

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 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, 2019

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: 001-37526

TELA Bio, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

45-5320061
(I.R.S. Employer
Identification Number)

**1 Great Valley Parkway, Suite 24
Malvern, Pennsylvania**
(Address of principal executive offices)

19355
(Zip Code)

(484) 320-2930

(Registrant's telephone number, including area code)

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

<u>Title of each class:</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered:</u>
Common Stock, \$0.001 par value per share	TELA	The Nasdaq Global Market

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

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

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

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

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

Large accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

Non-accelerated filer

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

The registrant was not a public company as of the last business day of its most recently completed second fiscal quarter and, therefore, cannot calculate the aggregate market value of its common equity held by non-affiliates as of such date.

As of March 20, 2020, the registrant had 11,407,243 shares of Common Stock, \$0.001 par value per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement to be filed with the U.S. Securities and Exchange Commission (the "SEC") for TELA Bio's annual meeting of stockholders are incorporated by reference into Part III of this Form 10-K

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Statements made in this Annual Report on Form 10-K that are not statements of historical or current facts, such as those under the heading “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements discuss our business, operations and financial performance and conditions, as well as our plans, objectives and expectations for our business operations and financial performance and condition. In some cases, you can identify forward-looking statements by terminology such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “design,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “predict,” “positioned,” “potential,” “seek,” “should,” “target,” “will,” “would” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. In addition, statements that “we believe” or similar statements reflect our beliefs and opinions on the relevant subject. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, our anticipated growth strategies and anticipated trends in our business.

You should understand that the following important factors could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements:

- estimates regarding future results of operations, financial position, research and development costs, capital requirements and our needs for additional financing;
- the commercial success and the degree of market acceptance of our products;
- our ability to expand, manage and maintain our direct sales and marketing organization and to market and sell our products in the U.S.;
- the performance of Aroa Biosurgery Ltd. (“Aroa”), in connection with the development and production of our products;
- our ability to compete successfully with larger competitors in our highly competitive industry;
- our ability to achieve and maintain adequate levels of coverage or reimbursement to our current and any future products we may seek to commercialize;
- our ability to enhance our products, expand our indications and develop and commercialize additional products;
- the development, regulatory approval, efficacy and commercialization of competing products;
- our business model and strategic plans for our products, technologies and business, including our implementation thereof;
- the size of the markets for our current and future products;
- our ability to attract and retain senior management and other highly qualified personnel;
- our ability to obtain additional capital to finance our planned operations;
- our ability to commercialize or obtain regulatory approvals for our products, or the effect of delays in commercializing or obtaining regulatory approvals;
- regulatory developments in the U.S. and internationally;
- the effect of events for which we have no control, including, global pandemics including the Coronavirus Disease 2019 (“COVID-19”) and economic uncertainty;
- our ability to develop and maintain our corporate infrastructure, including our internal controls;
- our ability to establish and maintain intellectual property protection for our products, as well as our ability to operate our business without infringing the intellectual property rights of others;
- our expectations regarding the use of proceeds from our initial public offering (“IPO”); and
- other risks and uncertainties, including those listed under the caption “Risk Factors.”

These forward-looking statements are based on management's current expectations, estimates, forecasts and projections about our business and the industry in which we operate, and management's beliefs and assumptions are not guarantees of future performance or development and involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control. In light of the significant uncertainties in these forward-looking statements, you should not rely upon forward-looking statements as predictions of future events. Although we believe the expectations reflected in the forward-looking statements are reasonable, the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements may not be achieved or occur at all. Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new

information, future events or otherwise after the date of this Annual Report on Form 10-K or to reflect the occurrence of any unanticipated events. Comparisons of results for current and any prior periods are not intended to express any future trends on indications of future performance, unless expressed as such, and should only be viewed as historical data.

PART I

ITEM 1. BUSINESS

Overview

We are a commercial stage medical technology company focused on designing, developing and marketing a new category of tissue reinforcement materials to address unmet needs in soft tissue reconstruction. We offer a portfolio of advanced reinforced tissue matrices that improve clinical outcomes and reduce overall costs of care in hernia repair, abdominal wall reconstruction and plastic and reconstructive surgery. Our products are an innovative solution that integrate multiple layers of minimally-processed biologic material with interwoven polymers in a unique embroidered pattern, which we refer to as a reinforced tissue matrices.

Our first portfolio of products, the OviTex Reinforced Tissue Matrix (“OviTex”), addresses unmet needs in hernia repair and abdominal wall reconstruction by combining the benefits of biologic matrices and polymer materials while minimizing their shortcomings, at a cost-effective price. Our OviTex products have received 510(k) clearance from the U.S. Food and Drug Administration (“FDA”) which clearance was obtained and is currently held by Aroa, our exclusive manufacturer and supplier, and have demonstrated safety and clinical effectiveness in our ongoing prospective, single arm, multicenter post-market clinical study, which we refer to as our BRAVO study. To date, we have enrolled 91 patients. The first 32 patients who have undergone surgery and completed the one-year follow-up visit have been evaluated in the BRAVO study and experienced no ventral hernia recurrences, no explantations and no surgical site occurrences requiring follow-up surgery. Our second portfolio of products, the OviTex PRS Reinforced Tissue Matrix (“OviTex PRS”) addresses unmet needs in plastic and reconstructive surgery. In April 2019, our OviTex PRS products received 510(k) clearance from the FDA, which clearance was obtained by Aroa and is currently held by us.

We began commercialization of our OviTex products in the U.S. in July 2016, and they are now sold to approximately 250 hospital accounts. Hernia repair is one of the most common surgeries performed in the U.S., representing approximately 1.2 million procedures annually. Our OviTex portfolio consists of multiple products that can be used for ventral hernia repair and abdominal wall reconstruction, inguinal hernia repair and hiatal hernia repair. In addition, to address the significant increase in the number of robotic-assisted hernia repairs over the last several years, we have designed an OviTex product specifically for use in laparoscopic and robotic-assisted surgery called OviTex LPR, which we began commercializing in November 2018. We subsequently expanded the OviTex LPR product line in December 2019.

OviTex PRS is indicated for use in implantation to reinforce soft tissue where weakness exists in patients requiring soft tissue repair or reinforcement in plastic and reconstructive surgery. Our OviTex PRS portfolio is supported by non-human primate data that demonstrated more rapid tissue integration and tissue remodeling compared to the market leading biologic matrix used in this indication. The current annual market for biologic matrices used for plastic and reconstructive surgery in the U.S. is approximately \$500 million. We commenced a limited launch in May 2019 and expect to continue commercializing in a controlled manner to gradually expand our surgeon network throughout 2020. We will also evaluate new generation products. We also intend to engage in discussions with the FDA regarding an Investigational Device Exemption (“IDE”) protocol to study the safety and effectiveness of our OviTex PRS product for an indication in breast reconstruction surgery.

We have a broad portfolio of intellectual property protecting our products, which we believe, when combined with our proprietary manufacturing processes and know-how, provides significant barriers to entry. Our intellectual property applies to our differentiated product construction and materials. In addition, we believe our exclusive manufacturing and long-term supply and license agreement (the “Aroa License”) with Aroa creates a competitive advantage by allowing us to secure an exclusive supply of ovine rumen at a low cost. Ovine rumen, the forestomach of a sheep, is the source of the

biologic material used in our products. In manufacturing the product, we use biologic material from ovine rumen because of its plentiful supply, optimal biomechanical profile and open collagen architecture that allows for rapid cellular infiltration. We purchase product from Aroa at a fixed cost equal to 27% of our net sales of licensed products.

We market our products through a single direct sales force, predominantly in the U.S. We have invested in our direct sales and marketing infrastructure in order to expand our presence and to promote awareness and adoption of our products. As of December 31, 2019, we had 35 sales territories in the U.S. As part of our commercial strategy, we plan to continue to invest in our commercial organization by hiring additional account managers, clinical development specialists, business managers and administrative support staff in order to cover the highest potential of accounts for soft tissue reconstruction procedures. We plan to continue to contract with group purchasing organizations (“GPOs”) and integrated delivery networks (“IDNs”) to increase access to and penetration of hospital accounts. We plan to adjust our commercial expansion plan as appropriate as we continue to better understand the effects of COVID-19 pandemic on our sales and marketing efforts.

Our revenue for the years ended December 31, 2019 and 2018 was \$15.4 million and \$8.3 million, respectively, which represents an increase of \$7.2 million, or 87%. Our net loss for the same time periods was \$22.4 million and \$21.1 million, respectively. As of December 31, 2019, we had an accumulated deficit of \$167.9 million. The vast majority of our revenue to date has been generated from sales of our OviTex products in the U.S., with the remainder generated from sales of our OviTex products in Europe and sales of our OviTex PRS products in the U.S.

In November 2019, we closed our IPO in which we issued and sold 4,398,700 shares of our common stock at a public offering price of \$13.00 per share, including 398,700 shares of our common stock sold pursuant to the underwriters’ option to purchase additional shares. We received net proceeds of \$50.6 million after deducting underwriting discounts, commissions and other offering expenses. Our common stock is listed on the Nasdaq Global Market under the trading symbol “TELA.”

Market Opportunity

OviTex

Hernia repair is one of the most common surgeries performed in the U.S. There are an estimated 1.2 million hernia repairs annually in the U.S. including recurrences, which we categorize as approximately (i) 65,000 complex/moderate ventral hernia repairs and abdominal wall reconstructions, (ii) 362,000 simple ventral hernia repairs and (iii) 789,900 inguinal hernia repairs. We estimate that there are approximately 44,400 hiatal hernia repairs annually in the U.S. Approximately 90% of all hernia repairs are treated with a tissue reinforcement material.

The healthcare burden of hernia disease to patients, insurers and employers is significant. For the patient, a hernia may cause an increasing level of pain when lifting, straining during urination or a bowel movement, or sitting or standing for long periods of time. Increased pain from the hernia is the most common reason that a patient who is deferring surgical hernia repair will ultimately elect repair surgery. Following surgical hernia repair, convalescence has a significant socioeconomic impact. Absence from work during this period can range from approximately five to 14 days according to one study. Pain is the most common cause of delay in returning to work, followed by wound problems. Long-term pain or discomfort at the hernia repair site is one of the most serious complications of hernia surgery and may, in some cases, persist for years.

In addition, for third-party payors, the costs related to hernia are significant. The number of annual physician office visits in the U.S. related to hernia were approximately 2.5 million in 2016 according to the National Ambulatory Medical Care Survey. Hernia repair and abdominal wall reconstruction inpatient per procedure costs in the U.S. ranged from approximately \$6,117 to \$29,615 in 2018 according to the national average Medicare Severity Diagnosis Related Groups (“MS-DRG”) rate which does not account for surgeon fees involved with such procedures. Hernias are prone to recurrence, which often require multiple repair procedures and additional healthcare expenditures. In the U.S., the economic burden of hernia repair accounts for approximately \$48 billion of healthcare expenditures annually.

Given the limitations of and lack of innovation in existing hernia repair products, we believe a significant market opportunity exists for our portfolio of OviTex products. Based on the volume weighted average selling price of our OviTex products, we estimate the annual U.S. total addressable market opportunity for our OviTex products to be approximately \$1.5 billion.

	Approximate Number of Annual U.S. Hernia Procedures Using Tissue Reinforcement Material	Estimated Annual U.S. Total Addressable Market Opportunity	Traditional Products Utilized
Complex/Moderate Ventral Repair /Abdominal Wall Reconstruction	58,000	\$ 350 million	Biologic Matrices and Resorbable Synthetic Mesh
Simple Ventral Hernia Repair	326,000	\$ 500 million	Permanent Synthetic Mesh
Inguinal Hernia Repair	711,000	\$ 650 million	Permanent Synthetic Mesh
Hiatal Hernia Repair	40,000	\$ 40 million	Biologic Matrices and Resorbable Synthetic Mesh
Total	1,135,000	\$ 1.5 billion	

OviTex PRS

Modern advances in tissue engineering have transformed the plastic and reconstructive surgeon’s management strategies across a wide variety of applications. Because biologic matrices incorporate into host tissues and enable revascularization and functional tissue remodeling, surgeons have realized multiple applications for their use, with techniques tailored to the specific requirements of the surgery. There is growing clinical literature validating the use of biologic matrices in head and neck surgery and reconstructions of the chest wall, pelvic region, extremities and breast.

In head and neck surgery, biologic matrices are used for both aesthetic and reconstructive purposes that include: surgery of the nose to change its shape or improve its function, referred to as rhinoplasty; lip augmentation; repair of perforations of the cartilage and thin bone separating the nostrils referred to as the nasal septum; complex reconstruction of the oral and oropharynx cavities after oncologic resection; cleft palate repair; upper and lower eyelid reconstruction; scalp defects and defects of the fibrous membrane covering the brain and spinal cord referred to as dura. In chest wall reconstruction, biologic matrices are used to repair defects from oncologic resections. In pelvic reconstruction, biologic matrices are utilized as an adjunct in the reconstruction of acquired pelvic defects caused by resections for colorectal, gynecologic and urologic malignancies. In extremities reconstruction, biologic matrices are used in the upper extremity for repair of the donor site following the harvest of a radial forearm free flap, a procedure used to harvest tissue and replace it in the head and neck after cancer has been resected. In breast reconstruction, biologic matrices are utilized for prosthetic based reconstruction following the removal of cancerous breast tissue.

Breast reconstructions can be performed either using a sub-pectoral or pre-pectoral technique. In a sub-pectoral technique, the upper portion of the breast implant is placed below the pectoralis muscle and a biologic matrix is placed around the lower portion of the breast implant. In a pre-pectoral technique, the entire breast implant is placed above the pectoralis muscle and the full top surface of the breast implant is covered. The pre-pectoral technique utilizes a larger biologic matrix compared to that needed with the sub-pectoral technique. For patients who undergo autologous reconstruction, the donor site of the autologous tissue, typically the abdomen, may require soft tissue reinforcement.

Based on the current sales of biologic matrices in the U.S. we estimate the annual U.S. current addressable market opportunity for our OviTex PRS products to be approximately \$500 million. This market continues to grow as surgeon and patient preferences shift from sub-pectoral to pre-pectoral techniques.

Given the limitations of and lack of innovation in existing biologic matrices for plastic and reconstructive surgical procedures, we believe a significant market opportunity exists for our OviTex PRS portfolio products.

Current Materials Used in Hernia Repair and Abdominal Wall Reconstruction and Their Limitations

Hernia Repair and Abdominal Wall Reconstruction

The vast majority of hernias are treated with surgical repair. Surgical hernia repair is performed either through open repair, which uses a single incision to open the abdomen or groin across the hernia, or minimally invasive repair, which involves laparoscopic or robotic-assisted techniques. Laparoscopic surgery is a minimally invasive surgical technique performed in the abdomen or groin through small incisions. Surgical instruments and devices, such as mesh products, are then delivered to the surgical site through a trocar, which is an access port to the patient's abdomen or groin. Robotic-assisted surgery is also performed using small incisions in the patient's abdomen or groin and a trocar, but the surgeon sits at a console in the operating room and operates the robotic instruments remotely.

At the advent of hernia repair, all procedures were performed using an open surgical technique in which an incision is made through the body to access and repair the hernia. Due to the amount of healthy soft tissue disruption required for an open procedure, there is a high risk of wound-related complications and seroma formation. In the early 1990s, surgeons began using a laparoscopic approach for hernia repair because it provided the benefits of lower wound complication rates, lower patient morbidity and decreased length of stay for patients. Despite these benefits, laparoscopic surgery presents surgeons with challenges, primarily due to restricted instrument dexterity that makes it difficult to achieve primary closure of the hernia defect, in which the connective tissue layer is sutured close, and leads to a bridged repair. In a bridged repair, the tissue reinforcement material spans a portion of the hernia defect without any connective tissue layer above it to provide additional reinforcement. This leads to increased risk of bulging of the material or hernia recurrence. Robotic-assisted hernia repair addresses this issue while still providing the benefits of a laparoscopic repair. In robotic-assisted repair, the surgeon enjoys greater instrument dexterity and precision, and is able to achieve primary closure of the hernia defect. This has contributed to a significant increase in the number of robotic-assisted hernia repair over the last several years.

It is estimated that about 90% of hernia repairs today use a form of reconstruction material to provide long-term support at the repair site. Reconstruction materials include synthetic mesh, which can be either permanent or resorbable, and biologic matrices made from tissue material.

Permanent Synthetic Mesh

Permanent synthetic mesh, the oldest category of hernia repair materials, is made of plastic materials that are also used in industrial and consumer products. These products have gained popularity with surgeons because they are relatively inert, can be readily sterilized, exhibit biomechanical strength and durability and are available at relatively low upfront cost. Limitations of permanent synthetic mesh products may include:

- significant persistent foreign body inflammatory response that can result in encapsulation of the implant by fibrotic tissue or contraction of the mesh;
- chronic post operative pain;
- scar tissue formation and lack of regeneration of soft tissue;
- permanent susceptibility to mesh infection;
- significant cost associated with subsequent repairs or failed and infected mesh;
- compromised abdominal wall anatomy due to damaged and eroded tissue rendering subsequent surgical repairs challenging; and
- migration of the permanent synthetic mesh which can result in organ erosion or perforation.

Many of these complications caused by permanent synthetic mesh require additional surgical intervention, including, explantation of the mesh or repair of hernia recurrence or the abdominal wall. Based on longitudinal data from the Danish Hernia Database, in an analysis of approximately 2,900 patients who received a mesh hernia repair, the observed rate of surgical intervention due to either recurrence or mesh-related complications at five years post operatively was approximately 17%. As a result of these complications and litigation involving these complications, the number of adverse events reported to the FDA for permanent synthetic mesh hernia repairs has risen from 643 in 2016, 2,464 in 2017, to more than 6,400 in 2018 through October. Synthetic mesh products have been the subject of more than 6,000 lawsuits in the U.S.

Biologic Matrices

The complications associated with permanent synthetic mesh prompted the development of biologic matrices as a second category of hernia repair materials. Biologic matrices are derived from human or animal dermis, pericardium or intestinal submucosa, which allows them to become replaced entirely by the patient's own tissue over time, a process known as remodeling. The goal behind these biologic materials was to lower the foreign body inflammatory response and biomechanical requirements of the repair, while providing a matrix upon which tissue remodeling could occur. Compared to permanent synthetic mesh, biologic matrices are less likely to induce this inflammatory response and become infected; however, they may have the following limitations:

- lack strength or durability as compared to synthetic mesh products;
- prone to laxity and stretching;
- difficult to handle, leading to longer operating times as compared to synthetic mesh products;
- inability to be placed in a patient through a trocar in laparoscopic or robotic-assisted surgery; and
- considerably more expensive upfront costs than permanent synthetic mesh, typically limiting their use to complex hernia repairs or abdominal wall reconstructions.

Though hernia recurrence occurs with the use of all types of soft tissue reconstruction, biologic matrices have the highest rates of recurrence, in part as a result of being commonly used in complex hernia repairs or abdominal wall reconstructions. The RICH study, a multicenter, prospective study sponsored by LifeCell Corporation ("LifeCell") that evaluated the performance of Stratattice, the current market-leading biologic matrix, in open ventral incisional hernia repair in contaminated abdominal wall defects, demonstrated post operative hernia recurrence rates of 22% and 33% at 12-months and 24-months follow-up, respectively.

Resorbable Synthetic Mesh

Resorbable synthetic mesh was introduced as a third category of hernia repair materials and as an alternative to permanent synthetic mesh and biologic matrices. Resorbable synthetic mesh was designed with the intended benefits of full degradation over several months, a moderately lower cost than biologic matrices and gradual transfer of strength from synthetic mesh to native tissue over time. Resorbable synthetic mesh is polymer-based and does not include biologic material to promote tissue remodeling and healing. Despite improvements compared to the use of permanent synthetic mesh or biologic matrices, limitations of resorbable synthetic mesh may include:

- significant foreign body inflammatory response that can result in encapsulation or contraction of the mesh until resorbed;
- scar tissue formation and lack of remodeling of soft tissue;
- mesh infection until resorbed;

- migration of the mesh until resorbed which can result in organ erosion or perforation; and
- lack of mid-term and long-term soft tissue reinforcement as resorption progresses.

Many of these complications can require additional surgical intervention including explantation of the resorbable synthetic mesh or repair of hernia recurrence or the abdominal wall. Data from a recently published, multicenter, prospective study sponsored by C.R. Bard, Inc. that evaluated the performance of Phasix, the current market-leading resorbable synthetic mesh, in CDC Class I, high risk ventral and incisional hernia repair, showed a post operative hernia recurrence rate of 12% at 18-months follow-up.

Current Materials Used in Plastic and Reconstructive Surgery and Their Limitations

Biologic matrices are most commonly used in plastic and reconstructive surgery, including surgery of the nose to change its shape or improve its function, referred to as rhinoplasty, lip augmentation, repair of perforations of cartilage and thin bone separating the nostrils, complex reconstruction of the oral and oropharynx cavities after oncologic resection, cleft palate repair, upper and lower eyelid reconstruction, scalp defects, and defects of the fibrous membrane covering the brain and spinal cord, called the dura, because of their ability to define shape and position, improve tissue quality, reinforce existing soft tissue and reduce the rate of complications associated with a foreign body inflammatory response, however they are prone to excessive stretching over time and difficult for surgeons to handle. These limitations may lead to undesirable results requiring additional surgical intervention. Additionally, biologic matrices are typically expensive to source.

Our Solution

We have created a new category of tissue reinforcement materials that were purposefully designed in close collaboration with more than 100 surgeons to address the unmet clinical needs in soft tissue reconstruction. Our portfolio of products, designed with over 95% biologic material, combines the benefits of both biologic and polymer materials while addressing their limitations by interweaving polymer fibers through layers of a minimally-processed biologic material. These products are priced competitively, and designed for use with a range of surgical techniques, allowing the benefits of an advanced biologic repair to be available to more patients.

