenants under the Amended Credit Facility. The financial covenants of the Globus Facility Agreement are not effective until April 2018 (See Note 15). There is no assurance that the

Company will be in compliance with the financial covenants of the Globus Facility Agreement in the future. The Globus Facility Agreement also includes 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 Globus's right to declare all outstanding obligations immediately due and payable.

***Other Debt Agreements***

The Company has various capital lease arrangements. The leases bear annual interest at rates ranging from 6.6% to 9.6%, are generally due in monthly principal and interest installments, are collateralized by the related equipment, and have various maturity dates through September 2018.

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

| | December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Amended Credit Facility with MidCap | $ 17,873 | $ 56,799 |
| Facility Agreement with Deerfield | — | 26,000 |
| Globus Facility Agreement | 30,000 | — |
| Notes payable | 1,395 | 1,788 |
| Total | 49,268 | 84,587 |
| Add: capital leases (See Note 7) | 480 | 1,277 |
| Less: debt discount | (3,543) | (5,642) |
| Total | 46,205 | 80,222 |
| Less: current portion of long-term debt | (3,113) | (79,742) |
| Total long-term debt, net of current portion | $ 43,092 | $ 480 |

Principal payments on debt are as follows as of December 31, 2016 (in thousands):

| Year Ending December 31, | |
|---|---|
| 2017 | $ 3,795 |
| 2018 | 4,046 |
| 2019 | 16,427 |
| 2020 | 3,333 |
| 2021 | 21,667 |
| Total | 49,268 |
| Add: capital lease principal payments | 480 |
| Less: debt discount | (3,543) |
| Total | 46,205 |
| Less: current portion of long-term debt | (3,113) |
| Long-term debt, net of current portion | $ 43,092 |

**7. Commitments and Contingencies**

***Leases***

In February 2008, the Company entered into a sublease agreement for office, engineering, and research and development space in Carlsbad, California. The Sublease term commenced May 2008 and ended on January 31, 2016. In January 2016, the Company entered into a new lease agreement (the "Building Lease") for the same property with the lease term through July 31, 2021. Under the new Building Lease the Company's monthly rent payable is approximately $105,000 per month during the first year and increases by approximately $3,000 per month each year thereafter.

The Company also leases certain equipment and vehicles under operating leases which expire on various dates through 2018, and certain equipment under capital leases which expire on various dates through 2017.

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

| Year ending December 31, | Operating | Capital |
|---|---|---|
| 2017 | $ 1,589 | $ 437 |
| 2018 | 1,557 | 68 |
| 2019 | 1,544 | — |
| 2020 | 1,585 | — |
| 2021 | 971 | — |
| Thereafter | — | — |
| | 7,246 | 505 |
| Less: amount representing interest | | (25) |
| Present value of minimum lease payments | | 480 |
| Current portion of capital leases | | (414) |
| Capital leases, less current portion | | $ 66 |

Rent expense under operating leases for the years ended December 31, 2016, 2015 and 2014 was $2.1 million, $1.8 million and $1.8 million, respectively.

***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 our 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.

***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.

***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 calculated either as a percentage of net sales or in one instance on a per-unit sold basis. Royalties are included on the accompanying consolidated statement of operations as a component of cost of revenues.

**8. 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 in totaling

$17.5 million, which the Company previously paid in 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. In September 2014, the Company and HealthpointCapital entered into an agreement for joint payment of settlement whereby HealthpointCapital has agreed to contribute $5 million to the $49 million settlement amount.

As of December 31, 2016, the Company has made installment payments in the aggregate of $27.4 million, with a remaining unpaid balance of $30.4 million. The Company has the right to prepay the amounts due without penalty. In addition, the unpaid balance of the amounts due accrues interest at the rate of 7% per year beginning May 15, 2014 until the amounts due are 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 provided 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.

**9. 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, 2016, 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, 2016 and 2015.

The redeemable preferred stock is presented separately from stockholders' deficit in the consolidated balance sheets and any adjustments to its carrying value up to its redemption value of $9.00 per share will be reported as a dividend.