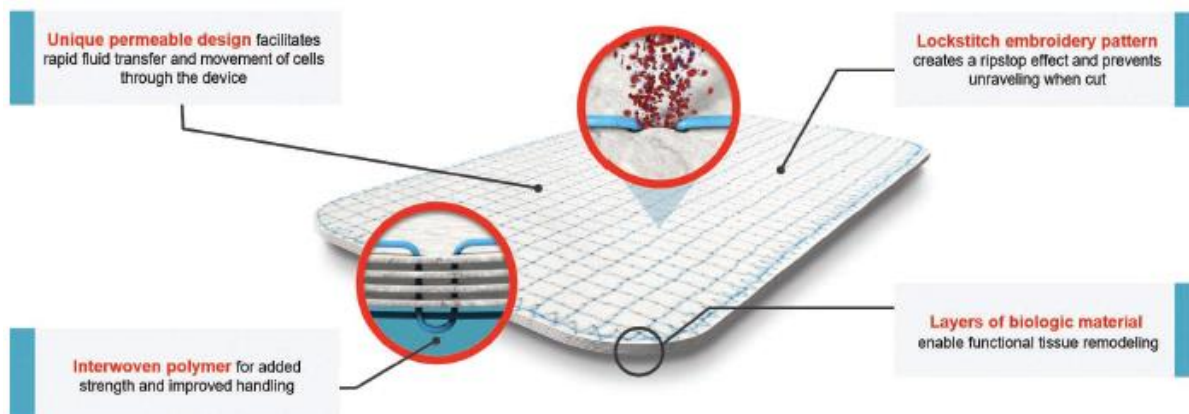
The biologic material serves as the natural building block from which we can fabricate devices that meet specific clinical and surgical handling requirements. This material consists of an intact, minimally-processed extracellular matrix derived from ovine rumen, which is the forestomach of a sheep. Polymer fibers are interwoven through the layers of biologic material in unique embroidered patterns and contribute to less than 5% of the overall device by mass. The interwoven polymer utilized can be either permanent, made from polypropylene, or resorbable, made from polyglycolic acid (“PGA”). The embroidering pattern varies between our OviTex and OviTex PRS portfolios to impart different biomechanical properties tailored for their respective intended clinical applications. Our OviTex products are designed with a lockstitch embroidery pattern that is sewn in a grid pattern to create a ripstop effect and minimize stretch. Our OviTex PRS products are designed with a patented corner-lock stitch pattern designed to resist deformation and to control the degree and direction of stretching of the product.

Our capabilities in polymer science, biologics, textile engineering and analytical testing enable us to quickly design, manufacture and develop innovative products. These competencies also allow our technical team to tailor the degree of stretch, direction of stretch, overall strength, handling properties, permeability, thickness, texture, size and shape of each reinforced tissue matrix to suit the needs of particular clinical applications and surgical techniques. This expertise has been utilized in the development of our OviTex and OviTex PRS products and is currently being leveraged in the development of our pipeline products.

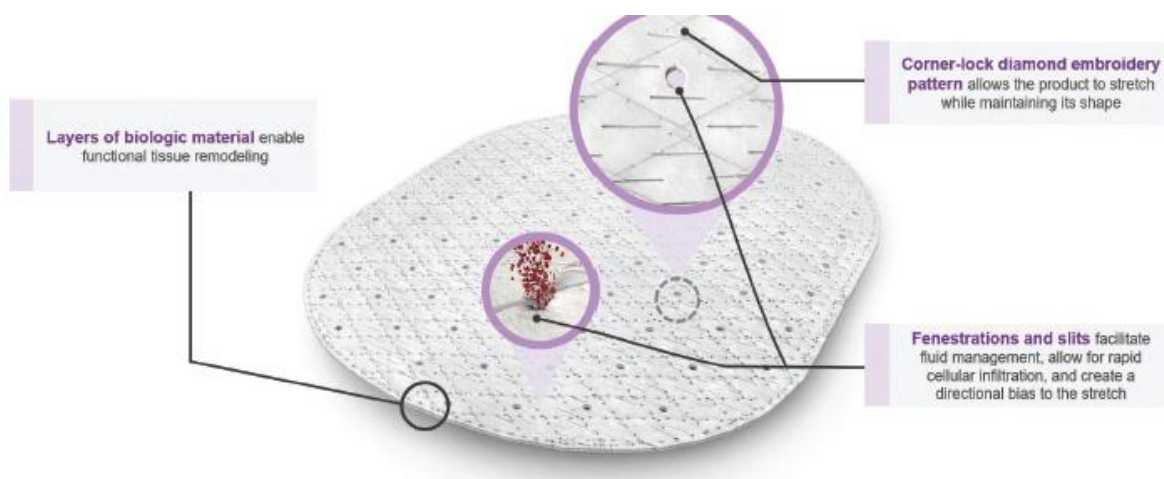
Our reinforced tissue matrices are designed to improve the outcomes of soft tissue reconstructions by reinforcing tissue while allowing rapid tissue integration, revascularization and biomechanical control. In addition to overall strength, a key property that we engineer into our products is the degree to which they stretch, known as compliance. Each of our products is designed to exhibit a degree of compliance appropriate for its intended clinical application.

The graphics below illustrate the key features of our OviTex and OviTex PRS products:

OviTex



OviTex PRS



We believe the principal benefits of our reinforced tissue matrices are:

- **Reduced foreign body inflammatory response.** The biologic material utilized in our reinforced tissue matrices acts to reduce the body's inflammatory response to the device. Our unique embroidered patterns create a macroporous grid within the biologic material. The biologic material largely surrounds the polymer and helps attenuate and localize inflammation to zones immediately surrounding the polymer. In our non-human primate comparative study in which we compared our OviTex products to several commercially available synthetic mesh and biologic matrix products, our OviTex products demonstrated a minimal foreign body inflammatory response, similar to biologic matrices, and less foreign body inflammatory response than all of the synthetic mesh tested at 24 weeks.

- **Enhanced remodeling of soft tissue and rate of healing.** Our reinforced tissue matrices are constructed to provide increased surface area and permeability, allowing for rapid absorption of wound fluids and blood during implantation and enabling improved supply of oxygen, cellular infiltration, migration, and repopulation for revascularization and functional tissue remodeling during healing. In our non-human primate comparative study, at 24 weeks the pattern of collagen formation in our OviTex products was reminiscent of connective tissue as opposed to the random fibers typical of scar tissue that were seen adjacent to the synthetic mesh. By contrast, the synthetic mesh showed no signs of remodeling of soft tissue and exhibited a high level of mesh contraction.
- **Ability to tolerate a contaminated wound environment.** Our reinforced tissue matrices are engineered to create hundreds of micro-channels to promote fluid exchange to allow host cells and new blood vessels to penetrate the reinforced tissue matrix. In our non-human primate comparative study, at four weeks our OviTex products had host cells between and within the layers of the reinforced tissue matrix. We believe this early cell infiltration may reduce the potential for bacterial colonization and the risk for infection. In our OviTex BRAVO study, there were no wound infections that required surgical intervention or device removal in the first 32 patients who reached one year follow-up.
- **Highly engineered biomechanical properties with durability of results.** Our reinforced tissue matrices are reinforced with interwoven polymer fibers to provide mid-term and long-term strength. The interwoven polymer increases the strength of our OviTex products by approximately 25% compared to the biologic material alone. When tensile forces are applied, this design allows for load sharing between the biologic material and the polymer during the remodeling process. Data from our strength testing demonstrated that our OviTex products meet or exceed that of published data from market-leading permanent and resorbable synthetic mesh. In our BRAVO study, there were no hernia recurrences in the first 32 patients who reached one year follow-up, despite 80% of these patients having one or more factors known to increase the risk of recurrence. Based on this interim data, we believe that this 0% recurrence rate is the lowest reported rate in any prospective study that includes either our biologic or resorbable synthetic mesh competitors. The addition of polymer to our reinforced tissue matrices allows each product to maintain its physiologic compliance properties, while resisting stretching and elongation. In our non-human primate comparative study, our OviTex devices best preserved their original shape, experiencing less contraction compared to biologic and synthetic mesh.
- **Enhanced surgeon handling and satisfaction.** Each of our embroidery patterns was designed specifically to allow the surgeon to trim and shape the product without the polymer unraveling. In addition, based upon our survey of approximately 50 surgeons, our OviTex products conform readily to the contours of surgical sites and are easy to handle, trim, suture and tack in all surgical approaches. In interim data presented from our BRAVO study, of 26 subjects who received minimally invasive surgery, 100% of the surgeons who operated on those subjects cited the product as being easy to place and the average surgeon satisfaction with the product was 9.7/10 at both 30 and 90 days. In addition, we have designed an OviTex product for use in laparoscopic and robotic-assisted surgery.
- **Lower upfront cost products.** Our reinforced tissue matrices provide our customers with meaningful cost savings over leading competitive products across a broad range of clinical uses so that more patients can experience the benefits of an advanced biologic repair solution. We price our OviTex products competitively, and on average, our customers realize 20% to 40% cost savings over leading biologic matrices and resorbable synthetic mesh. Our OviTex PRS portfolio is priced below leading biologic matrices.

Our Strengths

We are focused on developing and commercializing a new category of tissue reinforcement materials for surgeons and patients that aim to address the shortcomings of existing products. We believe the following strengths will allow us to build our business and potentially increase our market penetration:

- ***Innovative and broad portfolio of products.*** Our OviTex and OviTex PRS products are the only FDA-cleared products to incorporate polymer fibers interwoven through layers of biologic material in a lockstitch pattern creating an embroidered construction. The biologic matrix is derived from ovine rumen and utilizes a patented process to create a reinforced tissue matrix that is optimized for soft tissue reconstruction. Our OviTex and OviTex PRS products are available in resorbable and permanent polymer versions in a variety of configurations and sizes. For example, our OviTex devices are currently available in sizes ranging from 4 × 8 cm to 25 × 40 cm, and our OviTex LPR devices are designed with specific thickness, handling properties and shapes optimized for use in laparoscopic and robotic-assisted surgery.
- ***Disruptive technology supported by compelling clinical evidence.*** The safety, efficacy and durability of our OviTex products are supported by compelling clinical evidence that includes studies in more than 200 non-human primates, and our BRAVO study. Our non-human primate data demonstrated that use of our OviTex products resulted in more rapid tissue integration and revascularization compared to biologic matrices and lower inflammatory response and better functional tissue remodeling compared to permanent and resorbable synthetic mesh. In our BRAVO study, the first 32 patients who reached one year at follow-up had demonstrated no ventral hernia recurrence, no explantations and no surgical site occurrences requiring follow-up surgery.
- ***Long-term supply agreement that provides pricing flexibility.*** Our Aroa License provides for the exclusive supply of ovine rumen and manufacture of our OviTex and OviTex PRS products, which gives us a low and fixed cost of raw materials. We purchase product from Aroa at a fixed cost equal to 27% of our net sales of licensed products.
- ***Potential cost savings to healthcare systems and hospitals.*** Our pricing flexibility allows us to sell our OviTex and OviTex PRS products to hospitals and healthcare systems at prices substantially below competitive products based on national average competitive pricing. Our OviTex products are sold at prices approximately 20% to 40% lower than other biologic matrices and resorbable synthetic mesh. We believe our pricing flexibility will drive greater adoption of our products. Our OviTex PRS products are priced below leading biologic matrices, and as we launch our OviTex PRS portfolio, we anticipate that our customers will realize cost savings over biologic matrices based on national average competitive pricing. We believe that the average selling prices across our products will provide financial benefits to our customers in addition to improving clinical outcomes.
- ***Established reimbursement pathway for hernia repair.*** The implantation of biologic matrices and synthetic mesh for hernia repair is coded using an established fixed procedure payment system known as a MS-DRG that consists of a lump sum payment rate that varies based on the degree of complications and comorbidities of each hernia. In addition, surgeons receive payment for their services depending on the coding associated with the procedure. The MS-DRG-based reimbursement system encourages hospitals to become more efficient in treating patients due to its fixed per-patient reimbursement nature.
- ***Broad intellectual property portfolio.*** Our products are covered by intellectual property that broadly covers changing a biologic matrix's biomechanical properties by interweaving a polymer thread through the biologic matrix. Specifically, our patents claim the ability to tailor stretch resistance. The ability to predictably control the biomechanical properties of a biologic matrix is the cornerstone of our product portfolio. Our intellectual property also covers the development of extracellular matrix scaffolds derived from ovine rumen, methods for isolating these scaffolds from ovine rumen, layering multiple sheets of these ovine rumen scaffolds together, sewing in an anti-adhesive layer into a scaffold, and adding unique patterns sewn or embroidered into these scaffolds using different polymers to impart reinforcing strength.

Through the Aroa License and our issued or allowed patents and patent applications, we have a broad portfolio of intellectual property that is leveraged in all of our reinforced tissue matrix products. In addition, we believe that the trade secrets developed with Aroa create additional barriers to entry.

- **Industry leading executive team with proven track record.** Our executive team consists of seasoned medical device professionals with deep industry experience, and a broad network of relationships within the industry and the medical community. Our executive team has led and managed companies through significant growth and introduction and commercialization of multiple new products, including driving surgeon adoption of biologic and biosurgery technologies. Members of our team have held leading positions with medical technology companies such as Orthovita Inc., Stryker Corporation, Integra LifeSciences, LifeCell and Medtronic plc. We believe this team is well-positioned to lead us through the commercial expansion of our products and development and launch of future products.

Our Growth Strategy

Our goal is to become the leading provider of soft tissue reconstruction products. The key elements of our strategy include:

- **Expand our U.S. commercial organization to support our growth.** We sell our products through a single direct sales organization in the U.S. As of December 31, 2019, we had approximately 250 active hospital accounts, which are supported by 60 employees in our U.S. based commercial organization. We plan to continue to invest in our commercial organization by adding account managers, clinical development specialists, business managers and administrative support staff in order to cover the highest potential of accounts for soft tissue reconstruction procedures.
- **Promote awareness of our products to drive surgeon use.** We educate surgeons regarding the value proposition of our products through presentations and exhibits at industry conferences, medical education symposia, direct training and education, webinars and publishing additional clinical data demonstrating the benefits of our products and establishing online peer-to-peer communities. We plan to continue to drive awareness of our products through these programs, while expanding their geographic reach and increasing the number of surgeon interactions.
- **Drive utilization through existing GPO and IDN contracts and secure additional contracts.** We are focused on partnering with our existing GPO- and IDN-contracted customers to promote implementation of our contracts, increase our access to surgeon customers, broaden awareness of products and help drive utilization of our products within associated hospitals and healthcare systems. In addition, we continue to pursue contracts with additional GPOs and IDNs. GPO and IDN contracts enable greater access to geographies with high procedural volumes and provide prioritized status within hospital procurement systems.
- **Continue to build upon clinical evidence of the effectiveness and safety of our products.** We are committed to evidence-based medicine and investing in clinical data to support the use of our products. We plan to publish 90-day, 12-month and 24-month follow-up data from our BRAVO study over the next several years. In addition, we are tracking the health economic outcomes within our BRAVO study. We also plan to initiate a post-market study of our OviTex products for robotic-assisted ventral hernia repair surgery in 2020. We also intend to support independent investigator-led post-market clinical studies on the effectiveness and safety of our OviTex PRS products.
- **Advance our portfolio of reinforced tissue matrices with the introduction of new product features and designs.** We plan to continue to expand our product offerings and the treatment capabilities of our products to address a broader patient base within soft tissue reconstruction. New product features and designs that we plan to introduce, subject to receiving any required regulatory approval or clearance, include:
 - additional sizes and shapes of our OviTex LPR product line;

- a self-grip technology designed to enhance the use of our OviTex products in robotic-assisted surgery for inguinal and ventral hernia repair and enhancements to our OviTex PRS products to assist with surgical placement and tissue integration;
- larger OviTex sizes in our resorbable product line; and
- the use of additional polymers, including for instance a longer-acting resorbable and high strength permanent synthetic, to incorporate into our OviTex and OviTex PRS products.

Our Products

Our Technology Platform

Our advanced reinforced tissue matrix technology consists of multiple layers of minimally-processed, acellular extracellular matrix derived from ovine rumen with interwoven polymer fibers in a unique embroidered pattern. The extracellular matrix is the collagen component of the rumen that is retained following removal of the epithelium, muscle and cellular content, and has an optimal biomechanical profile and open collagen architecture that allows for rapid cellular infiltration. These thin, strong layers of ovine rumen are plentiful in supply and serve as building blocks from which we can construct multilayered devices to customize products to adapt to clinical needs and surgeon preferences. The layers of extracellular matrix provide a high degree of surface area for tissue remodeling. We strengthen these reinforced tissue matrix layers with interwoven polymers, that are either permanent, polypropylene, or resorbable, PGA. These polymers were selected because they are well characterized suture materials with a history of significant clinical use and recognized safety profile. Polypropylene has a high tensile strength and a low inflammatory response in small quantities. PGA is the fastest resorbing polymer and within three months it tends to be fully absorbed into the body.

Our highly specialized and customizable textile engineering capability allows us to tailor the degree and direction of stretch, overall strength, handling properties, permeability, thickness, texture, size and shape of each reinforced tissue matrix to suit the needs of particular clinical applications and surgical techniques. Our textile engineering utilizes a computer-controlled fabrication method that is scalable, reproducible, efficient and customizable. This embroidery process uses steel gauge needles to interweave the polymer while also creating hundreds of micro-channels to allow the multi-directional passage of the patients' native cells and fluids throughout the product. The interwoven polymers are embroidered using a lockstitch pattern, which allows for the device to be trimmed without fraying, and we can use a patented corner-lock pattern, which creates a stable polymer fabric within the biologic material. We manipulate the polymer thread patterns to control the degree and stretch of our products. Denser grid patterns increase the amount of reinforcement and less dense patterns of different geometry allow for greater stretch. We are also able to manufacture products with smooth external layers that minimize the amount of exposed polymer to allow for direct contact with patients' internal organs.

OviTex Reinforced Tissue Matrix

Our OviTex Reinforced Tissue Matrix has received 510(k) clearance from the FDA, which clearance was obtained and is currently held by Aroa, and is intended for use as a surgical mesh to reinforce and/or repair soft tissue where weakness exists. Indications for use include the repair of hernias and/or abdominal wall defects that require the use of reinforcing or bridging material to obtain the desired surgical outcome. Our OviTex products can be used in a variety of hernia repairs, including simple and complex ventral, inguinal and hiatal hernias, as well as abdominal wall reconstructions.

Our OviTex products are sterile reinforced tissue matrices derived from ovine rumen with either polypropylene or PGA. The product is provided in a dry and hydratable form and packaged in a double pouched configuration. The product can be stored at room temperature and only needs five minutes from rehydration to use. To be used in surgery our OviTex product is placed in a sterile dish, rehydrated with sterile saline for five minutes, trimmed to fit the site, if needed, and then positioned to achieve maximum contact between the device and the surrounding tissue. The device may be sutured, stapled or tacked into place to avoid excess tension.





All of our OviTex products were designed to minimize the amount of polymer material implanted in patients. The synthetic material in our OviTex products comprise less than 5% of our final product. Depending on the configuration

selected, the amount of polymer is approximately 75% less than the polymer content of the most widely implanted permanent synthetic mesh, thereby reducing the patient’s foreign body inflammatory response to the polymer.

We market a variety of OviTex products in a range of sizes, thicknesses and degrees of reinforcement in order to suit surgeon preference and desired surgical technique. Our OviTex portfolio is designed to allow surgeons to select a device appropriate for any abdominal tissue plane. Generally, surgeons may place the reinforced tissue matrix in direct contact with internal organs, known as intraperitoneal placement, or away from these internal organs in a variety of tissue planes, known as pre-peritoneal placement. When selecting a product for intraperitoneal placement, surgeons require a surface that minimizes the risk of tissue attachment, whereas when selecting a product for pre-peritoneal placement, surgeons are able to use a product with polymer exposure on both sides. Surgeons may select the most appropriate product from our OviTex portfolio based on the size of the defect, necessity or surgeon preference for internal organ contact, use of a minimally invasive or open surgical technique and risk of infection.

OviTex Laparoscopic and Robotic Procedures

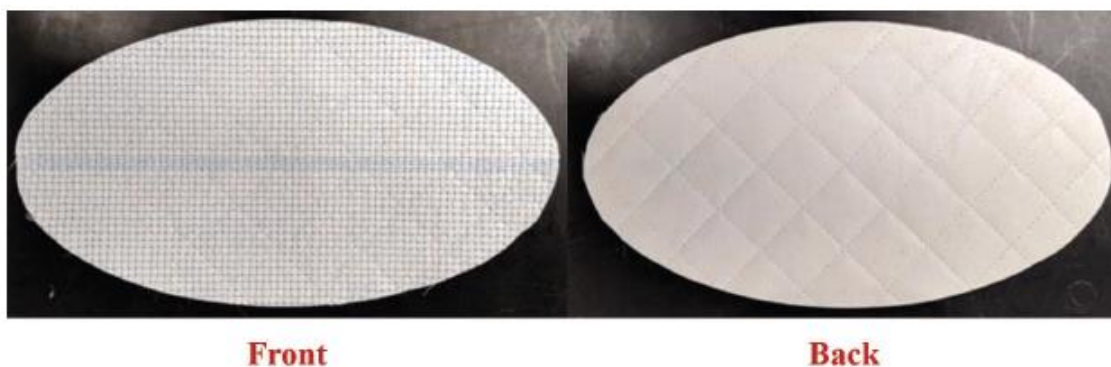
Our OviTex for Laparoscopic and Robotic Procedures (“OviTex LPR”) is a sterile reinforced tissue matrix derived from ovine rumen with polypropylene fiber intended to be used in laparoscopic and robotic-assisted hernia surgical repairs. OviTex LPR was designed for use with a trocar and requires the same rehydration and fixation as our other OviTex products. This product includes design elements to improve surgical handling, including two extra embroidered lines of blue colored polypropylene fibers to enhance endoscopic orientation and alignment. This product can be introduced into the patient’s body through various sized trocar ports. Based on surgeon feedback, OviTex LPR was designed in an elliptical or circular shape to minimize trimming.

	OviTex	OviTex 1S	OviTex 2S	OviTex LPR
				
Size and Shape	4 × 8 cm to 25 × 40 cm* (Rectangle or Square)	4 × 8 cm to 25 × 40 cm* (Rectangle or Square)	4 × 8 cm to 25 × 40 cm* (Rectangle or Square)	12 × 18cm (Ellipse); 9 cm to 15 cm (Round)
Strength	+	++	+++	+
Layers of Ovine Rumen	Four	Six	Eight	Four
Common Procedures	Moderate ventral hernia (pre-peritoneal placement), inguinal hernia, hiatal hernia	Moderate to complex ventral hernia, can be placed intraperitoneally	Complex ventral hernia and abdominal wall reconstruction and can be used for bridging, can be placed intraperitoneally	Laparoscopic or Robotic-assisted surgery
Polymer	Resorbable (PGA) or Permanent (Polypropylene)	Resorbable (PGA) or Permanent (Polypropylene)	Resorbable (PGA) or Permanent (Polypropylene)	Permanent (Polypropylene)
Shelf Life	Resorbable-18 months Permanent-36 months	Resorbable-18 months Permanent-36 months	Resorbable-18 months Permanent-36 months	36 months
Configuration	Exposed polymer on both sides	Exposed polymer on one side, and one smooth side	Two smooth sides	Exposed polymer on one side, and one smooth side
Commercial Availability	<input type="checkbox"/> U.S. <input type="checkbox"/> Europe (up to 20 × 20 cm)	<input type="checkbox"/> U.S. <input type="checkbox"/> Europe (up to 20 × 20 cm)	<input type="checkbox"/> U.S. <input type="checkbox"/> Europe (up to 20 × 20 cm)	U.S.

* 25 x 30 cm and 25 x 40 cm sizes currently only available with permanent (polypropylene) polymer.

+ Denotes relative level of strength

OviTex LPR

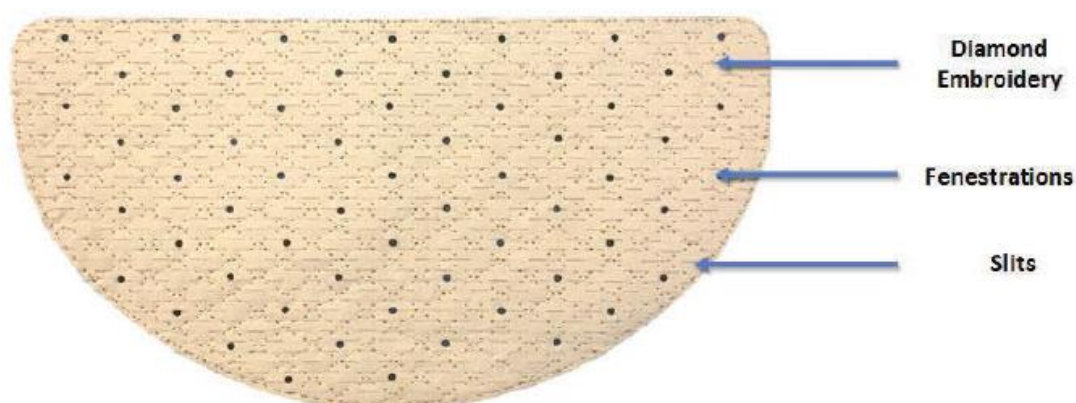


OviTex Plastic and Reconstructive Surgery — OviTex PRS

OviTex PRS, has received 510(k) clearance from the FDA, which clearance was obtained by Aroa and is held by us, and is indicated for use in implantation to reinforce soft tissue where weakness exists in patients requiring soft tissue repair or reinforcement in plastic and reconstructive surgery. Our OviTex PRS product can be stored at room temperature and comes in the same packaging and requires the same rehydration and fixation as our OviTex products.

Our OviTex PRS product is a sterile reconstructive reinforced tissue matrix composed of three layers of ovine rumen joined by a patented corner-lock embroidered diamond patterned polymer (PGA or polypropylene) that allows the product to stretch while also maintaining its shape. Machine punched regularly spaced fenestrations, or holes, and die-cut slits in the product facilitate fluid management, allow for rapid cellular infiltration and create a directional bias to the stretch. Our OviTex PRS product is available in arced rectangle, half-moon and oval shapes in a range of sizes (8 × 15 cm through 20 × 25 cm) to suit surgeon preference and nature of the soft tissue repair in plastic and reconstructive surgery. The device may be trimmed to a desired shape to further accommodate individual anatomy. The shelf life of permanent OviTex PRS is 24 months and the shelf life of resorbable OviTex PRS is 12 months.

OviTex PRS



Product Pipeline and Research and Development

We continue to expand our product pipeline and the treatment capabilities of our products through innovation, which we believe will expand the patient population that can benefit from our products to maximize their utility across surgical

techniques and clinical applications for soft tissue reinforcement. New product features and designs that we plan to introduce, subject to receiving any required regulatory approval or clearance, include:

- additional sizes and shapes of our OviTex LPR product line;
- a self-grip technology designed to enhance the use of our OviTex products in robotic-assisted surgery for inguinal and ventral hernia repair and enhancements to our OviTex PRS products to assist with surgical placement and tissue integration of our OviTex PRS products;
- larger OviTex sizes in our resorbable product line; and
- the use of additional polymers, including for instance a longer-acting resorbable and high strength permanent synthetic, to incorporate into our OviTex and OviTex PRS products.

Clinical Results and Studies

Overview of Preclinical and Clinical Programs

One of our key strategies is to continuously obtain evidence to support the safety and effectiveness of our products, which we believe will differentiate us from our competitors. As part of our strategy to gather and analyze high-quality data, we seek to ensure rigorous and reliable data collection and reporting. The data from our preclinical and clinical studies strengthens our ability to raise surgeon awareness and drive adoption of our products as a new category of soft tissue reconstruction products. We expect our clinical evidence will provide surgeons with safety and efficacy data on the appropriate use of our products and we plan to obtain further clinical evidence to support additional regulatory clearances or approvals of our reinforced tissue matrices for additional indications for use in the future.

We believe we have completed the largest non-human primate preclinical studies conducted in soft tissue reconstruction surgery. Non-human primates are considered the most suitable animal model to predict the human immune and inflammatory response to a soft tissue reconstruction device. Although not required for FDA clearance of our reinforced tissue matrices, we completed these preclinical studies prior to implantation of our products in human patients. In these studies, we compared our OviTex and OviTex PRS products to market leading competitive materials. In these studies, our reinforced tissue matrices exhibited a minimal inflammatory response, rapid cellular infiltration and revascularization and allowed for earlier and complete remodeling into functional tissue.

We are currently sponsoring our BRAVO study. An analysis of the first 32 patients who underwent surgery and completed the twelve-month follow-up visit showed a 0% rate of hernia recurrence, no device explantations and no predefined surgical site complications or wound-related events requiring surgical intervention. This clinical study included patients with a range of comorbidities, prior hernia repairs and history of surgical infections, predisposing them to complications. These patients were treated using either an open or minimally invasive surgical approach. These findings are generally corroborated by similar clinical data from multiple published retrospective studies in a variety of hernia repairs utilizing our OviTex products.

Our OviTex PRS products, designed for plastic and reconstructive surgery, utilize the same ovine rumen biologic material and interwoven polymer fibers as our OviTex products, but differ in their overall design. Our OviTex PRS reinforced tissue matrices have also been evaluated in a non-human primate model and demonstrated less inflammation and earlier remodeling into functional tissue than the leading biologic matrix used in plastic and reconstructive surgical procedures. Surgeons are beginning to utilize our OviTex PRS reinforced tissue matrices in their surgeries and we plan to continuously collect, analyze and support the presentation of clinical data to characterize the performance of our reconstructive reinforced tissue matrices. We also intend to support independent investigator-led post-market clinical studies on the effectiveness and safety of our OviTex PRS products.

Our BRAVO Study

We are sponsoring our BRAVO study, a prospective, single arm, multicenter study evaluating the clinical outcomes of 91 patients with simple and complex ventral hernias repaired with our OviTex 1S with permanent polymer. The study completed enrollment of 91 adult patients who underwent open, laparoscopic or robotic-assisted ventral hernia repair at seven centers in the U.S. between April 2017 and June 2019. The study was designed to test the hypothesis that the strong preclinical biologic performance and predictable biomechanics of our OviTex reinforced tissue matrices would translate into better clinical performance than that of biologic or synthetic devices for hernia repair. No study center contributed more than 19% of patients enrolled.

The primary endpoints of this study are the incidence of early postoperative surgical site occurrences or wound-related events noted at the hernia repair site and the incidence of other postoperative complications, in each case occurring within the first three months of the ventral hernia repair. These include deep or superficial wound infection, seroma, hematoma, wound dehiscence, skin necrosis and fistulas. Hernia recurrence is evaluated at each follow-up visit. In the case of a clinical suspicion by the surgeon of a recurrence, imaging studies are performed. Patients enrolled in the study are evaluated at 30 days, three months, 12 months and 24 months, with interim analysis of patients being conducted for each 25 patient cohort that reaches the three- and twelve-month follow-up period after implantation of our OviTex product. Patients presenting with a primary or recurrent ventral hernia were eligible for the study, with the exception of those with a Body Mass Index, or BMI, of over 40 kg/m², a Center for Disease Control, or CDC, Class IV/Dirty-Infected wound, or defects requiring devices larger than 20 × 20 cm or 18 × 22 cm, and other typical exclusion criteria. The secondary endpoints of this study are incidence of late postoperative surgical site occurrences or wound-related events noted at the hernia repair site and occurring more than three months after surgery, incidence of other late postoperative complications occurring more than three months after surgery or true hernia recurrence at the site of surgery at three months, 12 months or 24 months after the hernia repair.

The first 32 patients who have undergone surgery and completed the one-year follow-up visit have been evaluated. Excluded were two patients who withdrew from the study, one patient who is still active but has missed their one-year visit, and three subjects who died within three weeks of surgery due to causes unrelated to our OviTex product or the study procedure.

While many factors can influence surgical wound healing and postoperative infection, bacterial burden is the most significant risk factor. The CDC wound class is a surgical wound classification system designed by the CDC to help clinicians preemptively identify patients at risk of surgical site infection and assess the degree of bacterial contamination of a surgical wound at the time of operation. The CDC identifies four surgical wound classification categories: Class I/Clean; Class II/Clean-Contaminated; Class III/Contaminated; and Class IV/Dirty-Infected. The Ventral Hernia Working Group (“VHWG”) grade is a hernia grading system based on risk factor characteristics of the patient and the wound that helps surgeons develop patient assessment strategies, including the selection of appropriate repair material, the appropriate surgical technique and overall clinical approach based on each patient’s risk for developing a surgical site occurrence and postoperative complications. This surgical site occurrence-risk grading system consists of four grades: Grade 1/Low Risk; Grade 2/Co-Morbid; Grade 3/Potentially Contaminated; and Grade 4/Infected. This grading system represents salient points along a continuum of risk from low risk (healthy patients with uncomplicated wounds) to high-risk (patients with multiple comorbidities and uncontrolled infection). The demographics of the 32 patients, as well as the number of previous hernia repairs, history of surgical infection, wound status, VHWG classification, obesity classification approach and self-reported patient and surgeon satisfaction are presented in the table below.

BRAVO Study Data

	N ⁽¹⁾	%
Comorbidities		
Diabetes Mellitus	6	18.8 %
Hypertension	16	50.0 %
Previous Ventral Hernia Repair	14	43.8 %
Obesity	21	65.6 %
COPD/Asthma	4	12.5 %
Smoking History	9	28.1 %
Prior Hernia Repairs		
Yes	14	43.8 %
No	18	56.3 %
History of Surgical Infection		
Yes	6	18.8 %
No	26	81.3 %
Wound Status		
Class I	27	84.4 %
Class II	3	9.4 %
Class III	2	6.3 %
VHWG Grade		
Grade 1	5	15.6 %
Grade 2	21	65.6 %
Grade 3	6	18.8 %
Obesity Classification		
Not Obese	11	34.4 %
Obese	15	46.9 %
Morbidly Obese	6	18.8 %
Approach		
Open	24	75.0 %
Robotic-assisted	6	18.8 %
Laparoscopic	2	6.3 %

(1) Represents the number of patients out of the first 32 patients

	Month 12 Average	Range
Satisfaction		
Patient	9.3 (n=27)	2-10
Surgeon	9.8 (n=32)	8-10

The table below presents publicly available recurrence data for other biological matrix and resorbable synthetic mesh products in prospective clinical studies in ventral hernia repair presented in published clinical literature and conference presentations. Recurrence rates are calculated as the number of hernia recurrence at the time of follow-up divided by the number of patients who completed follow-up at the same time period.

Product Name	Tissue Reinforcement Material	Hernia Recurrence Rate ⁽¹⁾	Number of Hernia Recurrence ⁽¹⁾	Number of Patients who Completed Follow-up ⁽¹⁾	Follow-up Period in Months
Phasix ⁽¹⁾	Resorbable Synthetic Mesh	5%	5	95	12
Phasix ⁽¹⁾	Resorbable Synthetic Mesh	12%	11	95	18
Phasix ⁽¹⁾	Resorbable Synthetic Mesh	23%	19	82	36
Strattice ⁽¹⁾	Biologic Matrix	22%	15	69	12
Strattice ⁽¹⁾	Biologic Matrix	33%	22	67	24

(1) Hernia Recurrence Rate based on number of hernia recurrences reported in patients who completed follow up and patients who reported recurrent hernia before the specified follow up period. Clinical literature and conference presentations included hernia recurrence rates based on number of hernia recurrences in patients who comprised the initial intent-to-treat population (including those who did not complete the follow up period and did not report a hernia recurrence).

The table below presents the recurrence rate for the first 32 patients who reached 12-month follow-up in our BRAVO study.

Product Name	Tissue Reinforcement Material	Hernia Recurrence Rate	Number of Hernia Recurrence	Number of Patients who Completed Follow-up	Follow-up Period in Months
OviTex	Reinforced Tissue Matrix	— %	—	32	12

None of the first 32 patients who reached the one-year follow-up period had experienced a recurrence at that time (0 of 32; 0%). In this study, nine patients experienced surgical site occurrences, of which five were considered possibly related to the device (5 of 32; 15.6%). Of these five surgical site occurrences, four were infections (abdominal wall abscesses), and one was a seroma. None of the surgical site occurrences required further surgery or removal of the device, and all surgical site occurrences had resolved by the time of the 90-day follow-up visit. All nine patients had comorbidities that are known to increase the risks of surgical site occurrences, including obesity in seven, diabetes mellitus in one, chronic obstructive pulmonary disease in one, hypertension in five, one to five previous ventral hernia repairs in seven (average of 2.7 prior ventral hernia repairs) and previous surgical infections in three. Patient satisfaction for the completed patients was 9.3 out of 10 at the one-year follow-up and surgeon satisfaction at that time was 9.8 out of 10. Our OviTex product was considered easy or very easy to use in all cases, whether open or minimally invasive.

The first planned 12-month analysis of this study showed no device failures requiring explantation, reoperation or recurrences, thereby demonstrating the strong biologic and biomechanical performance of our OviTex reinforced tissue matrices. Our 0% 12-month recurrence rate compares favorably to the reported 12-month recurrence rates in published

prospective studies for Phasix, and Stratrice, which were 5.0%, and 22%, respectively. We believe that our OviTex reinforced tissue matrices better tolerate an infected environment as demonstrated by our 0% explantation rate.

As the BRAVO data continues to mature, we have recently conducted analysis on the first patient cohort at 24-months and expanded cohorts at 12-months and 90-days. We have submitted these data to upcoming medical conferences for presentation.

Preclinical In Vivo Evaluation of our OviTex Product in Non-Human Primates

We evaluated the biologic performance of two configurations of our OviTex reinforced tissue matrices in comparison to five currently available reconstruction materials and two other reconstruction materials that are no longer commercially available, including permanent synthetic mesh, resorbable synthetic mesh and biologic matrices in non-human primate studies, with 73 non-human primates. We selected the African Green monkeys for use in this study because this primate is closely related to and shares greater than 98% of their genetic code with humans. This non-human primate model has been used extensively to evaluate clinical and immune responses to pathogens, vaccines, and pharmaceuticals, and to predict xenograft biocompatibility for abdominal wall repair.

In accordance with the study protocol, the animals were anesthetized and a 7 × 3 cm full thickness “window” defect was created in the midline of the abdominal wall. The defect was then repaired with a reconstruction material of equal size, which was sutured in place to repair the defect and the skin was then sutured closed. Next the animals were euthanized at four, 12 or 24 weeks and the skin of the abdomen was dissected back to expose the site of the device. The graft site was evaluated for signs of herniation, inflammation, adhesions, contractions or other abnormalities. Then the length and width of the grafts were measured and the entire grafts and surrounding tissues were removed and photographed. Samples of the grafts were then prepared for analysis by an independent histopathologist. The most relevant data from this study came from the 24 week analysis.

Test Articles, Material Classification, Source Materials and Explant Time Points

Material	Manufacturer	Classification	Source Materials	Explant Time Point (weeks)
OviTex PGA 1S	TELA Bio	Reinforced Biologic	Ovine rumen embroidered with polyglycolic acid	4, 12, 24
OviTex PP 1S	TELA Bio	Reinforced Biologic	Ovine rumen embroidered with polypropylene	4, 12, 24
Stratrice Firm	LifeCell Corporation (now Allergan)	Biologic	Porcine dermis	4, 12, 24
Phasix	C.R. Bard, Inc. (now BD)	Resorbable Synthetic	Poly-4-hydroxybutyrate (P4HB)	4, 12, 24
Ventralight ST	C.R. Bard, Inc. (now BD)	Permanent Synthetic	Polypropylene with hydrogel barrier	4, 12, 24

OviTex

At 24 weeks, our OviTex reinforced tissue matrices best preserved their original geometry and exhibited limited contraction, had minimal inflammation, had rapid cellular infiltration and vascularization, and the grafts fully remodeled into host tissue (fastest rate of remodeling) with a higher degree of organized collagen than synthetics and biologics (on average).

Biologic Matrices

At 24 weeks, the biologics significantly contracted in length and expanded in width, had minimal inflammation, slow cellular infiltration and vascularization, and the grafts fully remodeled into host tissue (slower rate of remodeling than our OviTex product) and exhibited varying degrees of organized remodeled collagen.

Resorbable Synthetics

At 24 weeks, the resorbable synthetic material exhibited significant contraction, had mild to moderate inflammation (which persisted at elevated levels throughout the study), showed a substantial layer of early amorphous inflamed tissue adjacent to the device, and given that they contain no biologic material that can be remodeled, the scar-like collagen formed adjacent to the persistent synthetic mesh material, separated by a layer of loose connective and adipose tissue, which was also present between the mesh fibers.

Permanent Synthetics

At 24 weeks, the permanent synthetics exhibited a high degree of contraction in length and width, had mild to moderate inflammation (which persisted at elevated levels throughout the study), showed substantial layers of early amorphous tissue formed next to the device, and given that they have no biologic that can be remodeled, they exhibited disorganized and scar-like collagen surrounding the persistent synthetic mesh material.

Other Clinical Studies Using Our OviTex Products

A growing body of clinical evidence supports the safety, durability and effectiveness of our OviTex products for use in a range of hernia repair procedures including hiatal, inguinal and ventral hernia repairs and abdominal wall reconstruction.

Preclinical Animal Testing of OviTex PRS

Our resorbable and permanent OviTex PRS products were evaluated in a non-human primate study, in which our OviTex PRS product was compared to AlloDerm at two, four, 12 and 24 weeks for differences in healing kinetics, as evidenced through inflammatory response, cellular infiltration, and the morphological quality of the newly remodeled tissue associated with each device. The inflammatory response for both the OviTex PRS groups and AlloDerm was minimal, though when comparing the two the response was slightly lower in our resorbable OviTex PRS product at all time points, including the last 24 weeks. At four weeks, the highly permeable nature of our OviTex PRS product design enhanced fluid exchange evidenced by more effective and rapid infiltration of host cells in the collagen network. In comparison, the collagen network of AlloDerm developed a superficial layer of fibroblasts, covering the device, which macroscopically appeared white and largely inert. The earlier infiltration and faster recruitment of fibroblasts and host cells in our OviTex PRS product helped “jump start” the remodeling process into host tissue. At 12 weeks, our OviTex PRS product was fully remodeled and the maturation of the product was slightly ahead of that of AlloDerm at all time points. At 24 weeks, significant contraction was seen in all AlloDerm devices, as well as calcifications. The collagen in the AlloDerm specimens showed signs of maturation, much like our OviTex PRS products, which remodeled into mature collagen, consistent of compact lamellar bundles of low cellularity, occupying the entire defect site with functional tissue. After 24 weeks our OviTex PRS product was associated with a favorable tissue response, demonstrating rapid infiltration, earlier and more rapid tissue integration and slightly more advanced tissue remodeling in comparison to AlloDerm.

Intellectual Property

Our success depends in part on our ability to obtain, maintain, protect and enforce our proprietary technology and intellectual property rights, in particular, our patent and trademark rights, preserving the confidentiality of our trade secrets, and operating without infringing the valid and enforceable patents and other proprietary rights of third parties. We rely on a combination of patent, trademark, trade secret and other intellectual property rights and measures to protect the intellectual property rights that we consider important to our business. We also rely on know-how and continuing technological innovation to develop and maintain our competitive position.

Aroa License

In August 2012, we entered into the Aroa License, which was amended and restated in July 2015, pursuant to which we obtained an exclusive license to certain patents and know-how to develop, commercialize and sell bovine and ovine extracellular matrix products for hernia repair, abdominal wall and breast reconstruction in North America and Europe,

which we refer to as the Licensed Territory. In addition, under the Aroa License, Aroa is our exclusive manufacturer and supplier for the development of our products.