**10. Stock Benefit Plans, Stock-Based Compensation and Equity Transactions**

In 2005, the Company adopted its 2005 Employee, Director, and Consultant Stock Plan (the "2005 Plan"). The 2005 Plan expired in April 2016. As of December 31, 2016, there were 615,902 shares issuable under the 2005 Plan.

In the third quarter of 2016, the Company adopted its 2016 Equity Incentive Plan (the "2016 Plan"), which replaced the 2005 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. At December 31, 2016, 392,659 shares of common stock remained available for issuance under the 2016 Plan. The 2016 Plan will expire in May 2026.

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 such new employee to begin employment with the Company. The Inducement Plan currently has 950,000 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. Under the Inducement Plan, the Company granted $0.8 million of value Performance Restricted Share Units ("PRSUs"). The PRSUs will vest in a dollar amount representing between 0% to 250% of the target value upon the earlier of September 14, 2019 or a change in control of the Company. The actual payout amount will be based on the Company's market capitalization on the vesting date and the fair-market value of the Company's common stock on such vesting date and will be paid in shares of the Company's common stock.

The 2005 Plan, the 2016 Plan and the Inducement Plan are cumulatively referred to as the Plans.

***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), as adjusted for the 1-for-12 reverse stock split:

| | Shares | Weighted average exercise price | Weighted average remaining contractual term (in years) | Aggregate intrinsic value |
|---|---|---|---|---|
| Outstanding at December 31, 2015 | 637 | $ 24.96 | 6.36 | $ — |
| Granted | 668 | $ 4.43 | — | — |
| Forfeited | (150) | $ 29.42 | — | — |
| Outstanding at December 31, 2016 | 1,155 | $ 12.17 | 7.75 | $ — |
| Options vested and exercisable at December 31, 2016 | 435 | $ 21.11 | 5.20 | $ — |
| Options vested and expected to vest at December 31, 2016 | 991 | $ 13.37 | 7.41 | $ — |

The weighted-average grant-date fair value per share of stock options granted during the years ended December 31, 2016, 2015 and 2014 was $4.43, $15.36 and $9.72, respectively. The aggregate intrinsic value of options at December 31, 2016 is based on the Company's closing stock price on that date of $3.21 per share.

As of December 31, 2016, there was $5.6 million of unrecognized compensation expense for stock options and awards which is expected to be recognized on a straight-line basis over a weighted average period of approximately 3.6 years. The total intrinsic value of options exercised was immaterial for the years ended December 31, 2016, 2015 and 2014.

***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), as adjusted for the 1-for-12 reverse stock split:

| | Shares | Weighted average grant date fair value | Weighted average remaining recognition period (in years) |
|---|---|---|---|
| Unvested at December 31, 2015 | 260 | $ 16.91 | 1.48 |
| Awarded | 969 | $ 5.79 | |
| Vested | (64) | $ 9.73 | |
| Forfeited | (73) | $ 16.65 | |
| Unvested at December 31, 2016 | 1,092 | $ 7.48 | 3.02 |

The weighted average fair value per share of awards granted during the years ended December 31, 2016, 2015 and 2014 was $5.79, $16.11 and $16.62 respectively.

***Performance-Based Restricted Stock Units***

In July 2014, the Company granted 77,666 performance-based restricted stock units ("PSUs") to certain employees under its 2005 Plan. The PSUs vest based upon the Company's achievement of certain performance goals over the period from July 1, 2014 through December 31, 2016. The number of PSUs that may vest varies between 0%-200% based on the achievement of such goals. The PSUs were valued at $17.04 per share based on the closing price of the Company's common stock on the date of grant. The performance criteria for the PSUs issued in 2014 was not met and they were cancelled in 2017.

In February 2015, the Company granted 154,500 PSUs to certain employees under its 2005 Plan. The PSUs vest based upon the Company's achievement of certain performance goals over the period from January 1, 2015 through December 31, 2017. The number of PSUs that may vest varies between 0%-200% based on the achievement of such goals. The PSUs were valued at $16.20 per share based on the closing price of the Company's common stock on the date of grant.