Pursuant to the terms of the Aroa License, we made upfront payments to Aroa totaling \$2.3 million and granted Aroa 74,316 newly issued shares of our restricted common stock. We have made additional payments in the aggregate of \$2.0 million to Aroa following the achievement of certain regulatory and operational milestones, including FDA 510(k) clearance of our OviTex products, which clearance was obtained and is currently held by Aroa, for use in surgical soft tissue reinforcement and the receipt of the first CE mark for sale of our products in the European Economic Area for use in abdominal wall reconstruction and hernia repair and our acceptance of certain supply quantities manufactured by Aroa for our commercial launch in Europe. In addition, we paid Aroa \$3.0 million in revenue-based milestone payments upon our achievement of certain net sales thresholds for sales of our products within the Licensed Territory. An additional \$1.0 million payment will be made to Aroa when cumulative product net sales of our products in the European territory reach certain amounts.

We are responsible for marketing the products manufactured for us by Aroa. We pay Aroa for the supply and manufacturing of our products through a revenue sharing agreement. Pursuant to the Aroa License, we retain 73% of the net sales of all of our products and pay Aroa the remaining 27%. If at any point during the term of the Aroa License we and Aroa determine that our anticipated product needs exceed Aroa's manufacturing capabilities, we and Aroa will mutually approve an expansion and equally share the cost of such expansion. Our share of such expansion costs may be offset by us against future revenue share payments.

The initial term of the Aroa License terminates on the later of (i) August 3, 2022, or (ii) the expiration of the last patent covering bovine and ovine products currently July 30, 2029, with an option to extend for an additional ten year period. Either party may terminate the Aroa License upon the other party's material breach, subject to a ninety-day notice and cure period or upon thirty-days written notice in the event of bankruptcy. We may terminate manufacture and production of a specific product upon thirty-days prior written notice upon (i) a reasonable determination that such product infringes the intellectual property rights of a third party, (ii) an uncured supply failure by Aroa or (iii) such product proves unfeasible, and immediately upon written notice from a regulatory authority that such product must be withdrawn from the market. If we materially breach the Aroa License in one of the Licensed Territories, Aroa may terminate the Aroa License solely with respect to the Licensed Territory in which the breach occurred. Upon termination of the Aroa License, we have the right to purchase all or any part of the unsold portion of any completed products from Aroa and the right to continue to sell all products remaining in our inventory.

The Aroa License also contains customary representations and warranties, confidentiality, insurance, audit, indemnification and non-competition provisions.

Patents

As of December 31, 2019, we exclusively license two issued U.S. patents that will expire in 2029 and 2031. We own seven U.S. issued or allowed patents which will expire between 2035 and 2037 and six pending U.S. patent applications, which subject to issuance, are projected to expire between 2035 and 2040, without taking into account potential patent term extensions or adjustments. In addition to our U.S. intellectual property, we also own four non-U.S. patent applications, which, subject to issuance, would be projected to expire between 2036 and 2037 and have exclusively licensed issued patents in Europe and Canada that will expire in 2029.

Our patents and patent applications cover, among other things, our corner-lock embroidery pattern, the use of adhesion barriers sewn into soft tissue and compliance associated with stretching.

Although the term of individual patents varies depending upon the country in which they were granted, in most countries, including the U.S., the patent term is 20 years from the earliest claimed filing date of a non-provisional patent application in the applicable country. In the U.S., a patent's term may, in certain cases, be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over a commonly owned patent or a patent naming a common inventor and having an earlier expiration date.

We cannot be sure that our pending patent applications that we have filed or may file in the future will result in issued patents, and we can give no assurance that any patents that have issued or might issue in the future will protect our current or future products, will provide us with any competitive advantage, and will not be challenged, invalidated, or circumvented.

Trade Secrets

We seek to protect our proprietary rights through a variety of methods, including confidentiality agreements and proprietary information agreements with suppliers, employees, consultants and others who may have access to our proprietary information. However, trade secrets and proprietary information can be difficult to protect. While we have confidence in the measures we take to protect and preserve our trade secrets and proprietary information, such measures can be breached, and we may not have adequate remedies for any such breach. In addition, our trade secrets and proprietary information may otherwise become known or be independently discovered by competitors.

Trademarks

We also rely on trademarks and trade designs to develop and maintain our competitive position. TELA Bio[®], OviTex[®] and OviTex PRS[®] are registered trademarks of ours in the U.S.

For more information regarding the risks related to our intellectual property, please see the section titled “Risk Factors — Risks Related to Our Intellectual Property Matters.”

Research and Development

We invest in research and development to advance our reinforced tissue matrix products with the goal of improving upon and supplementing our existing product offerings. We believe our ability to rapidly develop, manufacture and obtain regulatory approval or clearance of our products is attributable to the dynamic product innovation process that we have implemented, the versatility and leveragability of our core technology and the management philosophy behind that process. We have recruited and retained engineers and scientists with significant experience in the development of polymer science, biologics, textile engineering and analytical testing. We have a number of design improvements for our reinforced tissue matrices in various stages of development that are expected to enhance our current products and increase surgeon adoption of our products. In addition, we intend to engage in discussions with the FDA regarding an IDE protocol to study the safety and effectiveness of our OviTex PRS portfolio for an indication in breast reconstruction surgery. Our research and development efforts are based at our facility in Malvern, Pennsylvania.

Commercial Strategy

Our commercial efforts are predominantly focused on the U.S. market where we have established strong relationships with key constituencies, including hospitals, ambulatory surgery centers, GPOs, IDN, third-party payors and other key clinical and economic decision makers by offering a unique high quality, cost-effective product. As part of our overall commercial strategy, we intend to contract with GPOs and IDNs to increase access and penetration with hospital accounts. We have invested in our direct sales and marketing infrastructure in order to expand our presence to promote awareness and adoption of our products. There are currently more than 250 active hospital accounts in the U.S. that have incorporated our products into their practices.

We market our products to hospitals, ambulatory surgery centers, surgeons, GPOs, IDNs and medical device supply chain participants primarily through our direct sales force. Our sales representatives and sales managers have substantial medical device experience. As of December 31, 2019, we had 60 employees in our U.S. based commercial organization in 35 sales territories, which includes account managers and administrative support staff. We plan to continue to invest in our commercial organization by adding account managers, clinical development specialists, business managers and administrative support staff in order to cover the highest potential of accounts for soft tissue reconstruction procedures.

Manufacturing

All of our raw materials are sourced through and manufactured by Aroa in their Auckland, New Zealand facility under the terms of the Aroa License. Aroa's facility is approximately 25,000 square feet of which approximately 10,000 square feet is dedicated to manufacturing. This facility is currently undergoing a short-term expansion to increase capacity with additional process equipment and work shifts, and a further intermediate-term expansion is planned, with approximately 15,000 square feet of additional manufacturing space available. Expansions are mutually agreed between us and Aroa, and under the terms of the Aroa License we share 50% of the expansion cost, which we may later offset against our revenue share payment to Aroa. The Auckland facility is FDA registered and ISO 13485 certified. We believe that Aroa will be capable of providing sufficient quantities of our products to meet anticipated customer demands. In the event of an uncured supply failure by Aroa, we have the right to, directly or through a third-party, step in and operate the Aroa Auckland facility to manufacture our products on behalf of Aroa.

The proprietary ovine rumen used in the manufacturing of our products is obtained from sheep raised for human consumption in New Zealand and is currently sourced by Aroa from two abattoirs, or slaughterhouses. Although only two abattoirs are currently used, there are more than 30 additional abattoirs in New Zealand that could be used to source the ovine rumen. New Zealand cattle and sheep are considered by the USDA to be free of prion disease (progressive neurodegenerative disorders, including scrapie). The sheep receive veterinary inspection prior to slaughter and then each carcass is inspected post-mortem for the presence of disease according to USDA approved standards. Only sheep which pass full inspection can be used as a raw tissue source for our products and all of the ovine rumen is processed in compliance with the FDA's regulations for Medical Devices Containing Materials Derived from Animal Sources. Once the ovine rumen is procured, our reinforced tissue matrix products are then manufactured by Aroa at its facility in Auckland, New Zealand.

Distribution

All of our products are shipped directly from Auckland, New Zealand to our headquarters in Malvern, Pennsylvania. We sell our products directly to our customers, which are hospitals and ambulatory surgery centers. Except for our stocking distributors in Europe, we do not use distributors to sell our products.

Competition

The medical device industry is intensely competitive, subject to change and significantly affected by new product introductions and other market activities of industry participants.

In the hernia repair market our primary competitors are Davol Inc., a subsidiary of C.R. Bard, Inc., which produces Phasix and Ventralight ST, and LifeCell, a subsidiary of Allergan, which produces Strattice. In the plastic and reconstructive surgery market, our primary competitor is LifeCell, a subsidiary of Allergan, which produces AlloDerm.

Many of these competitors are large, well-capitalized companies with significantly greater market share and resources than we have. As a consequence, they are able to spend more on product development, marketing, sales and other product initiatives than we can. We also compete with smaller medical device companies that have single products or a limited range of products. Some of our competitors have:

- significantly greater name recognition;
- broader or deeper relations with healthcare professionals, customers and third-party payors;
- more established distribution networks;
- greater experience in conducting research and development, manufacturing, clinical trials, marketing and obtaining regulatory clearance or approval for products; and

- greater financial and human resources for product development, sales and marketing and patent prosecution.

We believe that our continued ability to compete favorably depends on:

- successfully expanding our commercial operations;
- continuing to innovate and maintain scientifically-advanced technology;
- attracting and retaining skilled personnel;
- maintaining and obtaining intellectual property protection for our products; and
- conducting clinical studies and obtaining and maintaining regulatory approvals.

Government Regulation

Our products and operations are subject to extensive and rigorous regulation by the FDA and other federal, state and local authorities, as well as foreign regulatory authorities. The FDA regulates, among other things, the research, development, testing, design, manufacturing, approval, labeling, storage, recordkeeping, advertising, promotion and marketing, distribution, post approval monitoring and reporting and import and export of medical devices in the U.S. to assure the safety and effectiveness of medical products for their intended use. The Federal Trade Commission also regulates the advertising of our products in the U.S. Further, we are subject to laws directed at preventing fraud and abuse, which subject our sales and marketing, training and other practices to government scrutiny.

Regulatory System for Medical Devices in the U.S.

All of our medical devices sold in the U.S. are subject to the Federal Food, Drug, and Cosmetic Act (“FDCA”) as implemented and enforced by the FDA.

Unless an exemption applies, each new or significantly modified medical device we seek to commercially distribute in the U.S. will require either a premarket notification to the FDA requesting permission for commercial distribution under Section 510(k) of the FDCA also referred to as a 510(k) clearance, or approval from the FDA of a Premarket Approval application (“PMA”). Both the 510(k) clearance and PMA processes can be resource intensive, expensive, and lengthy, and require payment of significant user fees, unless an exemption is available.

Device Classification

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 each medical device and the extent of control needed to provide reasonable assurances with respect to safety and effectiveness.

510(k) Clearance Pathway

Our current products are subject to premarket notification and clearance under section 510(k) of the FDCA.

When a 510(k) clearance is required, we must submit a pre-market notification to the FDA demonstrating that our proposed device is substantially equivalent to a predicate device, which is a previously cleared and legally marketed 510(k) device or a device that was in commercial distribution before 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. By regulation, a pre-market notification must be submitted to the FDA at least 90 days before we intend to distribute a device. As a practical matter, clearance often takes nine to twelve months, but may take significantly longer. To demonstrate substantial equivalence, the manufacturer must show

that the proposed device has the same intended use as the predicate device, and it either has the same technological characteristics, or different technological characteristics and the information in the pre-market notification demonstrates that the device is equally safe and effective and does not raise different questions of safety and effectiveness. The FDA may require further information, including clinical data, to make a determination regarding substantial equivalence.

If the FDA agrees that the device is substantially equivalent to a predicate device currently on the market, it will grant 510(k) clearance to commercially market the device. If the FDA determines that the device is “not substantially equivalent” to a previously cleared device, the device is automatically designated as a Class III device. The device sponsor must then fulfill more rigorous PMA requirements, or can request a risk-based classification determination for the device in accordance with the *de novo* classification procedure, which is a route to market for novel medical devices that are low to moderate risk and are not substantially equivalent to a predicate device.

After a device receives 510(k) marketing clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a major change or modification in its intended use, will require a new 510(k) marketing clearance or, depending on the modification, a *de novo* classification or PMA approval. The FDA requires each manufacturer to determine whether the proposed change requires submission of a 510(k) or a PMA in the first instance, but the FDA can review any such decision and disagree with a manufacturer’s determination.

Many minor modifications today are accomplished by a manufacturer documenting the change in an internal letter-to-file. The letter-to-file is in lieu of submitting a new 510(k) to obtain clearance for every change. The FDA can always review these letters-to-file in an inspection. If the FDA disagrees with a manufacturer’s determination, the FDA can require the manufacturer to cease marketing and/or request the recall of the modified device until 510(k) marketing clearance or PMA approval is obtained. Also, in these circumstances, we may be subject to significant regulatory fines or penalties.

The FDA is currently considering proposals to reform its 510(k) marketing clearance process, and such proposals could include increased requirements for clinical data and a longer review period. In November 2018, FDA officials announced forthcoming steps that the FDA intends to take to modernize the premarket notification pathway under Section 510(k) of the FDCA. Among other things, the FDA announced that it plans to develop proposals to drive manufacturers using the 510(k) pathway toward the use of newer predicates. These proposals include plans to potentially sunset certain older devices that were used as predicates under the 510(k) clearance pathway, and to potentially publish a list of devices that have been cleared on the basis of demonstrated substantial equivalence to predicate devices that are more than 10 years old. The FDA also announced that it intends to finalize guidance to establish a premarket review pathway for “manufacturers of certain well-understood device types” as an alternative to the 510(k) clearance pathway and that such premarket review pathway would allow manufacturers to rely on objective safety and performance criteria recognized by the FDA to demonstrate substantial equivalence, obviating the need for manufacturers to compare the safety and performance of their medical devices to specific predicate devices in the clearance process. These proposals have not yet been finalized or adopted, and the FDA announced that it would seek public feedback prior to publication of any such proposals, and may work with Congress to implement such proposals through legislation.

Pervasive and Continuing FDA Regulation

After the FDA permits a device to enter commercial distribution, numerous and pervasive regulatory requirements continue to apply to our business operations, products and technologies. These include:

- the FDA’s Quality Systems Regulations (“QSR”), which requires manufacturers, including third party manufacturers, to follow stringent design, testing, production, control, supplier/contractor selection, complaint handling, documentation and other quality assurance procedures during all aspects of the manufacturing process;
- labeling and marketing regulations which require that promotion is truthful, not misleading, fairly balanced and provide adequate directions for use and that all claims are substantiated;

- complying with new requirements for Unique Device Identifiers on devices and also requiring the submission of certain information about each device to the FDA's Global Unique Device Identification Database;
- advertising and promotion requirements, including FDA prohibitions against the promotion of products for uncleared, unapproved or off-label uses and FDA guidance on off-label dissemination of information and responding to unsolicited requests for information;
- restrictions on sale, distribution or use of a device;
- device establishment, registration and listing requirements and annual reporting requirements;
- approval or clearance of modifications to 510(k)-cleared devices that could significantly affect safety or effectiveness or that would constitute a major change in intended use of one of our cleared devices;
- medical device reporting regulations, which require that manufacturers report to the FDA if their 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 the malfunction were to recur;
- medical device correction, removal and recall 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;
- recall requirements, including a mandatory recall if there is a reasonable probability that the device would cause serious adverse health consequences or death;
- an order of repair, replacement or refund;
- device tracking requirements; and
- post-market surveillance activities and regulations, which apply when necessary to protect the public health or to provide additional safety and effectiveness data for the device.

The FDA has broad post-market and regulatory enforcement powers. Medical device manufacturers are subject to unannounced inspections by the FDA and other state, local and foreign regulatory authorities to assess compliance with the QSR and other applicable regulations, and these inspections may include the manufacturing facilities of any suppliers.

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

- warning letters, untitled letters, Form 483s, fines, injunctions, consent decrees and civil penalties;
- recall or seizure of products;
- operating restrictions, partial suspension or total shutdown of production;
- the FDA's refusal of requests for 510(k) clearance or premarket approval of new products, new intended uses or modifications to existing products;
- the FDA's refusal to issue certificates to foreign governments needed to export products for sale in other countries;

- withdrawing 510(k) clearance or premarket approvals that have already been granted; and
- criminal prosecution.

Regulatory System for Medical Devices in Europe

The European Union (“EU”) and the European Economic Area (“EEA”) (which is comprised of the 27 Member States of the EU plus Norway, Liechtenstein and Iceland and, until 2021, the United Kingdom) has a coordinated system for the authorization of medical devices. The European Union Medical Devices Directive (“MDD”) sets out the basic regulatory framework for medical devices in the EU. This directive has been separately enacted in more detail in the national legislation of the individual member states of the EU.

The system of regulating medical devices operates by way of a certification for each medical device. Each certificated device is marked with a CE mark which shows that the device has a Certificat de Conformité, also referred to as a Certificate of Conformance. There are national bodies known as Competent Authorities in each member state which oversee the implementation of the MDD within their jurisdiction. The means for achieving the requirements for CE mark varies according to the nature of the device. Devices are classified in accordance with their perceived risks, similarly to the U.S. system. The class of a product determines the requirements to be fulfilled before a CE mark can be placed on a product, known as a conformity assessment. Conformity assessments for products are carried out as required by the MDD. Except for low-risk medical devices (Class I non-sterile, non-measuring devices), where the manufacturer can self-certify compliance with the MDD based on a self-assessment of the conformity of its products with the essential requirements of the EU Medical Devices Directive, a conformity assessment procedure requires the intervention of an organization accredited by a member state of the EEA to conduct conformity assessments, or a Notified Body. If a Notified Body of one member state has issued a Certificat de Conformité, the device can be sold throughout the EU without further conformance tests being required in other member states.

On April 5, 2017, the European Parliament passed the Medical Devices Regulation (Regulation 2017/745), which repeals and replaces the MDD and the Active Implantable Medical Devices Directive. The Medical Devices Regulation will become applicable in May 2020. Once applicable, the new regulations will among other things:

- strengthen the rules on placing devices on the market and reinforce surveillance once they are available;
- establish explicit provisions on manufacturers’ responsibilities for the follow-up of the quality, performance and safety of devices placed on the market;
- improve the traceability of medical devices throughout the supply chain to the end-user or patient through a unique identification number;
- set up a central database to provide patients, healthcare professionals and the public with comprehensive information on products available in the EU; and
- strengthen rules for the assessment of certain high-risk devices, such as implants, which may have to undergo an additional check by experts before they are placed on the market.

Privacy and Security Laws

There are numerous U.S. federal and state laws and regulations related to the privacy and security of personal information, including health information. Among others, the federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act and their implementing regulations (collectively referred to as “HIPAA”) establish privacy and security standards that limit the use and disclosure of protected health information, or PHI, and require covered entities and business associates to implement administrative, physical, and technical safeguards to ensure the confidentiality, integrity and availability of individually identifiable health information in electronic form, among other requirements.

Violations of HIPAA may result in civil and criminal penalties. Companies subject to HIPAA must also comply with HIPAA's breach notification rule which requires notification of affected patients and the U.S. Department of Health and Human Services ("HHS") and in certain cases of media outlets, in the case of a breach of unsecured PHI. The regulations also require business associates of covered entities to notify the covered entity of breaches by the business associate. State attorneys general also have the right to prosecute HIPAA violations committed against residents of their states, and HIPAA standards have been used as the basis for the duty of care in state civil suits, such as those for negligence or recklessness in misusing personal information. In addition, HIPAA mandates that HHS conduct periodic compliance audits of HIPAA covered entities and their business associates for compliance.

Many states have laws that protect the privacy and security of sensitive and personal information, including health information, to which we are subject. These laws may be similar to or even more protective than HIPAA and other federal privacy laws. For example, California enacted the California Consumer Privacy Act ("CCPA") which creates individual privacy rights for California consumers and increases the privacy and security obligations of entities handling certain personal data. The CCPA went into effect on January 1, 2020, and the California Attorney General may bring enforcement actions for violations beginning July 1, 2020. The CCPA has been amended from time to time, and it remains unclear what, if any, further modifications will be made to this legislation or how it will be interpreted.

We may be subject to other state and federal privacy laws, including laws that prohibit unfair privacy and security practices and deceptive statements about privacy and security, laws that place specific requirements on certain types of activities, such as data security and texting, and laws requiring holders of personal information to maintain safeguards and to take certain actions in response to a data breach.

EU member states, the United Kingdom, Switzerland and other jurisdictions have also adopted data protection laws and regulations, which impose significant compliance obligations. In the EEA and the United Kingdom, the collection and use of personal data, including clinical trial data, is governed by the provisions of the General Data Protection Regulation ("GDPR"). The GDPR became effective on May 25, 2018, repealing its predecessor directive and increasing responsibility and liability of pharmaceutical and medical device companies in relation to the processing of personal data of EU data subjects. The GDPR, together with national legislation, regulations and guidelines of the EU member states and the United Kingdom governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, analyze and transfer personal data, including health data from clinical trials and adverse event reporting. In particular, these obligations and restrictions concern the consent of the individuals to whom the personal data relates, the information provided to the individuals, the transfer of personal data out of the EEA or the United Kingdom, security breach notifications, security and confidentiality of the personal data and imposition of substantial potential fines for breaches of the data protection obligations. European data protection authorities may interpret the GDPR and national laws differently and impose additional requirements, which add to the complexity of processing personal data in or from the EEA or United Kingdom. Guidance on implementation and compliance practices are often updated or otherwise revised.

Anti-Kickback Statutes

The federal Anti-Kickback Statute prohibits persons from (among other things) knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce the referral of an individual, or the recommending, furnishing or arranging for a good or service, for which payment may be made under a federal healthcare program such as Medicare or Medicaid.

Courts have interpreted the Anti-Kickback Statute quite broadly, holding that the statute will be violated if even one purpose of a payment — though not its sole or primary purpose — is to induce an act prohibited by the statute with a willful intent to act improperly. The statute prohibits many arrangements and practices that are otherwise lawful in businesses outside of the healthcare industry. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. Prosecutors may infer intent from the surrounding circumstances and, because courts have interpreted the statute to be violated if even one purpose of a payment is to induce the purchase of items or services paid for by federal healthcare programs, prosecutors have broad discretion in choosing arrangements to prosecute under the statute. There are statutory exceptions and regulatory "safe harbors" available to protect certain appropriately structured arrangements that otherwise would implicate the Anti-Kickback

Statute and those who structure their business arrangements to satisfy all of the criteria of a safe harbor are protected from liability under the statute. Our business is subject to these laws.

Many states have adopted anti-kickback and self-referral laws similar to the Anti-Kickback Statute; however, some of these state prohibitions are broader in scope and apply to arrangements involving healthcare items or services reimbursed by any source, and not only by Medicare, Medicaid or another federal healthcare program. These state laws do not always have the same exceptions or safe harbors as the federal Anti-Kickback Statute.

False Claims Laws

The federal False Claims Act imposes liability on any individual or entity that, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. The qui tam or “whistleblower” provisions of the False Claims Act allow a private individual to bring actions on behalf of the federal government alleging that the defendant has violated the False Claims Act and to share in any monetary recovery. In recent years, the number of lawsuits brought against healthcare industry participants by private individuals has increased dramatically.

There are many potential bases for liability under the False Claims Act. Liability arises, primarily, when an entity knowingly submits, or causes another to submit, a false claim for reimbursement to the federal government, but also may arise when an entity knowingly makes a false statement material to an obligation to pay or transmit money or property to the federal government or knowingly conceals or knowingly and improperly avoids or decreases an obligation to pay or transmit money or property to the federal government. Various states have also enacted false claims and insurance fraud laws that are analogous to the federal False Claims Act. Many of these state laws apply to claims submitted to any third-party payor and are not limited to claims submitted to a federal healthcare program. The scope of these laws and the interpretations of them vary from state to state and are enforced by state courts and regulatory authorities, each with broad discretion. A determination of liability under such laws could result in fines and penalties and restrictions on a company’s ability to operate in these jurisdictions.

Transparency Laws

The federal Physician Payment Sunshine Act (“Sunshine Act”) which was enacted as part of the Patient Protection and Affordable Care Act (“PPACA”) generally requires certain manufacturers of a drug, device, biologic or other medical supply that is covered by Medicare, Medicaid or the Children’s Health Insurance Program and applicable GPOs to report on an annual basis: (i) certain payments and other transfers of value given to certain healthcare professionals and teaching hospitals and (ii) any ownership or investment interest that certain healthcare professionals, or their immediate family members, have in their company. The payments required to be reported include the cost of meals provided to a healthcare professional, travel reimbursements and other transfers of value, including those provided as part of contracted services such as speaker programs, advisory boards, consultation services and clinical trial services. Under the statute, the federal government makes reported information available to the public. Failure to comply with the reporting requirements can result in significant civil monetary penalties or criminal penalties if an entity intentionally makes false statements in the reports.

There has been a recent trend of separate state regulation of payments and transfers of value by manufacturers of medical devices to healthcare professionals and entities, however, and some state transparency laws apply more broadly than the federal Sunshine Act. There are also an increasing number of analogous state laws that require manufacturers to file reports with states on pricing and marketing information. Many of these laws contain ambiguities as to what is required to comply with the laws. For example, several states have enacted legislation requiring manufacturers to, among other things, establish and implement commercial compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities and/or register their sales representatives. Certain state laws also regulate manufacturers’ use of physician and patient identifiable data. These laws may affect our sales, marketing and other promotional activities by imposing administrative and compliance burdens. In addition, given the lack of clarity with respect to these laws and their implementation, our reporting actions could be subject to the penalty provisions of the pertinent state and federal authorities. All of our activities are also potentially subject to federal and state consumer protection and unfair competition.

Other Federal Healthcare Fraud and Abuse Laws

We may also be subject to other federal healthcare fraud and abuse laws, including provisions of HIPAA, which prohibit knowingly and recklessly executing a scheme or artifice to defraud any healthcare benefit program, including private payors, as well as knowingly and willfully falsifying, concealing or covering up a material fact by any trick, scheme or device 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 fines, imprisonment or exclusion from government-sponsored programs. Similar to 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 order to have committed a violation.

Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act (“FCPA”) prohibits U.S. businesses and their representatives from offering to pay, paying, promising to pay or authorizing the payment of money or anything of value to a foreign official in order to influence any act or decision of the foreign official in his or her official capacity or to secure any other improper advantage in order to obtain or retain business. The FCPA also obligates companies whose securities are listed in the U.S. to comply with accounting provisions requiring us to maintain books and records, which in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the corporation, including international subsidiaries, if any, and to devise and maintain a system of internal accounting controls sufficient to provide reasonable assurances regarding the reliability of financial reporting and the preparation of financial statements. The scope of the FCPA includes interactions with certain healthcare professionals in many countries.

International Laws

In Europe, and throughout the world, other countries have enacted anti-bribery laws and/or regulations similar to the FCPA. Violations of any of these anti-bribery laws, or allegations of such violations, could have a negative impact on our business, results of operations and reputation.

There are also international privacy laws that impose restrictions on the access, use, and disclosure of health information. All of these laws may impact our business. Our failure to comply with these privacy laws or significant changes in the laws restricting our ability to obtain required patient information could significantly impact our business and our future business plans.

U.S. Healthcare Reform

Changes in healthcare policy could increase our costs and subject us to additional regulatory requirements that may interrupt commercialization of our products. By way of example, the PPACA substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the medical device industry.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the PPACA, and we expect there will be additional challenges and amendments to the PPACA in the future. On March 2, 2020, the United States Supreme Court announced that it would hear *House of Representatives v. Texas*, a case in which certain states have challenged the constitutionality of the PPACA’s individual mandate and whether, if the individual mandate is unconstitutional, if the individual mandate is severable from the remainder of the PPACA. If the Supreme Court rules that the individual mandate is unconstitutional and unable to be severed from the remainder of the PPACA, the remaining provisions of the PPACA would be invalid. It is unclear how this case, along with other efforts to repeal and replace the PPACA will impact the PPACA and our business.

There will continue to be proposals by legislators at both the federal and state levels, regulators and third-party payors to reduce costs while expanding individual healthcare benefits. Certain of these changes could impose additional limitations on the prices we will be able to charge and/or patients’ willingness to pay for our products. While in general it is too early to predict what effect, if any, any future healthcare reform legislation or policies will have on our business,

current and future healthcare reform legislation and policies could have a material adverse effect on our business and financial condition.

Pricing and Reimbursement

In the U.S. and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of reimbursement from third party payors. Third party payors include government health administrative authorities, managed care providers, private health insurers, and other organizations. These third party payors are increasingly challenging the price and examining the cost-effectiveness of medical products and services. In addition, significant uncertainty exists as to the reimbursement status of newly approved healthcare products, and efforts are underway by the current U.S. administration and states to reduce the cost of medical products and services overall. We may need to conduct expensive studies in order to demonstrate the cost-effectiveness of our products. Our product candidates may not be considered cost-effective. Decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. One third-party payor's decision to cover a particular product or procedure using the product does not ensure that other payors will also provide coverage for the product. Adequate third party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate revenue levels. Future legislation could limit payments for medical devices, including our products and our future products.

The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid health care costs, including price controls, restrictions on reimbursement and requirements for substitution of less costly products. Adoption of government controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for our products. The marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and third party payors fail to provide adequate coverage and reimbursement. In addition, an increasing emphasis on managed care in the U.S. has increased and will continue to increase the pressure on medical product and service pricing.

Corporate Information

We were incorporated on April 17, 2012.

Our primary executive offices are located at 1 Great Valley Parkway, Suite 24, Malvern, Pennsylvania 19355 and our telephone number is (484) 320-2930. Our website address is www.telabio.com. The information contained in, or that can be accessed through, our website is not part of this Annual Report.

Employees

As of December 31, 2019, we had 89 employees worldwide. None of our employees are represented by a collective bargaining agreement and we have never experienced a work stoppage. We believe we have good relationships with our employees.

ITEM 1A. RISK FACTORS

You should carefully consider the following risks described below, together with all of the other information in this Annual Report, including our consolidated financial statements and related notes. While we believe that the risks and uncertainties described below are the material risks facing our business, additional risks that we do not know of or that we currently think are immaterial may also arise and materially affect our business. The realization of any of these risks could have a material adverse effect on our business, financial condition, results of operations, and our ability to accomplish our strategic objectives.

Risks Related to Our Limited Operating History, Financial Position and Capital Requirements

We have incurred significant operating losses since inception, we expect to incur operating losses in the future and we may not be able to achieve or sustain profitability.

We have incurred net losses since our incorporation on April 17, 2012. For the years ended December 31, 2019 and 2018, we had net losses of \$22.4 million and \$21.1 million, respectively. As of December 31, 2019, we had an accumulated deficit of \$167.9 million.

We expect to continue to incur significant sales and marketing, research and clinical development, regulatory and other expenses as we expand our marketing efforts to increase adoption of our products, expand existing relationships with our customers, obtain regulatory clearances or approvals for our planned or future products, conduct clinical trials on our existing and planned or future products and develop new products or add new features to our existing products. In addition, we expect our general and administrative expenses to increase due to the additional costs associated with being a public company. As a result, we expect to continue to incur operating losses for the foreseeable future and may never achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on an ongoing basis. If we do not achieve or sustain profitability, it will be more difficult for us to finance our business and accomplish our strategic objectives, either of which would have a material adverse effect on our business, financial condition and results of operations and may cause the market price of our common stock to decline.

We have limited history operating as a commercial company.

We began commercializing our OviTex products in the U.S. in 2016 and in certain European countries in 2019, and therefore do not have a long history operating as a commercial company. Since 2016, our revenue has been derived almost entirely from sales of our OviTex products. In April 2019, Aroa received 510(k) marketing clearance from the FDA, which we hold for our OviTex PRS products. In May 2019, we commenced a limited launch of OviTex PRS and plan to continue commercializing in a controlled manner, gradually expanding our surgeon network, throughout 2020 and will also evaluate new generation products. As a result of its recent commercial introduction, our OviTex products have limited product and brand recognition, and demand for our OviTex products may not increase as quickly as we expect, or may decline. Our limited commercialization experience and limited number of cleared products make it difficult to evaluate our current business and predict future prospects. Our ability to generate revenue from sales of our OviTex products, OviTex PRS and other products we may seek to develop and commercialize in the future will depend on a number of factors, including our ability to successfully market and commercialize our OviTex and OviTex PRS products in the U.S. If our assumptions regarding the risks and uncertainties we face, which we use to plan our business, are incorrect or change due to circumstances in our business or our markets, or if we do not address these risks successfully, our operating and financial results could differ materially from our expectations and our business could suffer.

Our indebtedness may limit our flexibility in operating our business and adversely affect our financial health and competitive position.

As of December 31, 2019, we had \$30.0 million of indebtedness outstanding under our credit facility with OrbiMed Royalty Opportunities II, LP (“OrbiMed”) that matures in November 2023.

To service this indebtedness and any additional indebtedness we may incur in the future, we need to generate cash from our operating activities. Our ability to generate cash is subject, in part, to our ability to successfully execute our business strategy, as well as general economic, financial, competitive, regulatory and other factors beyond our control. We cannot assure you that our business will be able to generate sufficient cash flow from operations or that future borrowings or other financings will be available to us in an amount sufficient to enable us to service our indebtedness and fund our other liquidity needs. To the extent we are required to use cash from operations or the proceeds of any future financing to service our indebtedness, we will be less able to plan for, or react to, changes in our business, industry and the economy generally.

In addition, the agreement governing our credit facility contains certain covenants that limit our ability to engage in certain transactions that may be in our long-term best interests. Subject to certain limited exceptions, these covenants limit our ability to, among other things:

- create, incur, assume or permit to exist any additional indebtedness, or create, incur, allow or permit to exist any additional liens;
- enter into any amendment, supplement, waiver or other modification of, or enter into any forbearance from exercising any rights with respect to, the terms or provisions contained in certain agreements without consent;
- effect certain changes in our business, fiscal year, management, entity name, business locations;
- liquidate or dissolve, merge with or into, consolidate with, or acquire all or substantially all of the capital stock or assets of, any other company;
- pay cash dividends on, make any other distributions in respect of, or redeem, retire or repurchase, any shares of our capital stock;
- make certain investments; and
- enter into transactions with our affiliates.

We have not previously breached and are not currently in breach of these or any of the other covenants; however, there can be no guarantee that we will not breach these covenants in the future. In the event that we breach one or more covenants, our lender may choose to declare an event of default and require that we immediately repay all amounts outstanding, terminate any commitment to extend further credit and foreclose on the collateral granted to it to collateralize such indebtedness. The occurrence of any of these events could have a material adverse effect on our business, financial condition and results of operations.

We may require substantial additional capital to finance our planned operations, which may not be available to us on acceptable terms or at all.

If needed, any future funding requirements will depend on many factors, including:

- surgeon and market acceptance of our products;
- the cost of our research and development activities;
- the cost and timing of obtaining regulatory clearances or approvals;
- the cost and timing of establishing additional sales and marketing capabilities;
- the cost and timing of clinical trials that we are currently conducting or may conduct in the future;

- costs associated with any product recall that may occur;
- the effect of competing products in our markets or competing technologies;
- the extent to which we acquire or invest in products, technologies and businesses, although we currently have no commitments or agreements relating to any of these types of transactions;
- the costs of operating as a public company;
- the cost of filing and prosecuting patent applications and defending and enforcing our patent or other intellectual property rights; and
- the cost of defending, in litigation or otherwise, any claims that we infringe third-party patents or other intellectual property rights.

Any additional equity or debt financing that we raise may contain terms that are not favorable to us or our stockholders. In addition, any future debt financing into which we enter may impose upon us additional covenants that restrict our operations, including limitations on our ability to incur liens or additional debt, pay dividends, repurchase our common stock, make certain investments or engage in certain merger, consolidation or asset sale transactions. If we raise additional funds through collaboration and licensing arrangements with third-parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us.

Furthermore, we cannot be certain that additional funding will be available on acceptable terms, if at all. If we do not have, or are not able to obtain, sufficient funds, we may have to delay development or commercialization of our products or license to third-parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations. Any of these factors could harm our business, financial condition and results of operations.

We have limited experience marketing and selling our products, and if we are unable to expand, manage and maintain our direct sales and marketing organizations, we may not be able to generate anticipated revenue.

We began selling our OviTex products in the U.S. in 2016. As a result, we currently have limited sales and marketing capabilities. Building the requisite sales, marketing or distribution capabilities to successfully market and sell our products will be expensive and time-consuming and will require significant attention from our leadership team to manage. Any failure or delay in the development of our sales, marketing or distribution capabilities would adversely impact the commercialization of our products. Additionally, we may choose to collaborate, either globally or on a territory-by-territory basis, with third parties on the commercialization of our products. If we are unable to enter into such arrangements on acceptable terms or at all, we may not be able to successfully commercialize our products.

As of December 31, 2019, our commercial organization consisted of 60 employees. To generate future revenue growth, we plan to expand the size and geographic scope of our direct sales organization. This growth may require us to split or adjust existing sales territories, which may adversely affect our ability to retain customers in those territories. Additionally, our future success will depend largely on our ability to continue to hire, train, retain and motivate skilled sales and marketing personnel with significant industry experience and technical knowledge of medical devices and related products. The competition for talented individuals experienced in selling and marketing medical device products is intense, and we cannot assure you that we can assemble or maintain an effective team. We cannot assure you that we will be able to hire and retain additional personnel on favorable or commercially reasonable terms, if at all. Our operating results are directly dependent upon the sales and marketing efforts of our employees. Failure to hire or retain qualified sales and marketing personnel would prevent us from expanding our business and generating revenue. If we are unable to expand our sales and marketing capabilities, we may not be able to effectively commercialize our products, which could have an adverse effect on our business, financial condition and results of operations.

We may be unable to accurately forecast customer demand and our inventory levels.

Anticipating demand for our products may be challenging as surgeon demand and adoption rates are unpredictable. In addition, as an increasing number of our products are adopted by surgeons, we anticipate greater fluctuations in demand for our products, which makes demand forecasting more difficult.

We place orders with our supplier based on forecasts of demand and, in some instances, may acquire additional inventory to accommodate anticipated demand. Our forecasts are based on management's judgment and assumptions, each of which may introduce error into our estimates. If we overestimate customer demand, our excess or obsolete inventory may increase significantly, which would reduce our gross margin and adversely affect our financial results. Conversely, if we underestimate customer demand or if insufficient manufacturing capacity is available, we would miss revenue opportunities and potentially lose market share and damage our customer relationships.

Risks Related to the Commercialization of our Products

To date, substantially all of our revenue has been generated from sales of our OviTex products, and we therefore are highly dependent on their success.

Sales of our OviTex products accounted for 91% of total revenue for the year ended December 31, 2019 and for all of our revenue for the years ended December 31, 2018 and 2017. We first commercialized OviTex products in the U.S. in 2016 and in the last twelve months, we have introduced our larger sized OviTex products, our OviTex LPR product for use in laparoscopic and robotic-assisted hernia surgical repairs and sold the initial units of our OviTex PRS products for use in surgery for soft tissue repair or reinforcement in plastic and reconstructive procedures. We expect that sales of our OviTex products and, once fully commercialized, our OviTex PRS products, will account for all of our revenue for the foreseeable future. Our failure to successfully increase sales of these products or any other event impeding our ability to sell these products would result in a material adverse effect on our business, financial condition and results of operations.

The commercial success of our products will largely depend upon attaining significant market acceptance.

Our ability to execute our growth strategy, achieve commercial success and become profitable will depend upon the adoption by inpatient and outpatient hospitals, surgeons, and medical device supply chain participants of our reinforced tissue matrix products. We cannot predict how quickly, if at all, surgeons will accept our products or, if accepted, how frequently they will be used. Our products and planned or future products we may develop or market may never gain broad market acceptance among surgeons and the medical community for some or all of our indications. Some surgeons may have prior history with or a preference for other soft tissue reinforcement products, such as permanent synthetic mesh, resorbable synthetic mesh, or other biologic matrices, or may be reluctant to alter their practice patterns to treat patients with our reinforced tissue matrix products. The degree of market acceptance of any of our products will depend on a number of factors, including:

- whether surgeons and others in the medical community consider our products to be safe, effective and cost effective;
- the potential and perceived advantages of our products over alternative products;
- the effectiveness of our sales and marketing efforts for our products;
- the prevalence and severity of any complications associated with using our products;
- the convenience and ease of use of our products relative to competing products;
- product labeling or product insert requirements by regulatory authorities;
- the competitive pricing of our products;

- the quality of our products meeting patient and surgeon expectations;
- the results of clinical trials and post-market clinical studies relating to the use of our products;
- pricing pressure, including from GPOs and government payors;
- the availability of coverage and adequate reimbursement for procedures using our products from third-party payors, including government authorities;
- the willingness of patients to pay out-of-pocket for our products in the absence of coverage and adequate reimbursement by third-party payors, including government authorities; and
- our ability to provide incremental clinical and economic data that show the safety, clinical efficacy and cost effectiveness, and patient benefits from, our products.

Additionally, even if our products achieve market acceptance, they may not maintain that market acceptance over time if competing products or technologies, which are more cost effective or received more favorably, are introduced. Failure to achieve or maintain market acceptance and/or market share would limit our ability to generate revenue and would have a material adverse effect on our business, financial condition and results of operations.

Even if we are able to attain significant market acceptance of our products, the commercial success of our products is not guaranteed.

Our future financial success will depend substantially on our ability to effectively and profitably market and sell our products. Even if we are able to attain significant market acceptance of our products, the commercial success of our products and any of our planned or future products is dependent on a number of additional factors, including the results of clinical trials relating to the use of our products and our ability to obtain and maintain regulatory approval to market our products and maintain compliance with applicable regulatory requirements. Successful growth of our sales and marketing efforts will depend on the strength of our marketing and distribution infrastructure and the effectiveness of our marketing and sales efforts, including our efforts to expand our direct sales force, while our ability to satisfy demand for our products driven by our sales and marketing efforts will be largely dependent on the ability of Aroa to maintain a commercially viable manufacturing process that is compliant with regulatory standards. If we fail to successfully market and sell our products, we will not be able to achieve profitability, which will have a material adverse effect on our business, financial condition and results of operations.

Our ability to grow our revenue in future periods will depend on our ability to increase sales of our OviTex and OviTex PRS products and any new product or product indications that we introduce, which will, in turn, depend in part on our success in expanding our customer base and driving increased use of our products. New products or product indications may also need to be approved or cleared by the FDA and comparable non-U.S. regulatory agencies to drive revenue growth. If we cannot achieve revenue growth, it could have a material adverse effect on our business, financial condition and results of operations.

The misuse or off-label use of our products may harm our reputation in the marketplace, result in injuries that lead to product liability suits or result in costly investigations, fines or sanctions by regulatory bodies if we are deemed to have engaged in the promotion of our products for these uses.

Surgeons and other medical professionals may misuse our reinforced tissue matrix products or use improper techniques if they are not adequately trained, potentially leading to injury and an increased risk of product liability. If our products are misused or used with improper technique, we may become subject to costly litigation by our customers or their patients. Product liability claims could divert management's attention from our core business, be expensive to defend and result in sizeable damage awards against us that may not be covered by insurance. In addition, any of the events described above could harm our business.