For purposes of measuring compensation expense, the amount of PSUs ultimately expected to vest is estimated at each reporting date based on management's expectations regarding the relevant performance criteria. The related compensation expense was $0.0 million, $0.2 million and $0.2 million for the years ended December 31, 2016, 2015 and 2014, respectively. The recognition of compensation expense associated with PSUs requires judgment in assessing the probability of meeting the performance goals, as well as defined criteria for assessing achievement of the performance-related goals.

***Elite Medical Holdings and Pac 3 Surgical Collaboration Agreement***

In October 2013, the Company entered into a three-year collaboration agreement with Elite Medical Holdings, LLC and Pac 3 Surgical Products, LLC (the "Collaborators") (the "Collaboration Agreement") to provide consultation services to assist the Company in the development of its products and its products in development. Under the terms of the collaboration agreement, the Company will gain exclusive rights to the use of all intellectual property developed by the collaborators. The Company agreed to make three annual payments to the collaborator as sole consideration for services provided, totaling an aggregate of up to $8 million, paid in common stock of Alphatec Holdings at a per share price of $23.35, which was equal to the average NASDAQ closing price of the common stock on the five days leading up to and including the date of signing the Collaboration Agreement. The actual number of shares issued each year will be determined by the fair market value of the services provided over the prior 12 months.

On November 2, 2015, the Company entered into a first amendment (the "First Amendment") to the Collaboration Agreement. Pursuant to the First Amendment, in exchange for a "lock up" restriction on selling or transferring each tranche of shares issued to the Collaborators and a maximum value cap, as discussed below, the Company has agreed to make a cash payment to the Collaborators in the event that the shares in such tranche do not have a minimum amount of value based on the market value of the Company's common stock at the end of the lock up period applicable to such tranche of shares. In addition, in the event that at the end of a lock up period the value of a tranche of shares issued to the Collaborators exceeds a certain amount, the Collaborators have agreed to forfeit shares back to the Company, so as to limit the maximum amount of value derived from such shares at the end of a lock up period. Pursuant to the First Amendment, the shares issued to the Collaborators in each of 2014, 2015 and 2016 are subject to a lock up that lasts until the first quarter of 2017, 2018 and 2019, respectively. The valuation of each tranche of shares occurs at the end of the applicable lock up period.

Based on the closing price of the Company's common stock on December 31, 2016, the Company has recorded a guaranteed compensation liability of $6.7 million for shares of the Company's common stock previously issued under the Collaboration Agreement, with $2.2 million payable in 2017, 2018 and 2019. The amount payable in 2017 is included in accrued expenses and the amounts payable in 2018 and 2019 are presented under other long-term liabilities in the consolidated balance sheet and represent the cash settlement amounts. If the Collaborators elect to sell, assign or transfer: (i) more than 20% of the shares issued to the Collaborators prior to the first valuation date; or (ii) any of the Collaborator shares still subject to a lockup after the first valuation date, all of the aforementioned restrictions on transfer and valuation minimums and maximums are null and void.

As of December 31, 2016, the Company has issued 342,356 shares of its common stock under this agreement and recorded expense of $2.1 million, $4.9 million and $1.9 million in the years ended December 31, 2016, 2015 and 2014, respectively, which is included in research and development expenses.

***SVB Warrants***

In December 2011, in connection with the third amendment to the Company's former credit facility with the SiliconValley Bank ("SVB"), finance charges totaling $0.2 million were waived in exchange for the issuance to SVB of warrants to purchase 7,812 shares of the Company's common stock. The warrants are immediately exercisable, can be exercised through a cashless exercise, have an exercise price of $19.20 per share and have a 10-year term.

***Common Stock Reserved for Future Issuance***

Common stock reserved for future issuance consists of the following (in thousands), as adjusted for the 1-for-12 reverse stock split:

| | December 31, 2016 |
|---|---|
| Stock options outstanding | 1,155 |
| Awards outstanding | 1,092 |
| Warrants outstanding | 8 |
| Authorized for future grant under 2016 and INDC Plans | 395 |
| | 2,650 |

**11. Income Taxes**

The components of the pretax income (loss) from continuing operations for the years ended December 31, 2016, 2015 and 2014 are as follows (in thousands):

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| U.S. Domestic | $ (29,898) | $ (88,614) | $ (3,821) |
| Foreign | (1,037) | (83,785) | 4,130 |
| Pretax income (loss) from operations | $ (30,935) | $ (172,399) | $ 309 |