The products we commercialize have been cleared by the FDA and other regulatory authorities for specific indications. Our OviTex products are reinforced tissue matrices designed for use as a surgical mesh to reinforce and/or repair soft tissue where weakness exists and indications for use of our OviTex products include the repair of hernia and/or body wall defects which require the use of reinforcing or bridging material to obtain the desired surgical outcome. Our OviTex PRS products are reconstructive reinforced tissue matrices designed for implantation to reinforce soft tissue where weakness exists in patients requiring soft tissue repair or reinforcement in plastic and reconstructive surgery. In connection with the March 2019 meeting of the General and Plastic Surgery Devices Panel of the Medical Devices Advisory Committee, the FDA stated that no surgical mesh device, including OviTex PRS, has been cleared or approved for use in breast surgery, and that to obtain such indication, the product sponsor must obtain an approved PMA. Our OviTex PRS products are not cleared or approved specifically for breast reconstruction surgery and thus we are prohibited from marketing them for that use. OviTex PRS or any other product we may develop for use in breast reconstruction surgery will need to be approved specifically for that indication. We intend to engage in discussions with the FDA regarding an IDE protocol to study the safety and effectiveness of our OviTex PRS product for an indication in breast reconstruction surgery. There can be no assurance that we will be able to secure an IDE in a timely manner, or at all. Any marketing for OviTex PRS or any other product for a use in breast reconstruction surgery would be deemed off-label promotion of that product if it has been cleared for a general indication of use to reinforce or repair soft tissue and has not received a clearance or approval specifically for use in breast surgery. We train our marketing personnel and direct sales force to not promote our OviTex or OviTex PRS products for uses outside of the FDA-cleared indications for use, known as “off-label uses.” We cannot, however, prevent a surgeon or medical professional from using our OviTex or OviTex PRS products or other products we may commercialize in the future for off-label uses.

Although we train our direct sales force not to promote our products for off-label uses, and our instructions for use in all markets specify that our products are not intended for use outside of those indications cleared or approved for use, the FDA or another regulatory authority could conclude that we have engaged in off-label promotion. If the FDA determines that our promotional or training materials constitute promotion of an off-label use, it could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions. It is also possible that other federal, state or non-U.S. enforcement authorities might take action under other regulatory authority if they consider our business activities to constitute promotion of an off-label use, which could result in significant penalties, including, but not limited to, criminal, civil and administrative penalties, damages, fines, disgorgement, exclusion from participation in government healthcare programs and the curtailment of our operations.

Even if surgeons or medical professionals use our OviTex products only for their approved indications, a failure by such surgeons and medical professionals to use our products in accordance with the processes and procedures established to properly utilize our OviTex products could result in product liability lawsuits, costly investigations and potentially affect our ability to achieve sufficient market penetration for our OviTex products. In those possible events, our reputation could be damaged and adoption of the products would be impaired. We may also be required to reassess the training, written instructions and product warnings we provide our customers. This process could require us to expend significant time and capital and could have a material adverse effect on our business, financial condition and results of operations and impair our ability to grow our business.

If we are unable to achieve and maintain adequate levels of coverage or reimbursement for our OviTex, OviTex PRS or other products we may commercialize in the future, our commercial success may be hindered.

Our ability to successfully commercialize and achieve market acceptance of our products depends, in significant part, on the availability of adequate financial coverage and reimbursement from third-party payors, including governmental payors (such as the Medicare and Medicaid programs in the U.S.), managed care organizations and private health insurers. The primary customers for our products are hospitals and ambulatory surgery centers who will then seek reimbursement from third-party payors for the procedures performed using our products. While some third-party payors currently cover and provide reimbursement for procedures using our currently cleared or approved products, we can give no assurance that these third-party payors will continue to provide coverage and adequate reimbursement for the procedures using our products, to permit hospitals and surgeons to offer procedures using our products to patients requiring treatment, or that current reimbursement levels for procedures using our products will continue. Additionally, no uniform policy for coverage and reimbursement exists in the U.S. and coverage and reimbursement can differ significantly from payor to payor. If third-party payors reverse or limit their coverage for the procedures using our

currently cleared or approved products in the future, this could have a material adverse effect on our business. If we are forced to lower the price we charge for our products, this could have a material adverse effect on our business, financial condition and results of operations and impair our ability to grow our business.

Healthcare costs have risen significantly over the past decade, which has resulted in or led to numerous cost reform initiatives. Third-party payors, whether U.S. or non-U.S., or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs, including examining the cost effectiveness of procedures, in addition to their safety and efficacy, when making coverage and payment decisions. Payors continually review new and existing technologies for possible coverage and can, without notice, deny or reverse coverage or alter pre-authorization requirements for new or existing procedures. We cannot provide assurance that we will be successful in any efforts we may potentially undertake to reverse such non-coverage decisions. If we are not successful in reversing non-coverage policies, or if third-party payors that currently cover or reimburse certain procedures reverse or limit their coverage of such procedures in the future, or if other third-party payors issue similar policies, our business could be adversely impacted.

Our long-term growth depends on our ability to enhance our product offerings.

It is important to our business that we continue to enhance our OviTex and OviTex PRS products and develop and introduce new reinforced tissue matrix products. Developing products is expensive and time-consuming and could divert management's attention away from other aspects of our business. The success of any new reinforced tissue matrix product offering or product enhancements to our OviTex and OviTex PRS products will depend on several factors, including our ability to:

- properly identify and anticipate surgeon and patient needs;
- develop and introduce new products and product enhancements in a timely manner;
- avoid infringing upon the intellectual property rights of third parties;
- ensure the quality, manufacture and supply of new products by Aroa;
- demonstrate, if required, the safety and efficacy of new products with data from preclinical studies and clinical trials;
- obtain the necessary regulatory clearances or approvals for expanded indications, new products or product modifications;
- be fully FDA-compliant with marketing of new devices or products;
- provide adequate training to potential users of our new products;
- receive adequate coverage and reimbursement for procedures performed with our new products; and
- develop an effective and dedicated sales and marketing team.

If we are not successful in introducing new product indications and developing and commercializing new products and product enhancements, our ability to increase our revenue may be impaired, which could have a material adverse effect on our business, financial condition and results of operations.

In the future our products may become obsolete, which would negatively affect operations and financial condition.

The medical device industry is characterized by rapid and significant change. There can be no assurance that other companies will not succeed in developing or marketing devices and products that are more effective than our reinforced

tissue matrix products or that would render our reinforced tissue matrix products obsolete or noncompetitive. Additionally, new surgical procedures, medications and other therapies could be developed that replace or reduce the importance of our products. Accordingly, our success will depend in part on our ability to respond quickly to medical and other changes through the development and introduction of new products. Our reinforced tissue matrix products have a limited shelf life and will expire if not timely used. Product development involves a high degree of risk, and there can be no assurance that our new product development efforts will result in any commercially successful products.

To successfully market and sell our products in markets outside of the U.S., we must address many international business risks with which we have limited experience.

We did not have any sales in markets outside of the U.S. for the years ended December 31, 2018 or 2017 and approximately 2% of our revenue for the year ended December 31, 2019 came from sales in markets outside of the U.S. Part of our sales strategy is to maintain our European presence. European sales are subject to a number of risks, including:

- difficulties in staffing and managing international operations;
- increased competition as a result of more products and procedures receiving regulatory approval in international markets;
- longer accounts receivable payment cycles and difficulties in collecting accounts receivable;
- fluctuations in currency exchange rates;
- non-U.S. certification and regulatory clearance or approval requirements;
- difficulties in developing effective marketing campaigns in unfamiliar non-U.S. countries;
- the impact of the potential exit of the United Kingdom from the European Union;
- customs clearance and shipping delays;
- complexities associated with managing multiple payor reimbursement regimes, government payors or patient self-pay systems;
- political, social, and economic instability abroad, terrorist attacks, and security concerns in general;
- preference for locally produced products;
- potentially adverse tax consequences, including the complexities of non-U.S. value-added tax systems, tax inefficiencies related to our corporate structure, and restrictions on the repatriation of earnings;
- the burdens of complying with a wide variety of non-U.S. laws and different legal standards; and
- increased financial accounting and reporting burdens and complexities.

If one or more of these risks are realized, our business, financial condition and results of operations could be adversely affected.

Risks Related to Our Reliance on Third Parties

We are highly dependent upon Aroa, as the exclusive manufacturer and supplier of our products.

In August 2012, we entered into our Aroa License which was amended and restated in July 2015. The Aroa License grants us an exclusive license in North America, the EU, Norway, Switzerland, Russia and former Soviet satellite countries to certain intellectual property rights, including patents relating to the use of bovine and ovine rumen as a source of extracellular matrix. Under the Aroa License, Aroa is our exclusive manufacturer and supplier of our products.

We are reliant upon the intellectual property we license from Aroa for the development and commercialization of our products. Under the Aroa License, we hold an exclusive license to certain intellectual and technology rights to develop, commercialize and sell certain endoform regenerative template products derived from cows and sheep. The Aroa License also provides for cooperative development of our products utilizing the licensed intellectual property and all of our products rely on intellectual property owned by Aroa and licensed to us under the Aroa License. The Aroa License imposes various developmental and regulatory requirements upon us along with requiring us to make milestone payments upon the achievement of certain commercial and regulatory milestones. If we fail to comply with our obligations under the Aroa License, Aroa will have the right to terminate the Aroa License, in which event we would not be able to develop and market our products. We are obligated to pay Aroa up to an aggregate of \$4.0 million in revenue-based milestone payments upon our achievement of certain net sales thresholds for sales of our products within the specified licensed territory, of which we have already paid \$3.0 million.

Aroa is required under the Aroa License to manufacture all of our products at its manufacturing and warehousing facility in Auckland, New Zealand. The production of all of our products in a single location exposes us to the risk of Aroa's facility being harmed or rendered inoperable by natural or man-made disasters or pandemics, which may render it difficult or impossible for Aroa to perform its manufacturing and assembly activities for some time. Although we and Aroa intend to establish redundant production facilities to lessen the risk of production disruptions, we will need to ensure that any manufacturing facility complies with our quality expectations and applicable regulatory requirements. If we are unable to establish redundant manufacturing facilities in a timely manner, any disruption in the manufacture of our products at Aroa's manufacturing and warehouse facility, the continued commercialization of our products, the supply of our products to customers and the development of any new reinforced tissue matrix products will be delayed, limited or prevented, which could have material adverse effect on our business, financial condition and results of operations.

Under the Aroa License, Aroa provides all of the raw materials and components used in the manufacture and assembly of our products. If Aroa is unable to supply the raw materials and components or to manufacture and assemble our products reliably and at the levels we anticipate or that are required by the market, we may be unable to acquire a substitute supply of raw materials and components on a timely basis, if at all. Under the Aroa License Aroa also holds the FDA clearances under which we commercialize our products, and maintains ultimate responsibility for all regulatory interactions with FDA relating to our products and decisions made with respect to changing or updating those clearances. If Aroa fails to comply with all applicable regulatory requirements and maintain the FDA clearances related to our products, we may be unable to commercialize our products on a timely basis, or at all. Our ability to supply our products commercially and to develop any future products depends, in part, on our ability to obtain these materials, components and products in accordance with regulatory requirements and in sufficient quantities for commercialization and clinical testing. While Aroa has historically met our demand for its products and services on a timely basis in the past, we cannot guarantee that it will always be able to meet our demand for its products. If Aroa fails to meet demand or notifies us that it believes it will fail to meet demand for our products, we are required under the Aroa License to work with Aroa to cure its supply failure and may, only in certain circumstances and on a temporary basis, engage a replacement contract manufacturer to mitigate a failure by Aroa to meet demand for our products. As such, we are highly dependent upon Aroa's continued ability to supply our products at the levels we require and any production shortfall that impairs the supply of our products could have a material adverse effect on our business, financial condition and results of operations and adversely affect our ability to satisfy demand for our products, which could adversely affect our product sales and operating results materially.

We or our partners may experience development, manufacturing problems, capacity constraints, or delays in the production of our products that could limit the potential growth of our revenue or increase our losses.

We may encounter unforeseen situations in Aroa's manufacturing and assembly of our products that would result in delays or shortfalls in its production. For example, Aroa was unable to supply us with our products from September 2017 to December 2017 due to a quality testing process failure identified by Aroa. Personnel shortages and reduced manufacturing capacity due to the COVID-19 outbreak may also result in a disruption in production.

Based upon our current planned market adoption we believe we will reach our capacity limitations in the Aroa facility. We have plans to expand capacity but there can be no assurance that we will be successful. If we are unable to successfully expand capacity we may not be able to meet the demand for our products. In addition, Aroa's production processes and assembly methods may have to change in order to accommodate any significant future expansion of its manufacturing capacity, which may increase our manufacturing costs, delay production of our products and adversely impact our business. Conversely, if demand for our products shifts such that Aroa's manufacturing facility is operated below its capacity for an extended period, it may adjust its manufacturing operations to reduce fixed costs, which could lead to uncertainty and delays in manufacturing times and quality during any transition period.

If Aroa's manufacturing activities are adversely impacted or if it is otherwise unable to keep up with demand for our products by successfully manufacturing, assembling, testing and shipping our products in a timely manner, our revenue could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors' products, which would have a material adverse effect on our business, financial condition and results of operations.

Our supply of ovine rumen for use in manufacturing our products may be vulnerable to disruption due to natural disaster, disease or other events.

The ovine rumen used in the manufacturing of our products is sourced through Aroa in New Zealand. Although Aroa obtains its supply of ovine rumen from jurisdictions with sheep that are not currently known to carry any prion disease (progressive neurodegenerative disorders, including scrapie disease), there can be no assurance that these flocks will remain prion disease-free or that a future outbreak or presence of other unintended and potentially hazardous agents would not adversely affect our products or patients that may receive them. The geographic concentration of our supply chain increases our vulnerability to disruption due to natural disasters, disease or other events. If there is a disruption in the supply of ovine rumen to our manufacturer and supplier, we may be unable to fulfill customer orders or delay the commercialization of new products.

We may also be prohibited from importing our products into the U.S. in the event of disease outbreak or other event impacting the sheep population in New Zealand. Any disruption in our supply lines could have a material adverse effect on our business, financial condition and results of operations.

Performance issues, service interruptions or price increases by our shipping carriers could adversely affect our business and harm our reputation and ability to provide our products on a timely basis.

Expedited, reliable shipping is essential to our operations. We rely heavily on providers of transport services for reliable and secure point-to-point transport of our OviTex and OviTex PRS products (and would rely heavily on such providers for any other products we may commercialize and ship in the future) to our customers and for tracking of these shipments. Should a carrier encounter delivery performance issues such as loss, damage or destruction of any of our products, it would be costly to replace such products in a timely manner and such occurrences may damage our reputation and lead to decreased demand for our OviTex and OviTex PRS products (or any other products we commercialize in the future) and increased cost and expense to our business. In addition, any significant increase in shipping rates could adversely affect our operating margins and results of operations. Similarly, strikes, severe weather, natural disasters, disease or other service interruptions affecting delivery services we use would adversely affect our ability to deliver our OviTex and OviTex PRS products (or any other products we commercialize in the future) on a timely basis. For example, disruptions to transportation infrastructure as a result of the COVID-19 outbreak may impact our ability to provide our products to our customers.

Risks Related to Intellectual Property Matters

We may need to license intellectual property from third parties, and such licenses may not be available or may not be available on commercially reasonable terms.

We may need to obtain licenses from third parties to advance our research or allow commercialization of our products, and we cannot provide any assurances that third-party patents do not exist which might be enforced against our products in the absence of such a license. The licensing and acquisition of third-party intellectual property rights is a competitive practice and companies that may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our products. We may fail to obtain any of these licenses on commercially reasonable terms, if at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology. If we are unable to do so, we may be unable to develop or commercialize the affected products, which could materially harm our business and the third parties owning such intellectual property rights could seek either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation. Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may not be able to successfully develop and commercialize the affected products, which would have a material adverse effect on our business.

If we fail to comply with our obligations under any license, collaboration or other agreements, we could lose intellectual property rights that are necessary for developing and protecting our products.

We have licensed certain intellectual property rights covering our current products from third parties, including Aroa. We are heavily dependent on our agreements with such third parties for our current products. If, for any reason, one or more of our agreements is terminated or we otherwise lose those rights, it could harm our business. Our license and other agreements impose, and any future collaboration agreements or license agreements we enter into are likely to impose various development, commercialization, funding, milestone, royalty, diligence, sublicensing, insurance, patent prosecution and enforcement or other obligations on us. If we breach any material obligations, or use the intellectual property licensed to us in an unauthorized manner, we may be required to pay damages and the licensor may have the right to terminate the license, which could result in us being unable to develop, manufacture and sell products that are covered by the licensed technology, having to negotiate new or reinstated licenses on less favorable terms, or enabling a competitor to gain access to the licensed technology.

If we are unable to adequately protect our intellectual property rights, or if we are accused of infringing on the intellectual property rights of others, our competitive position could be harmed or we could be required to incur significant expenses to enforce or defend our rights.

Our commercial success will depend in part on our success in obtaining and maintaining issued patents, trademarks and other intellectual property rights in the U.S. and elsewhere and protecting our proprietary technology. If we do not adequately protect our intellectual property and proprietary technology, competitors may be able to use our technologies or the goodwill we have acquired in the marketplace and erode or negate any competitive advantage we may have, which could harm our business and ability to achieve profitability.

We own seven issued or allowed U.S. patents and have six pending U.S. patent applications. As of December 31, 2019, we had rights, whether through ownership or licensing, to twelve issued or allowed U.S. patents, six pending U.S. patent applications, two issued non-U.S. patents and four pending non-U.S. patent applications. Our issued U.S. patents will expire between 2035 and 2037. The licensed patents will expire between 2029 and 2031.

Our ability to enforce our patent rights depends on our ability to detect infringement. It may be difficult to detect infringers who do not advertise the components that are used in their products. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's product. We may not prevail in

any lawsuits that we initiate and the damages or other remedies awarded if we were to prevail may not be commercially meaningful.

The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We cannot provide any assurances that any of our patents, or patents to which we have ownership rights through licensing agreements, have, or that any of our pending patent applications that mature into issued patents will include, claims with a scope sufficient to protect our OviTex and OviTex PRS products, any additional features we develop for our OviTex and OviTex PRS products or any new products we seek to develop in the future. Other parties may have developed technologies that may be related or competitive to our OviTex or OviTex PRS products, may have filed or may file patent applications and may have received or may receive patents that overlap or conflict with our patent applications, either by claiming the same methods or devices or by claiming subject matter that could dominate our patent position. The patent positions of medical device companies, including our patent position, may involve complex legal, scientific and factual questions, and, therefore, the issuance, scope, validity and enforceability of any patent claims that we may obtain cannot be predicted with certainty. Patents, if issued, may be challenged, deemed unenforceable, invalidated or circumvented. Proceedings challenging our patents could result in either loss of the patent or denial of the patent application or loss or reduction in the scope of one or more of the claims of the patent or patent application. In addition, such proceedings may be costly. Thus, any patents that we may own, or to which we have ownership rights through licensing agreements, may not provide any protection against competitors. Furthermore, an adverse decision in a judicial or administrative proceeding can result in a third party receiving the patent right sought by us, which in turn could affect our ability to commercialize our products.

Patents covering our products could be found invalid or unenforceable if challenged in court or before administrative bodies in the U.S. or abroad.

Although an issued patent is presumed valid and enforceable, its issuance is not conclusive as to its validity or its enforceability and it may not provide us with adequate proprietary protection or competitive advantages against competitors with similar products. Competitors could purchase our OviTex or OviTex PRS products and attempt to replicate the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around the relevant patents, or develop and obtain patent protection for more effective technologies, designs or methods. We may be unable to prevent the unauthorized disclosure or use of our technical knowledge or trade secrets by consultants, suppliers, vendors, former employees and current employees. The laws of some non-U.S. countries do not protect our proprietary rights to the same extent as the laws of the U.S., and we may encounter significant problems in protecting our proprietary rights in these countries.

In addition, proceedings to enforce or defend our patents, or patents to which we have ownership rights through licensing agreements, could put those patents at risk of being invalidated, held unenforceable or interpreted narrowly. Such proceedings could also provoke third parties to assert claims against us, including that some or all of the claims in one or more of those patents are invalid or otherwise unenforceable. If any of the patents covering our OviTex or OviTex PRS products are invalidated or found unenforceable, or if a court found that valid, enforceable patents held by third parties covered one or more of our products, our competitive position could be harmed or we could be required to incur significant expenses to enforce or defend our rights.

Third parties may assert ownership or commercial rights to inventions we develop.

Third parties may in the future make claims challenging the inventorship or ownership of our intellectual property. In addition, we may face claims by third parties that our agreements with employees, contractors or consultants obligating them to assign intellectual property to us are ineffective or in conflict with prior or competing contractual obligations of assignment, which could result in ownership disputes regarding intellectual property we have developed or will develop and interfere with our ability to capture the commercial value of such intellectual property. Litigation may be necessary to resolve an ownership dispute, and if we are not successful, we may be precluded from using certain intellectual property or may lose our exclusive rights in such intellectual property. Either outcome could harm our business and competitive position.

Litigation or other proceedings or third-party claims of intellectual property infringement could require us to spend significant time and money and could prevent us from selling our products or affect our stock price.

Our commercial success will depend in part on not infringing the patents or violating other proprietary rights of others. Significant litigation regarding patent rights occurs in our industry. Our competitors may have applied for or obtained, or may in the future apply for and obtain, patents that will prevent, limit or otherwise interfere with our ability to make, use and sell our products. We do not always conduct independent reviews of patents issued to third parties. In addition, patent applications in the U.S. and elsewhere can be pending for many years before issuance, or unintentionally abandoned patents or applications can be revived, so there may be applications of others now pending or recently revived patents of which we are unaware. Patent applications in the U.S., the EU and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. These applications may later result in issued patents, or the revival of previously abandoned patents, that will prevent, limit or otherwise interfere with our ability to develop and market our products. Third parties may assert claims that we are employing their proprietary technology without authorization, including claims from competitors or from nonpracticing entities that have no relevant product revenue and against whom our own patent portfolio may have no deterrent effect.

As we continue to commercialize our products in their current or updated forms, launch new products and enter new markets, we expect competitors may claim that one or more of our products infringe their intellectual property rights as a strategy to impede our commercialization and entry into new markets. The large number of patents, the rapid rate of new patent applications and issuances, the complexities of the technologies involved, and the uncertainty of litigation may increase the risk of business resources and management's attention being diverted to patent litigation. We have received, and we may in the future receive, letters or other threats or claims from third parties inviting us to take licenses under, or alleging that we infringe, their patents.