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

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Current income tax (benefit) provision: | | | |
| Federal | $ (8) | $ 221 | $ — |
| State | 72 | 149 | 145 |
| Total current | 64 | 370 | 145 |
| Deferred income tax (benefit) expense: | | | |
| Federal | (4,269) | (1,363) | 238 |
| State | (429) | (153) | 24 |
| Total deferred | (4,698) | (1,516) | 262 |
| Total income tax (benefit) provision | $ (4,634) | $ (1,146) | $ 407 |

ASC 740-20 requires total income tax expense or benefit to be allocated among continuing operations, discontinued operations, extraordinary items, other comprehensive income and items charged directly to shareholders' equity. This allocation is referred to as intra-period tax allocation. The sale of the Company's international distribution operations and several foreign subsidiaries is reported under discontinued operations in the consolidated financial statements. Accordingly, we are required to allocate the provision for income taxes between continuing operations and discontinued operations. For the year ended December 31, 2016, we recognized a gain from discontinued operations before tax, and, as a result, we recorded a tax expense of $6.5 million in discontinued operations and a corresponding tax benefit to continuing operations.

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 income (loss) from continuing operations as a result of the following differences:

| | December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Federal statutory rate | (35.0)% | (35.0)% | (35.0)% |
| Adjustments for tax effects of: | | | |
| State taxes, net | (1.7)% | (0.3)% | (3.9)% |
| Stock-based compensation | 2.3% | 0.4% | (239.7)% |
| Foreign taxes | 0.1% | 0.1% | (17.2)% |
| Tax credits | — | (0.1)% | 123.3% |
| Deemed foreign dividend | — | 0.1% | — |
| Fair market value adjustments | 0.4% | (1.6)% | 293.4% |
| Intercompany debt forgiveness and other permanent adjustments | 0.3% | 0.1% | (29.9)% |
| Goodwill impairment | — | 30.5% | — |
| Tax rate adjustment | 0.3% | 0.3% | (16.3)% |
| Uncertain tax positions | (0.1)% | — | (54.0)% |
| Other | 0.9% | (4.3)% | 913.2% |
| Valuation allowance | 17.5% | 9.1% | (1,065.6)% |
| Effective income tax rate | (15.0)% | (0.7)% | (131.7)% |

The 2016 benefit for income taxes from continuing operations primarily consists of domestic losses net of state taxes.

Significant components of the Company's deferred tax assets and liabilities as of December 31, 2016 and 2015 are as follows (in thousands):

| | December 31, | |
|---|---|---|
| | 2016 | 2015 |
| Deferred tax assets: | | |
| Allowances and reserves | $ 705 | $ 955 |
| Accrued expenses | 1,452 | 2,331 |
| Inventory reserves | 7,071 | 9,631 |
| Net operating loss carryforwards | 37,444 | 43,427 |
| Property and equipment | 2,730 | 2,420 |
| Intangible asset | 3,291 | — |
| Stock-based compensation | 1,766 | 2,377 |
| Legal settlement | 11,494 | 11,806 |
| Goodwill | 3,029 | 3,362 |
| Income tax credit carryforwards | 5,429 | 3,235 |
| Total deferred tax assets | 74,411 | 79,544 |
| Valuation allowance | (58,202) | (63,612) |
| Total deferred tax assets, net of valuation allowance | 16,209 | 15,932 |
| Deferred tax liabilities: | | |
| Investment in foreign partnership | 16,215 | 15,467 |
| Intangible assets | — | 465 |
| Total deferred tax liabilities | 16,215 | 15,932 |
| Net deferred tax assets (liabilities) | $ (6) | $ — |

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, 2016, a valuation allowance of $58.2 million has been established against the net deferred tax assets as realization is uncertain. The deferred tax liabilities consist primarily of the excess of the book value over the tax basis of their investment in the foreign partnership.

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 all U.S. deferred tax assets and all European deferred tax assets, except for Scient'x S.A.S. and Surgiview S.A.S. at December 31, 2016, as the French entities now have an overall net deferred tax liability. If the Company later determines that it is more-likely-than-not to realize all or a portion of the U.S. or other European deferred tax assets, it would reverse the previously provided valuation allowance.

At December 31, 2016, the Company has unrecognized tax benefits of $9.3 million of which $7.9 million 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 for the years ended December 31, 2016, 2015 and 2014 (in thousands):

| | Year ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Unrecognized tax benefit at the beginning of the year | 10,359 | 8,861 | 7,835 |
| Additions based on tax positions related to the current year | 153 | 859 | 1,050 |
| Additions based on tax positions related to the prior year | 57 | 1,144 | 391 |
| Reductions as a result of lapse of applicable statute of limitations | (184) | (76) | (40) |
| Reductions as a result of foreign exchange rates and other | (1,054) | (429) | (375) |
| Unrecognized tax benefits at the end of the year | $ 9,331 | $ 10,359 | $ 8,861 |

The Company believes it is reasonably possible it will reduce its unrecognized tax benefits by $0.6 million within the next 12 months.

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 2011. 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, however Scient'x's 2013 and 2014 tax years are currently under audit by the French 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, 2016, accrued interest and penalties were $1.1 million, which primarily relates to the uncertain tax positions of the Scient'x operations. During 2016, there was a decrease of $0.1 million in the accrued interest and penalties related to the uncertain tax positions of the Scient'x operations.

At December 31, 2016, the Company had federal and state net operating loss carryforwards of $91.9 million and $113.9 million, respectively, expiring at various dates through 2036. At December 31, 2016, the Company had federal and state research and development tax credits of $3.4 million and $3.1 million, respectively. The federal research and development tax credits expire at various dates through 2036, while the state credits do not expire. The Company had foreign net operating loss carryforwards of $14.9 million which do not expire. 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 of the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), as well as similar state and foreign 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.

The Company does not record U.S. income taxes on the undistributed earnings of its foreign subsidiaries based upon the Company's intention to permanently reinvest undistributed earnings to ensure sufficient working capital and further expansion of existing operations outside the United States. The undistributed earnings of the foreign subsidiaries as of December 31, 2016 are immaterial. In the event the Company is required to repatriate funds from outside of the United States, such repatriation would be subject to local laws, customs, and tax consequences. Determination of the amount of unrecognized deferred tax liability related to these earnings is not practicable.

**12. Related Party Transactions**

For the years ended December 31, 2016, 2015 and 2014, the Company incurred costs of less than $0.1 million, $0.1 million and $0.2 million, respectively, to Foster Management Company and HealthpointCapital, LLC for travel and administrative expenses. John H. Foster, who was one of the Company's directors until March 2, 2016 is a significant equity holder of HealthpointCapital, LLC, an affiliate of HealthpointCapital Partners, L.P. and HealthpointCapital Partners II, L.P., which are the Company's principal stockholders. As of December 31, 2016, the Company also had a liability of less than $0.1 million payable to HealthpointCapital, LLC for travel and administrative expenses.

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 entered into an agreement for joint payment of settlement whereby HealthpointCapital has agreed to contribute $5 million to the $49 million settlement amount.

*Indemnification Agreements*

The Company has entered into indemnification agreements with certain of its directors, which are named defendants in the Orthotec litigation matter in New York (See Note 8). The indemnification agreements require the Company to indemnify these individuals to the fullest extent permitted by applicable law and to advance expenses incurred by them in connection with any proceeding against them with respect to which they may be entitled to indemnification by the Company. For the years ended December 31, 2016, 2015 and 2014, the Company paid less than $0.1 million in each year in connection with the indemnification obligations of Scient'x and Surgiview, all of which was related to the Orthotec matter. (See Note 8).

**13. 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 $0.4 million, $0.6 million and $0.6 million for the years ended December 31, 2016, 2015 and 2014, respectively.

**14. Restructuring Activities**

In connection with the Globus Transaction (described in Note 4), the Company reduced its U.S. workforce and terminated employment agreements with several executive officers and employees including the chief executive officer and the chief financial officer, and recorded restructuring expenses related to severance and post-employment benefits of $1.9 million in the year ended December 31, 2016. The Company had additional headcount reductions in February 2017.