Moreover, we may become party to adversarial proceedings regarding our or third-party patent portfolios. Such proceedings could include supplemental examination or contested post-grant proceedings such as review, reexamination, inter partes review, interference or derivation proceedings before the U.S. Patent and Trademark Office ("USPTO") and challenges in U.S. District Courts. Patents may be subjected to opposition, post-grant review or comparable proceedings lodged in various foreign, both national and regional, patent offices. The legal threshold for initiating litigation or contested proceedings may be low, so that even lawsuits or proceedings with a low probability of success might be initiated. Litigation and contested proceedings can also be expensive and time-consuming, and our adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we can. We may also occasionally use these proceedings to challenge the patent rights of others. We cannot be certain that any particular challenge will be successful in limiting or eliminating the challenged patent rights of the third party.

Any lawsuits resulting from such allegations could subject us to significant liability for damages and/ or invalidate our proprietary rights. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop making, selling or using products or technologies that allegedly infringe the asserted intellectual property;
- lose the opportunity to license our technology to others or to collect royalty payments;
- incur significant legal expenses, including, in some cases, the attorney's fees and costs of litigation to the party whose intellectual property rights we may be found to be infringing;
- pay substantial damages (possibly treble damages) or royalties to the party whose intellectual property rights on which we may be found to be infringing;
- redesign products that contain the allegedly infringing intellectual property; and

- attempt to obtain a license to the relevant intellectual property from third parties, which may not be available on reasonable terms or at all.

Any litigation or 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 business and harm our reputation. If we are found to infringe the intellectual property rights of third parties, we could be required to pay substantial damages (which may be increased up to three times of awarded damages) and/or substantial royalties and could be prevented from selling our products unless we obtain a license or are 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 technically feasible way that would not infringe the intellectual property rights of others. We could encounter delays in product introductions while we attempt to develop alternative methods or products. 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.

Even if we were ultimately to prevail, any of these events could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business. Intellectual property litigation, regardless of its outcome, may cause negative publicity, adversely impact prospective customers, cause product shipment delays, or prohibit us from manufacturing, importing, marketing or otherwise commercializing our products, services and technology. In addition, if the breadth or strength of protection provided the patents and patent applications we own or in-license is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future products. In addition, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments, and if securities analysts or investors view these announcements in a negative light, the price of our common stock could be adversely affected.

In addition, we generally indemnify our customers with respect to infringement by our products of the proprietary rights of third parties. Third parties may assert infringement claims against our customers. These claims may require us to initiate or defend protracted and costly litigation on behalf of our customers, regardless of the merits of these claims. If any of these claims succeed or settle, we may be forced to pay damages or settlement payments on behalf of our customers or may be required to obtain licenses for the products they use. If we cannot obtain all necessary licenses on commercially reasonable terms, our customers may be forced to stop using our products.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position could be harmed.

We also rely upon copyright and trade secret protection, as well as non-disclosure agreements and invention assignment agreements with our employees, consultants and third parties, to protect our confidential and proprietary information.

In addition to contractual measures, we try to protect the confidential nature of our proprietary information using commonly accepted physical and technological security measures. Such measures may not provide adequate protection for our proprietary information. Our security measures may not prevent an employee or consultant from misappropriating our trade secrets and providing them to a competitor, and recourse we take against such misconduct may not provide an adequate remedy to protect our interests fully. Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our products that we consider proprietary. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome of any such claim is unpredictable. Trade secret violations are often a matter of state law, and the criteria for protection of trade secrets can vary among different jurisdictions. In addition, trade secrets may be independently developed or reverse engineered by others in a manner that could prevent legal recourse by us. If any of our confidential or proprietary information, such as our trade secrets, were to be disclosed or misappropriated, or if any such information was independently developed by a competitor, our business and competitive position could be harmed.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our target markets and our business may be adversely affected. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity, possibly leading to market confusion and potentially requiring us to pursue legal action. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our unregistered trademarks or trade names. If we are unable to successfully register our trademarks and trade names and establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely impact our financial condition or results of operations.

We may be unable to enforce our intellectual property rights throughout the world.

Filing, prosecuting and defending patents covering our products in all countries throughout the world would be prohibitively expensive, and the laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the U.S. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. This could make it difficult for us to stop infringement of our foreign patents, if obtained, or the misappropriation of our other intellectual property rights. For example, some foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. In addition, some countries limit the enforceability of patents against third parties, including government agencies or government contractors. In these countries, patents may provide limited or no benefit. Patent protection must ultimately be sought on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries. Additionally, in the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition and could require us to devote resources to advertising and marketing new brands. Our competitors may infringe our trademarks, and we may not have adequate resources to enforce our trademarks.

Proceedings to enforce our patent or trademark rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate.

Third parties may assert that our employees or consultants have wrongfully used or disclosed confidential information or misappropriated trade secrets.

We employ individuals who previously worked with other companies, including our competitors. Although we try to ensure that our employees and consultants do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property or personal data, including trade secrets or other proprietary information, of a former employer or other third party. Litigation may be necessary to defend against these claims. If we fail in defending any such claims or settling those claims, in addition to paying monetary damages or a settlement payment, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Recent changes in U.S. patent laws may limit our ability to obtain, defend and/or enforce our patents.

The U.S. has recently enacted and implemented wide ranging patent reform legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on actions by the U.S. Congress, the U.S. federal courts, and the USPTO, the

laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce patents that we have licensed or that we might obtain in the future. Similarly, changes in patent law and regulations in other countries or jurisdictions, changes in the governmental bodies that enforce them or changes in how the relevant governmental authority enforces patent laws or regulations may weaken our ability to obtain new patents or to enforce patents that we have licensed or that we may obtain in the future.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The USPTO and other patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In addition, periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and other patent agencies over the lifetime of the patent. While an inadvertent failure to make payment of such fees or to comply with such provisions can in many cases be cured by additional payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance with such provisions will result in the abandonment or lapse of the patent or patent application, and the partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents within prescribed time limits. If we or our licensors fail to maintain the patents and patent applications covering our product or if we or our licensors otherwise allow our patents or patent applications to be abandoned or lapse, it can create opportunities for competitors to enter the market, which would hurt our competitive position and could impair our ability to successfully commercialize our products.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

The term of any individual patent depends on applicable law in the country where the patent is granted. In the U.S., provided all maintenance fees are timely paid, a patent generally has a term of 20 years from its application filing date or earliest claimed non-provisional filing date. Extensions may be available under certain circumstances, but the life of a patent and, correspondingly, the protection it affords is limited. Even if we or our licensors obtain patents covering our products, when the terms of all patents covering a product expire, our business may become subject to competition from products identical or similar to ours. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

We may be unable to patent term extension in the U.S. under the Hatch-Waxman Act and in foreign countries under similar legislation.

In the U.S., a patent that covers a drug product or medical device approved by the FDA may be eligible for a term extension designed to restore the period of the patent term that is lost during the premarket regulatory review process conducted by the FDA. Depending upon the timing, duration and conditions of FDA marketing approval of our products, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, which permits a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, and only claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. In the European Union, our product candidates may be eligible for term extensions based on similar legislation. In either jurisdiction, however, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Even if we are granted such extension, the duration of such extension may be less than our request. If we are unable to obtain a patent term extension, or if the term of any such extension is less than our request, the period during which we can enforce our patent rights for that product will be in effect shortened and our competitors may obtain approval to market competing products sooner. The resulting reduction of years of revenue from applicable products could be substantial.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to our products or utilize similar technology but that are not covered by the claims of our patents or that incorporate certain technology in our products that is in the public domain;
- we, or our future licensors or collaborators, might not have been the first to make the inventions covered by the applicable issued patent or pending patent application that we own now or may own or license in the future;
- we, or our future licensors or collaborators, might not have been the first to file patent applications covering certain of our or their inventions;
- we may not be able to successfully commercialize our products before our relevant patents we may have, or to which we have ownership rights through licensing agreements, expire;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our current or future pending patent applications will not lead to issued patents;
- issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors or other third parties;
- our competitors or other third parties might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- the patents of others may harm our business; and
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Government Regulation

Our products and operations are subject to extensive government regulation and oversight both in the U.S. and internationally.

Our products are regulated as medical devices. We and our products are subject to extensive regulation in the U.S. and internationally including by the FDA and European Medicines Agency (“EMA”). The FDA, EMA and other foreign equivalents regulate, among other things, with respect to medical devices: design, development and manufacturing; testing, labeling, content and language of instructions for use and storage; clinical trials; product safety; establishment registration and device listing; marketing, sales and distribution; pre-market clearance and approval; record keeping procedures; advertising and promotion; recalls and field safety corrective actions; post-market surveillance, including

reporting of deaths or serious injuries and malfunctions that, if they were to recur, could lead to death or serious injury; post-market approval studies; and product import and export.

The regulations to which we are subject are complex and have become more stringent over time. Failure to comply with applicable regulations could jeopardize our ability to sell our products and result in enforcement actions such as: warning letters; fines; injunctions; civil penalties; termination of distribution; recalls or seizures of products; delays in the introduction of products into the market; total or partial suspension of production; refusal to grant future clearances or approvals; withdrawals or suspensions of current approvals, resulting in prohibitions on sales of our products; and in the most serious cases, criminal penalties.

We may not receive, or may be significantly delayed in receiving, the necessary clearances or approvals for our future products and modifications to our current products may require new 510(k) clearances or PMA approvals, and may require us to cease marketing or recall the modified products until clearances or approvals are obtained.

An element of our strategy is to continue to add new features and expand the indications and uses for our current products. In the U.S., before we can market a new medical device, or a new use of, new claim for or significant modification to an existing product, we must first receive either clearance under Section 510(k) of the FDCA or approval of a PMA from the FDA, unless an exemption applies. Our products are cleared with the FDA, through clearances obtained and, with the exception of the clearances relating to our OviTex PRS products, held by Aroa, under Section 510(k) of the FDCA, which permits marketing of a device if it is “substantially equivalent” to an already legally-marketed “predicate” device, which includes a device that has been previously cleared through the 510(k) process, a device that was legally marketed prior to May 28, 1976 (preamendments device), a device that was originally on the U.S. market pursuant to an approved PMA and later downclassified, or a 510(k)-exempt device. 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 are sometimes required to support substantial equivalence. In the PMA process, the FDA must determine that a proposed device is safe and effective for its intended use based, in part, on extensive data, including, but not limited to, technical, preclinical, clinical trial, manufacturing and labeling data. The PMA process is typically required for devices that are deemed to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices. To date, our products have been the subject of cleared 510(k)s, obtained and, with the exception of the clearances relating to our OviTex PRS products, held by Aroa. For more information regarding the regulation of our products, see “Business — Government Regulation.”

Modifications to products that are approved through a PMA application generally require FDA approval. Similarly, certain modifications made to products cleared through a 510(k) may require a new 510(k) clearance. Both the PMA approval and the 510(k) clearance process can be expensive, lengthy and uncertain. The FDA’s 510(k) clearance process usually takes from three to 12 months, but can last longer. The process of obtaining a PMA is much more costly and uncertain than the 510(k) clearance process and generally takes from one to three years, or even longer, from the time the application is filed with the FDA. In addition, a PMA generally requires the performance of one or more clinical trials. Despite the time, effort and cost, we cannot assure you that any particular device will be approved or cleared by the FDA. Any delay or failure to obtain necessary regulatory clearances or approvals could harm our business.

In the U.S., Aroa has obtained and holds 510(k) clearances from the FDA to market our OviTex products and obtained the 501(k) clearances from the FDA held by us for our OviTex PRS products. An element of our strategy is to continue to upgrade our reinforced tissue matrix products. We expect that any such modifications may require new 510(k) clearances; however, future modifications may be subject to the substantially more costly, time-consuming and uncertain PMA process. If the FDA requires us to go through a lengthier, more rigorous examination for future products or modifications to existing products than we had expected, product introductions or modifications could be delayed or canceled, which could cause our sales to decline.

The FDA can delay, limit or deny clearance or approval of a device for many reasons, including:

- we may not be able to demonstrate to the FDA’s satisfaction that the product or modification is substantially equivalent to the proposed predicate device or safe and effective for its intended use;

- the data from our preclinical studies and clinical trials may be insufficient to support clearance or approval, where required; and
- the manufacturing process or facilities we use may not meet applicable requirements.

In addition, the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions which may prevent or delay approval or clearance of our future products under development. For example, in November 2018, FDA officials announced forthcoming steps that the FDA intends to take to modernize the premarket notification pathway under Section 510(k) of the FDCA. Among other things, the FDA announced that it plans to develop proposals to drive manufacturers utilizing the 510(k) pathway toward the use of newer predicates. These proposals include plans to potentially sunset certain older devices that were used as predicates under the 510(k) clearance pathway, and to potentially publish a list of devices that have been cleared on the basis of demonstrated substantial equivalence to predicate devices that are more than 10 years old. The FDA also announced that it intends to finalize guidance to establish a premarket review pathway for “manufacturers of certain well-understood device types” as an alternative to the 510(k) clearance pathway and that such premarket review pathway would allow manufacturers to rely on objective safety and performance criteria recognized by the FDA to demonstrate substantial equivalence, obviating the need for manufacturers to compare the safety and performance of their medical devices to specific predicate devices in the clearance process. These proposals have not yet been finalized or adopted, and the FDA announced that it would seek public feedback prior to publication of any such proposals, and may work with Congress to implement such proposals through legislation. Accordingly, it is unclear the extent to which any proposals, if adopted, could impose additional regulatory requirements on us that could delay our ability to obtain new 510(k) clearances, increase the costs of compliance, or restrict our ability to maintain our current clearances, or otherwise create competition that may negatively affect our business.

Even after we have obtained the proper regulatory clearance or approval to market a product, we have ongoing responsibilities under FDA regulations. The failure to comply with applicable regulations could jeopardize our ability to sell our reinforced tissue matrix products and result in enforcement actions such as:

- warning letters;
- fines;
- injunctions;
- civil penalties;
- termination of distribution;
- recalls or seizures of products;
- delays in the introduction of products into the market;
- total or partial suspension of production;
- refusal to grant future clearances or approvals;
- withdrawals or suspensions of current clearances or approvals, resulting in prohibitions on sales of our products; and
- in the most serious cases, criminal penalties.

Any of these sanctions could result in higher than anticipated costs or lower than anticipated sales and harm our reputation, business, financial condition and results of operations.

In addition, regulators may determine that our financial relationships with our principal investigators resulted in a perceived or actual conflict of interest that may have affected the interpretation of a study. Principal investigators for our clinical trials may serve as speakers or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA or other regulatory authority. The FDA or other regulatory authority may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the study. The FDA or other regulatory authority may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA or other regulatory authority, as the case may be, and may ultimately lead to the denial of marketing approval of one or more of our future products.

To sell our products in member countries of the EEA our products must comply with the essential requirements of the EU Medical Devices Directive (Council Directive 93/42/EEC) and the Active Implantable Medical Devices Directive (Council Directive 90/385/EEC). Compliance with these requirements is a prerequisite to be able to affix the Conformité Européenne, or CE, mark to our products, without which they cannot be sold or marketed in the EEA. In the EEA, we have obtained the CE mark for our OviTex products. For more information regarding regulation of our products, see “Business—Government Regulation.”

An element of our strategy is to continue to add new features and expand the indications and uses for our current products. 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, approval of a PMA. The FDA requires every manufacturer to make this determination in the first instance, but the FDA may review any manufacturer’s decision. The FDA may not agree with our decisions regarding whether new clearances or approvals are necessary. Such modifications can be expensive and uncertain in time and outcome. We may not be able to obtain additional 510(k) clearances or PMAs for new products or for modifications to, or additional indications for, our products in a timely fashion, or at all. Delays in obtaining required future clearances or approvals would adversely affect our ability to introduce new or enhanced products in a timely manner, which in turn would harm our future growth. We have made modifications to our products in the past and expect to make additional modifications in the future that we believe do not or will not require additional clearances or approvals. If the FDA disagrees and requires new clearances or approvals for these modifications, we may be required to recall and to stop selling or marketing such products as modified until we obtain clearance or approval, which could harm our operating results and require us to redesign such products. In these circumstances, we may be subject to significant enforcement actions, including significant fines or penalties.

International regulatory approval processes may take more or less time than the FDA clearance or approval process. If we fail to comply with applicable FDA and comparable non-U.S. regulatory requirements, we may not receive regulatory clearances or approvals or may be subject to FDA or comparable non-U.S. enforcement actions.

We may be unable to obtain future regulatory clearance or approval in a timely manner, or at all, especially if existing regulations are changed or new regulations are adopted. For example, the FDA clearance or approval process can take longer than anticipated due to requests for additional clinical data and changes in regulatory requirements. A failure or delay in obtaining necessary regulatory clearances or approvals would materially adversely affect our business, financial condition and results of operations.

Although we have obtained regulatory clearance for our products, they will remain subject to extensive regulatory scrutiny.

We are subject to ongoing and pervasive regulatory requirements governing, among other things, the manufacturing, marketing, advertising, medical device reporting, selling and promoting our products. For example, we must submit periodic reports to the FDA as a condition of our clearance under Section 510(k). These reports include safety and effectiveness information about the device after its clearance. Failure to submit such reports, or failure to submit the reports in a timely manner, could result in enforcement action by the FDA.

Even after we have obtained the proper regulatory approval to market our products, they will be subject to ongoing regulatory requirements for design, development, manufacturing, testing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, recalls and field safety corrective actions, conduct of post-marketing studies and submission of safety, effectiveness and other post-market information, including both federal and state requirements in the U.S. and requirements of comparable non-U.S. regulatory authorities. Our failure to comply with applicable regulatory requirements could result in enforcement action by the FDA, EMA and applicable state regulatory authorities, which may include any of the following sanctions:

- issue warning or untitled letters that would result in adverse publicity or may require corrective advertising;
- 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 clearances under Section 510(k) or pre-market approvals or EU regulatory approvals of new products, new intended uses, or modifications to existing products;
- withdrawal or suspension of regulatory clearances or approvals;
- FDA refusal to issue certificates to non-U.S. governments needed to export products for sale in other countries; and
- criminal prosecution.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our products. If regulatory sanctions are applied or if regulatory clearance or approval is withdrawn, it would have a material adverse effect on our business, financial condition and results of operations.

Our products must be manufactured in accordance with federal and state regulations, and we could be forced to recall our products or terminate production if we fail to comply with these regulations.

The methods used in, and the facilities used for, the manufacture of our products must comply with the FDA's QSR which is a complex regulatory scheme that covers the procedures and documentation of the design, testing, production, process controls, quality assurance, labeling, packaging, handling, storage, distribution, installation, servicing and shipping of medical devices. Furthermore, Aroa must maintain facilities, procedures and operations that comply with our quality standards and applicable regulatory requirements. The FDA enforces the QSR through periodic announced or unannounced inspections of medical device manufacturing facilities, which may include the facilities of subcontractors. Our products are also subject to similar state regulations and various EU laws and regulations governing manufacturing.

Aroa may not take the necessary steps to comply with applicable regulations, which could cause delays in the delivery of our products. For example, following an inspection in March 2017, Aroa received an FDA Form 483 that contained multiple observations related to its manufacturing processes and procedures. In addition, failure to comply with applicable FDA requirements or later discovery of previously unknown problems with our products or manufacturing processes could result in, among other things: untitled letters or warning letters; fines, injunctions or civil penalties; suspension or withdrawal of approvals; seizures or recalls of our products; total or partial suspension of production or distribution; administrative or judicially imposed sanctions; the FDA's refusal to grant pending or future clearances or

approvals for our products; clinical holds; refusal to permit the import or export of our products; and criminal prosecution of us or our employees.

Any of these actions could significantly and negatively affect supply of our products. If any of these events occurs, our reputation could be harmed, we could be exposed to product liability claims and we could lose customers and experience reduced sales and increased costs.

If guidelines for soft tissue reconstruction surgery change or the standard of care evolves, we may need to redesign and seek new marketing authorization from the FDA for our OviTex and OviTex PRS products or other products we may commercialize in the future.

If guidelines for soft tissue reconstruction surgery change or the standard of care for reconstructing tissue evolves, we may need to redesign the applicable product and seek new approvals from the FDA. Our clearances under Section 510(k) of the FDCA are based on current soft tissue reconstruction surgery guidelines. If the guidelines change so that different surgeries or products become desirable, the clinical utility of one or more of our OviTex and OviTex PRS products or other products we may commercialize in the future could be diminished and our business could be adversely affected.

If any of our products cause or contribute to a death, serious injury, or other adverse medical events, or malfunction in certain ways, we will be required to report these events to FDA and other comparable regulatory authorities under applicable medical device reporting regulations, which can result in voluntary corrective actions or agency enforcement actions. If we fail to comply with our reporting obligations, we would be subject to sanctions that could harm our reputation, business, financial condition and results of operations. The discovery of serious safety issues with our products, or a recall of our products either voluntarily or at the direction of the FDA or another governmental authority, could have a negative impact on us.

We are subject to the FDA's medical device reporting regulations and similar EU regulations, which require us to report to the FDA when we receive or become aware of information that reasonably suggests that one or more of our products may have caused or contributed to a death or serious injury or malfunctioned in a way that, if the malfunction were to recur, could cause or contribute to a death or serious injury. The timing of our obligation to report is triggered by the date we become aware of the adverse event as well as the nature of the event. We may fail to report adverse events of which we become aware within the prescribed timeframe. We may also fail to recognize that we have become aware of a reportable adverse event, especially if it is not reported to us as an adverse event or if it is an adverse event that is unexpected or removed in time from the use of the product. If we fail to comply with our reporting obligations, the FDA could take action, including untitled letters, warning letters, administrative actions, criminal prosecution, imposition of civil monetary penalties, revocation of related approvals, seizure of our products or delay in clearance or approval of future products.