On July 6, 2015, the Company announced a restructuring of its manufacturing operations in California in an effort to improve its cost structure. The restructuring includes a reduction in workforce and closing the California manufacturing facility. Restructuring liabilities are measured at fair value and recognized as incurred. The Company incurred termination benefits, accelerated depreciation, facility closing and other restructuring costs expenses of $0.4 million and $2.2 million in the years ended December 31, 2016 and 2015, respectively, related to these restructuring activities which were completed in the first half of 2016.

In 2013, the Company announced that Scient'x began a process to significantly restructure its business operations in France in an effort to improve operating efficiencies and rationalize its cost structure and in 2015 the Company initiated plans to close its French operations. The restructuring included a reduction in Scient'x's workforce and closing of the manufacturing facilities in France. The Company has recorded total costs of $10.6 million through December 31, 2016, which includes employee severance, social plan benefits and related taxes, facility closing costs, manufacturing transfer costs, and contract termination costs. The Company has substantially completed the activities associated with the restructuring as of December 31, 2016, and majority of the related liabilities have been settled.

**15. Subsequent Event**

On March 22, 2017, the Company entered into a securities purchase agreement (the "Purchase Agreement") with certain institutional and accredited investors (collectively, the "Purchasers"), including certain directors and executive officers of the Company, providing for the sale by the Company of 1,809,628 shares of its common stock at a purchase price of $2.00 per share, 15,245 shares of preferred shares (the "Preferred Shares,") and a newly designated Series A Convertible Preferred Stock (the "Series A Convertible Preferred Stock") at a purchase price of $1,000 per share (which Preferred Shares are convertible into approximately 7,622,372 shares of the Company's common stock, subject to limitations on conversion until the approval by the Company's stockholders and warrants to purchase up to 9,432,000 shares of its Common Stock at an exercise price of $2.00 per share (the "Warrants"), in a private placement (the "Private Placement"). The Warrants will become exercisable following stockholder approval, are subject to certain ownership limitations, and expire five years after the date of such stockholder approval.

The aggregate gross proceeds for the Private Placement is approximately $18.9 million. The Company intends to use the net proceeds from the Private Placement for general corporate and working capital purposes. Certain directors and executive officers of the Company purchased an aggregate of $2.35 million of shares of Series A Convertible Preferred Stock, which shares are convertible into approximately 1,175,000 shares of Common Stock, and Warrants to purchase up to 1,175,000 shares of the Company's common stock. Pursuant to the terms of the Purchase Agreement, from the closing until the later of 90 days after the effective date of a resale registration statement or the date of stockholder approval, the Company is prohibited from issuing, or entering into any agreement to issue, or announcing the issuance or proposed issuance of, any shares of the Company's common stock or common stock equivalents, subject to certain permitted exceptions.

A total of 15,245 shares of Series A Convertible Preferred Stock will be authorized for issuance under a Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock of the Company (the "Certificate of Designation"), to be filed with the Secretary of State of the State of Delaware in connection with the closing. The shares of Series A Convertible Preferred Stock have a stated value of $1,000 per share and will be convertible into approximately 500 shares of the Company's common stock. Until the date that stockholder approval is obtained, the Certificate of Designation limits the number of shares of common stock issuable upon conversion of the Series A Convertible Preferred Stock such that, when aggregated with the shares of common stock issued at the closing, such issuances shall not exceed 19.99% of the Company's issued and outstanding common stock.

The Series A Convertible Preferred Stock will be entitled to dividends on an as-if-converted basis in the same form as any dividends actually paid on shares of the Company's common stock or other securities. The initial conversion price of $2.00 is subject to appropriate adjustment in the event of a stock split, stock dividend, combination, reclassification or other recapitalization affecting the Company's common stock. In addition, for a period ending on the earlier of one year from effective date of a resale registration Statement or the date on which there are no shares of Series A Convertible Preferred Stock outstanding, the conversion price is also subject to full ratchet anti-dilution protection in the event the Company issues securities at an effective price less than the initial conversion price, subject to certain exceptions.

On March 30, 2017, the Company entered into a sixth amendment to the Amended Credit Facility with MidCap and a first amendment to the Globus Facility Agreement with Globus (collectively the "2017 Amendments). The 2017 Amendments extend the date that the financial covenants of the Amended Credit Facility and the Globus Facility Agreement are effective from April 2017 to April 2018.

**16. Quarterly Financial Data (Unaudited)**

The following financial information reflects all normal recurring adjustments, which are, in the opinion of management, necessary for a fair statement of the results of the interim periods. Summarized quarterly data for fiscal 2016 and 2015 are as follows (in thousands, except per share data):

| | Year ended December 31, 2016 | | | |
|---|---|---|---|---|
| | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
| **Selected quarterly financial data: (2)** | | | | |
| Revenue | $ 34,206 | $ 32,241 | $ 26,711 | $ 27,090 |
| Gross profit | 24,487 | 21,158 | 15,862 | 14,627 |
| Total operating expenses | 27,930 | 21,479 | 20,411 | 21,691 |
| Loss from continuing operations | (4,248) | (1,909) | (10,063) | (10,081) |
| Income (loss) from discontinued operations | (2,369) | (3,324) | (3,658) | 5,727 |
| Net loss | (6,617) | (5,233) | (13,721) | (4,354) |
| Net loss per basic and diluted share (1) | (0.78) | (0.62) | (1.60) | (0.49) |

| | Year ended December 31, 2015 | | | |
|---|---|---|---|---|
| | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
| **Selected quarterly financial data: (2)** | | | | |
| Revenue | $ 35,577 | $ 32,333 | $ 31,687 | $ 34,791 |
| Gross profit | 24,492 | 18,287 | 21,658 | 23,585 |
| Total operating expenses | 24,750 | 23,691 | 186,333 | 29,103 |
| Loss from continuing operations | (3,599) | (4,190) | (156,998) | (6,463) |
| Income (loss) from discontinued operations | (963) | 243 | (3,267) | (3,440) |
| Net loss | (4,561) | (3,947) | (160,265) | (9,903) |
| Net loss per basic and diluted share (1) | (0.55) | (0.48) | (19.35) | (1.18) |

(1) Basic and diluted net loss per share, adjusted for the 1-for-12 reverse stock split, is computed independently for each of the quarters presented. Therefore, the sum of the quarterly per share amounts will not necessarily equal the total for the year.

(2) Selected quarterly financial data for periods prior to the nine months ended September 30, 2016 have been recast to reflect discontinued operations.

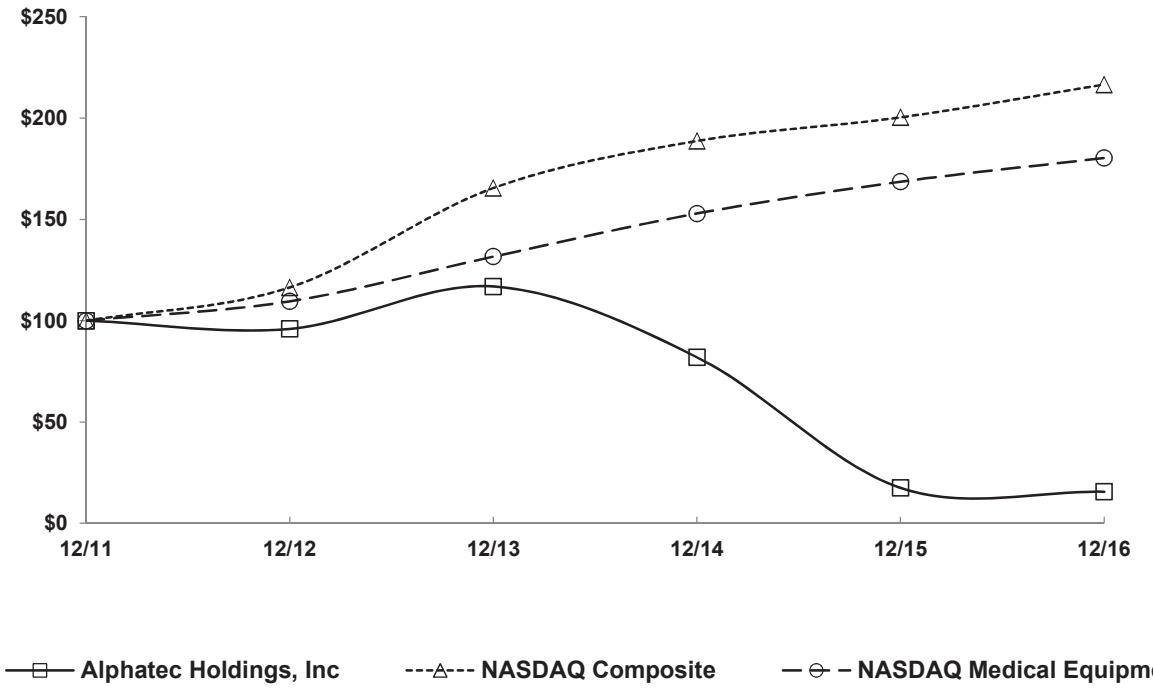
## SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS

| | Allowance for Doubtful Accounts (1) (In thousands) |
|---|---|
| Balance at December 31, 2013 | $ 637 |
| Provision | 522 |
| Write-offs and recoveries, net | (613) |
| Balance at December 31, 2014 | 546 |
| Provision | 414 |
| Write-offs and recoveries, net | (191) |
| Balance at December 31, 2015 | 769 |
| Provision | 620 |
| Write-offs and recoveries, net | (31) |
| Balance at December 31, 2016 | $ 1,358 |

(1) The provision is included in sales and marketing expenses.

## COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Alphatec Holdings, Inc, the NASDAQ Composite Index
and the NASDAQ Medical Equipment Index




*$100 invested on 12/31/11 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

Graph produced by Research Data Group, Inc. 1/5/17

## EXECUTIVE TEAM

**Terry M. Rich**
Chief Executive Officer, Director

**Mike Plunkett**
President and Chief Operating Officer

**Jeff Black**
Executive Vice President & Chief Financial Officer

**Craig Hunsaker**
Executive Vice President, People & Culture
and General Counsel

**Jon Allen**
Executive Vice President, Commercial Operations

**Brian Snider**
Executive Vice President, Strategic Marketing and Product Development

## BOARD OF DIRECTORS

**Mortimer "Tim" Berkowitz III**
Chairman of the Board of Directors

**R. Ian Molson**
Director, Member of the Audit Committee,
Chair of the Compensation Committee

**Stephen O'Neil**
Director, Member of the Compensation Committee

**Donald A. Williams**
Director, Chair of the Audit Committee

**David H. Mowry**
Director, Member of the Audit Committee

**Leslie H. Cross**
Director

**Terry M. Rich**
Director, Chief Executive Officer

## CORPORATE HEADQUARTERS

Alphatec Spine, Inc.
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Carlsbad, CA 92008
760.494.6610
www.alphatecspine.com

## ANNUAL MEETING OF STOCKHOLDERS

Thursday, June 15, 2017 at 2:00 p.m.
Corporate Headquarters

## COMMON STOCK LISTING

Nasdaq Global Select Market
Ticker Symbol: ATEC

## STOCK TRANSFER AGENT

Computershare, Inc.
480 Washington Blvd.
Jersey City, NJ 07310
Shareholder Communication Center: 800.356.2017
www.computershare.com

## INDEPENDENT AUDITORS

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4370 La Jolla Village Drive
Suite 500
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## SECURITIES COUNSEL

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12670 High Bluff Drive
San Diego, CA 92130
858.523.5400
www.lw.com

## ANNUAL REPORT ON FORM 10-K

A copy of Alphatec Holdings, Inc. annual report to the U.S. Securities and Exchange Commission on Form 10-K is available without charge online at www.alphatecspine.com

## NOTE ON FORWARD LOOKING STATEMENTS

This annual report contains forward-looking statements within the meaning of the United States securities laws. Such forward-looking statements are subject to risks and uncertainties that could cause Alphatec Holdings, Inc.'s actual results to differ materially from those indicated by these forward-looking statement. Information on the risks and uncertainties that could affect Alphatec Holdings, Inc.'s results is included in the Annual Report on Form 10-K included herewith, Alphatec Holdings, Inc. undertakes no obligation to update any forward-looking statements.

Alphatec Spine®

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