The FDA and EMA have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture of a product or in the event that a product poses an unacceptable risk to health. The FDA's authority to require a recall must be based on a finding that there is reasonable probability that the device could cause serious injury or death. We may also choose to voluntarily recall a product if any material deficiency is found. For example, in April 2018, Aroa, as the product manufacturer, issued a voluntary recall of our resorbable OviTex products due to a reduction in the labeled shelf life of such products from 24 months to 18 months. The recall included a total of 1,974 units from 48 manufacturing lots and was ultimately terminated in April 2019. A government-mandated or voluntary recall by us could also occur as a result of an unacceptable risk to health, component failures, malfunctions, manufacturing defects, labeling or design deficiencies, packaging defects or other deficiencies or failures to comply with applicable regulations. Product defects or other errors may occur in the future.

Depending on the corrective action we take to redress a product's deficiencies or defects, the FDA may require, or we may decide, that we will need to obtain new clearances or approvals for the device before we may market or distribute the corrected device. Seeking such approvals may delay our ability to replace the recalled devices in a timely manner. Moreover, if we do not adequately address problems associated with our devices, we may face additional regulatory

enforcement action, including FDA warning letters, product seizure, injunctions, administrative penalties or civil or criminal fines.

Companies are required to maintain certain records of recalls and corrections, even if they are not reportable to the FDA. We may initiate voluntary withdrawals or corrections for our products in the future that we determine do not require notification of the FDA. If the FDA disagrees with our determinations, it could require us to report those actions as recalls and we may be subject to enforcement action. A future recall announcement could harm our reputation with customers, potentially lead to product liability claims against us and negatively affect our sales. Any corrective action, whether voluntary or involuntary, as well as defending ourselves in a lawsuit, will require the dedication of our time and capital, distract management from operating our business and may harm our reputation and financial results.

Legislative or regulatory reforms may make it more difficult and costly for us to obtain regulatory clearances or approvals for our products or to manufacture, market or distribute our products after clearance or approval is obtained.

From time to time, legislation is drafted and introduced in Congress that could significantly change the statutory provisions governing the regulation of medical devices, or the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions which may prevent or delay approval or clearance of our future products under development. For example, in November 2018, FDA officials announced forthcoming steps that the FDA intends to take to modernize the premarket notification pathway under Section 510(k) of the FDCA. These proposals have not yet been finalized or adopted, and the FDA announced that it would seek public feedback prior to publication of any such proposals, and may work with Congress to implement such proposals through legislation. In addition, FDA regulations and guidance are often revised or reinterpreted by the FDA in ways that may significantly affect our business and our products. Any new statutes, regulations or revisions or reinterpretations of existing regulations may impose additional costs or lengthen review times of any future products or make it more difficult to obtain clearance of or approval for, manufacture, market or distribute our products. We cannot determine what effect changes in regulations, statutes, legal interpretation or policies, when and if promulgated, enacted or adopted may have on our business in the future. Such changes could, among other things, require: additional testing prior to obtaining clearance or approval; changes to manufacturing methods; recall, replacement or discontinuance of our products; or additional record keeping.

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. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the U.S. or abroad. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump 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, the FDA's ability to engage in routine oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. It is difficult to predict how these executive actions 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 restrictions on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted. 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 lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

On April 5, 2017, the European Parliament passed the Medical Devices Regulation (Regulation 2017/745), which repeals and replaces the EU Medical Devices Directive and the Active Implantable Medical Devices Directive. Unlike directives, which must be implemented into the national laws of the EEA member states, the regulations would be directly applicable, i.e., without the need for adoption of EEA member state laws implementing them, in all EEA member states and are intended to eliminate current differences in the regulation of medical devices among EEA member states. The Medical Devices Regulation is intended to, among other things, establish a uniform, transparent, predictable and sustainable regulatory framework across the EEA for medical devices and ensure a high level of safety and health while supporting innovation.

The Medical Devices Regulation will become applicable in 2020, and, once applicable, the new regulations will, among other things:

- strengthen the rules on placing devices on the market and reinforce surveillance once they are available;
- establish explicit provisions on manufacturers' responsibilities for the follow-up of the quality, performance and safety of devices placed on the market;
- improve the traceability of medical devices throughout the supply chain to the end-user or patient through a unique identification number;
- establish a central database to provide patients, healthcare professionals and the public with comprehensive information on products available in the EU; and
- strengthen rules for the assessment of certain high-risk devices, which may have to undergo an additional check by experts before they are placed on the market.

Failure to comply with these regulations may harm our business.

Changes in funding for the FDA and other government agencies could hinder their ability to hire and retain key leadership and other personnel, or otherwise prevent new products and services from being developed or commercialized in a timely manner.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory, and policy changes. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new devices to be reviewed and/or approved or cleared by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Our relationships with surgeons, patients and payors in the U.S. are subject to applicable anti-kickback, fraud and abuse laws and regulations.

Our current and future operations with respect to the commercialization of our products are subject to various U.S. federal and state healthcare laws and regulations. These laws impact, among other things, our proposed sales, marketing, support and education programs and constrain our business and financial arrangements and relationships with third-party payors, surgeons and other healthcare professionals. The laws are described in greater detail in the section below under "Business — Government Regulation," and include, but are not limited to:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving or paying any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, lease, order, or arranging for or recommending the purchase, lease or order of, any good or service, for which payment may be made, in whole or in part, under federal healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- the U.S. federal false claims laws, including the civil False Claims Act (which can be enforced through “qui tam,” or whistleblower actions, by private citizens on behalf of the federal government), which prohibits any person from, among other things, knowingly presenting, or causing to be presented false or fraudulent claims for payment of government funds or knowingly making, using or causing to be made or used, a false record or statement material to an obligation to pay money to the government or knowingly and improperly avoiding, decreasing or concealing an obligation to pay money to the U.S. federal government;
- the U.S. federal Health Insurance Portability and Accountability Act of 1996 which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement, in connection with the delivery of, or payment for healthcare benefits, items or services by a healthcare benefit program, which includes both government and privately funded benefits programs; similar to the U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the Physician Payments Sunshine Act, implemented as the Open Payments program, and its implementing regulations, which requires certain manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children’s Health Insurance Program to report annually to the Centers for Medicare and Medicare Services, or CMS, information related to certain payments made in the preceding calendar year and other transfers of value to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members; and
- state laws and regulations, including state anti-kickback and false claims laws, that may apply to our business practices, including but not limited to, research, distribution, sales and marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers; state laws that require medical device companies to comply with the medical device industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; and state laws and regulations that require drug and device manufacturers to file reports relating to pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities.

The shifting commercial compliance environment and the need to build and maintain robust and expandable systems to comply with different compliance or reporting requirements in multiple jurisdictions increase the possibility that a healthcare or medical device company may fail to comply fully with one or more of these requirements. Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. Certain physicians who influence the ordering or use of our products in procedures they perform have ownership interests in us and/or receive compensation for consulting services provided to us. It is possible that governmental authorities will conclude that our business practices do not comply with applicable fraud and abuse or other healthcare laws and regulations or guidance.

To enforce compliance with healthcare regulatory laws, certain enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. Responding to investigations can be time- and resource-consuming and can divert management’s attention from the business. Additionally, as a result of these investigations, healthcare providers and entities may also have to agree to additional compliance and reporting requirements as part of a consent decree or corporate integrity agreement. Any such investigation or settlements could increase our costs or otherwise have an adverse effect on our business. Even an unsuccessful challenge or investigation into our practices could cause adverse publicity and be costly to respond to.

If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment,

exclusion from government funded healthcare programs, such as Medicare and Medicaid, additional oversight and reporting requirements if we become subject to a corporate integrity agreement to resolve allegations of non-compliance with these laws and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business is found not to be in compliance with applicable laws, they may be subject to the same criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

We are subject to anti-bribery, anti-corruption, and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act, in which violations of these laws could result in substantial penalties and prosecution.

We are exposed to trade and economic sanctions and other restrictions imposed by the U.S. and other governments and organizations. The U.S. Departments of Justice, Commerce, State and Treasury and other federal agencies and authorities have a broad range of civil and criminal penalties they may seek to impose against corporations and individuals for violations of economic sanctions laws, export control laws, the U.S. Foreign Corrupt Practices Act, or the FCPA, and other federal statutes and regulations, including those established by the Office of Foreign Assets Control. In addition, the U.K. Bribery Act of 2010 (“Bribery Act”), prohibits both domestic and international bribery, as well as bribery across both private and public sectors. An organization that “fails to prevent bribery” by anyone associated with the organization can be charged under the Bribery Act unless the organization can establish the defense of having implemented “adequate procedures” to prevent bribery. Under these laws and regulations, as well as other anti-corruption laws, anti-money laundering laws, export control laws, customs laws, sanctions laws and other laws governing our operations, various government agencies may require export licenses, may seek to impose modifications to business practices, including cessation of business activities in sanctioned countries or with sanctioned persons or entities and modifications to compliance programs, which may increase compliance costs, and may subject us to fines, penalties and other sanctions. A violation of these laws or regulations would negatively affect our business, financial condition and results of operations.

We face risks related to our collection and use of data, which could result in investigations, inquiries, litigation, fines, legislative and regulatory action and negative press about our privacy and data protection practices.

Our business processes personal data, including some data related to health. When conducting clinical trials, we face risks associated with collecting trial participants’ data, especially health data, in a manner consistent with applicable laws and regulations. We also face risks inherent in handling large volumes of data and in protecting the security of such data. We could be subject to attacks on our systems by outside parties or fraudulent or inappropriate behavior by our service providers or employees. Third parties may also gain access to users’ accounts using stolen or inferred credentials, computer malware, viruses, spamming, phishing attacks or other means, and may use such access to obtain users’ personal data or prevent use of their accounts. Data breaches could result in a violation of applicable U.S. and international privacy, data protection and other laws, and subject us to individual or consumer class action litigation and governmental investigations and proceedings by federal, state and local regulatory entities in the U.S. and by international regulatory entities, resulting in exposure to material civil and/or criminal liability. Further, our general liability insurance and corporate risk program may not cover all potential claims to which we are exposed and may not be adequate to indemnify us for all liability that may be imposed.

As our operations and business grow, we may become subject to or affected by new or additional data protection laws and regulations and face increased scrutiny or attention from regulatory authorities. In the U.S., HIPAA imposes, among other things, certain standards relating to the privacy, security, transmission and breach reporting of individually identifiable health information. Certain states have also adopted comparable privacy and security laws and regulations, some of which may be more stringent than HIPAA. Such laws and regulations will be subject to interpretation by various courts and other governmental authorities, thus creating potentially complex compliance issues for us and our future customers and strategic partners. In addition, California enacted the CCPA on June 28, 2018, which takes effect on January 1, 2020. The CCPA creates individual privacy rights for California consumers and increases the privacy and security obligations of entities handling certain personal data. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. The CCPA may increase our compliance costs and potential liability, and many similar laws have been proposed at the federal level and in other states. In the event that we are subject to or affected by HIPAA, the CCPA or other domestic privacy and data

protection laws, any liability from failure to comply with the requirements of these laws could adversely affect our financial condition.

This risk is enhanced in certain jurisdictions and, as we expand our operations domestically and internationally, we may be subject to additional laws in other jurisdictions. Any failure, or perceived failure, by us to comply with privacy and data protection laws, rules and regulations could result in proceedings or actions against us by governmental entities or others. These proceedings or actions may subject us to significant penalties and negative publicity, require us to change our business practices, increase our costs and severely disrupt our business. The EU's General Data Protection Regulation, or GDPR, became effective in May 2018. The GDPR applies extraterritorially and imposes several stringent requirements for controllers and processors of personal data, including, for example, higher standards for obtaining consent from individuals to process their personal data, more robust disclosures to individuals and a strengthened individual data rights regime, shortened timelines for data breach notifications, limitations on retention of information, increased requirements pertaining to special categories of personal data and pseudonymised (i.e., key-coded) data and additional obligations when we contract third-party processors in connection with the processing of the personal data. The GDPR provides that EU member states may make their own laws and regulations limiting the processing of personal data, including special categories of data (e.g., racial or ethnic origin, political opinions, religious or philosophical beliefs) and profiling and automated individual decision-making of individuals, which could limit our ability to use and share personal data or other data and could cause our costs to increase, harming our business and financial condition. Non-compliance with GDPR is subject to significant penalties, including fines of up to €20.0 million or 4% of total worldwide revenue, whichever is greater. The implementation and enforcement of the GDPR may subject us to enforcement risk and requirements to change certain of our data collection, processing and other policies and practices. We could incur significant costs investigating and defending such claims and, if we are found liable, significant damages. If any of these events were to occur, our business and financial results could be adversely affected. Other jurisdictions outside the EU are similarly introducing or enhancing laws and regulations relating to privacy and data security, which enhances risks relating to compliance with such laws.

Additionally, we are subject to laws and regulations regarding cross-border transfers of personal data, including laws relating to transfer of personal data outside of the EEA. We rely on transfer mechanisms permitted under these laws, including EU Standard Contract Clauses. If we cannot rely on existing mechanisms for transferring personal data from the EEA, the United Kingdom or other jurisdictions, we could be prevented from transferring personal data of users or employees in those regions. This could adversely affect the manner in which we provide our services and thus materially affect our operations and financial results.

Healthcare policy changes, including recently enacted legislation reforming the U.S. healthcare system, could harm our business, financial condition and results of operations.

In the U.S., there have been and continue to be a number of legislative initiatives to contain healthcare costs. In March 2010, the PPACA was enacted in the U.S., which made a number of substantial changes in the way healthcare is financed by both governmental and private insurers. Among other ways in which it may affect our business, the PPACA:

- established a new Patient-Centered Outcomes Research Institute to oversee and identify priorities in comparative clinical effectiveness research in an effort to coordinate and develop such research;
- implemented payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other healthcare providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models; and
- expanded the eligibility criteria for Medicaid programs.

We do not yet know the full impact that the PPACA will have on our business. Since its enactment, there have been judicial and Congressional challenges to certain aspects of the PPACA, and we expect there will be additional challenges and amendments to the PPACA in the future. On March 2, 2020, the United States Supreme Court announced that it will hear *House of Representatives v. Texas*, a case in which certain states have challenged the constitutionality of the PPACA's individual mandate and whether, if the individual mandate is unconstitutional, if the individual mandate is

severable from the remainder of the PPACA. If the Supreme Court rules that the individual mandate is unconstitutional and unable to be severed from the remainder of the PPACA, the remaining provisions of the PPACA would be invalid. It is unclear how this case, along with other efforts to repeal and replace the PPACA will impact the PPACA and our business.

In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. On August 2, 2011, the Budget Control Act of 2011 was signed into law, which, among other things, reduced Medicare payments to providers by 2% per fiscal year, effective on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2027 unless additional Congressional action is taken. On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, reduced Medicare payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. The Medicare Access and CHIP Reauthorization Act of 2015, (“MACRA”) enacted on April 16, 2015, repealed the formula by which Medicare made annual payment adjustments to physicians and implemented fixed annual updates and a new system of incentive payments that began in 2019 that are based on various performance measures and physicians’ participation in alternative payment models such as accountable care organizations. It is unclear what effect new quality and payment programs, such as MACRA, may have on our business, financial condition, results of operations or cash flows.

We expect additional state and federal healthcare policies and reform measures to be adopted in the future, any of which could limit reimbursement for healthcare products and services or otherwise result in reduced demand for our products or other products we may commercialize in the future or additional pricing pressure and have a material adverse effect on our industry generally and on our customers. Any changes of, or uncertainty with respect to, future coverage or reimbursement rates could affect demand for our products or other products we may commercialize in the future, which in turn could impact our ability to successfully commercialize our products or other products we may commercialize in the future and could have a material adverse effect on our business, financial condition and results of operations.

Our business involves the use of hazardous materials and we and Aroa must comply with environmental laws and regulations, which may be expensive and restrict how we do business.

Aroa’s activities in manufacturing our products may involve the controlled storage, use and disposal of hazardous materials. Aroa is or may be subject to federal, state, local and non-U.S. laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these hazardous materials. We currently carry no insurance specifically covering environmental claims relating to the use of hazardous materials.

Although we believe that Aroa’s safety procedures for handling and disposing of these materials and waste products comply with the standards prescribed by these laws and regulations, we cannot eliminate the risk of accidental injury or contamination from the use, storage, handling or disposal of hazardous materials. In the event of an accident, federal, state or other applicable authorities may curtail Aroa’s use of these materials and interrupt their business operations which could adversely affect our business.

Compliance with environmental laws and regulations may be expensive and non-compliance could result in substantial liabilities, fines and penalties, personal injury and third party property damage claims and substantial investigation and remediation costs. Environmental laws and regulations could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations. We cannot assure you that violations of these laws and regulations will not occur in the future or have not occurred in the past as a result of human error, accidents, equipment failure or other causes. The expense associated with environmental regulation and remediation could harm our financial condition and results of operations.

Risks Related to Our Business and Products

Our financial results may fluctuate significantly and may not fully reflect the underlying performance of our business.

Our quarterly and annual results of operations may vary significantly in the future, and period-to-period comparisons of our operating results may not be meaningful. Accordingly, the results of any one quarter or period should not be relied upon as an indication of future performance. Our quarterly and annual financial results may fluctuate as a result of a variety of factors, many of which are outside our control.

Factors that may cause fluctuations in our quarterly and annual results include:

- surgeon and patient adoption of our products;
- timing of new product offerings, acquisitions, licenses or other significant events by us or our competitors;
- changes in coverage policies by third-party payors that affect the reimbursement of procedures in which our products are used;
- unanticipated pricing pressure;
- our ability to obtain and maintain regulatory clearance or approval for any products in development or for our current products for additional indications or in additional jurisdictions;
- the hiring, retention and continued productivity of our sales representatives;
- our ability to expand the geographic reach of our sales and marketing efforts;
- results of clinical research and trials on our existing products and products in development;
- delays in, or failure of, component and raw material deliveries by Aroa;
- recalls or other field safety corrective actions by Aroa;
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters such as earthquakes, floods or public health emergencies such as the recent COVID-19 pandemic; and
- positive or negative coverage in the media or clinical publications of our products or products of our competitors or our industry.

Because our quarterly and annual results may fluctuate, period-to-period comparisons may not be the best indication of the underlying results of our business. In particular, we cannot predict at this time the extent of the impact that the recent COVID-19 pandemic will have on our sales and financial results. These fluctuations may also increase the likelihood that we will not meet our forecasted performance, which could negatively affect the market price for our common stock.

The recent outbreak of the COVID-19 may negatively impact our commercialization strategy and the sales of OviTex and OviTex PRS.

In December 2019, a novel strain of coronavirus, COVID-19, was reported to have surfaced in Wuhan, China. As of March 2020, COVID-19 has spread to other countries, including the United States, and has been declared to be a pandemic by the World Health Organization. Efforts to contain the spread of COVID-19 have intensified and the U.S., Europe and Asia have implemented severe travel restrictions, social distancing and delays or cancellations of elective surgeries. The outbreak of COVID-19 poses the risk that we or our employees, contractors, suppliers, and other partners

may be prevented from conducting business activities for an indefinite period of time, including due to shutdowns that may be requested or mandated by governmental authorities.

Hospitals have begun to reduce and divert staffing, divert resources to patients suffering from the infectious disease and limit hospital access for non-patients, including our sales professionals. In addition, travel restrictions due to COVID-19 have impacted our sales professionals' ability to travel to customers. These circumstances have negatively impacted the ability of our sales professionals to effectively market to physicians, which will have a negative impact on our sales and the market penetration of our OviTex and OviTex PRS products. In addition, the spread of COVID-19 has had, and may continue to have, an impact on the number of patients seeking and receiving hernia repair, abdominal wall reconstruction or plastic and reconstructive surgeries, as hospitals cancel elective surgeries and patients postpone these procedures due to COVID-19 concerns, which may reduce demand for our OviTex and OviTex PRS products and negatively impact our sales and results of operations.

COVID-19 has and will continue to have an impact on ports and trade globally. We currently rely on Aroa, which is headquartered in New Zealand, for supply of our products. There is a risk that supplies of our products may be significantly delayed or may become unavailable as a result of COVID-19 and the resulting impact on Aroa's labor force and operations, including as a result of governmental restrictions on business operations and the movement of people and goods in an effort to curtail the spread of the virus. There can be no assurance that we would be able to timely implement any mitigation plans. Disruptions in our supply chain, whether as a result of restricted travel, quarantine requirements or otherwise, could negatively impact our ability to supply and sell our products.

The continued spread of COVID-19 has also led to severe disruption and volatility in the global capital markets, which could increase our cost of capital and adversely affect our ability to access the capital markets. It is possible that the continued spread of COVID-19 could cause an economic slowdown or recession or cause other unpredictable events, each of which could adversely affect our business, results of operations or financial condition.

The extent to which COVID-19 impacts our financial results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the COVID-19 outbreak and the actions to contain the outbreak or treat its impact, among others. Moreover, the COVID-19 outbreak has begun to have indeterminable adverse effects on general commercial activity and the world economy, and our business and results of operations could be adversely affected to the extent that COVID-19 or any other pandemic harms the global economy generally.

We may be unable to compete successfully with larger competitors in our highly competitive industry.

The medical device industry is intensely competitive, subject to rapid change and significantly affected by new product introductions and other market activities of industry participants. Our competitors also compete with us in recruiting and retaining qualified scientific, management and commercial personnel, as well as in acquiring technologies complementary to, or necessary for, our products. Because of the complex and technical nature of our products and the dynamic market in which we compete, any failure to attract and retain a sufficient number of qualified employees could materially harm our ability to develop and commercialize our products, which would have a material adverse effect on our business, financial condition and results of operations.

In the U.S., we currently compete with LifeCell Corporation, an affiliate of Allergan plc, and Davol Inc., a subsidiary of C.R. Bard, Inc. which produce, among other things, soft tissue reconstruction surgery products, including Strattice and Phasix, respectively. In the EEA, we compete with C.R. Bard, Inc. who produces other soft tissue reinforcement products. Many of these competitors are large, well-capitalized companies with significantly greater market share and resources than us. As a consequence, they are able to spend more on product development, marketing, sales and other product initiatives than we can. We believe other emerging businesses are in the early stages of developing similar products designed for soft tissue reconstruction surgery. Although we are the only ovine-derived implantable product designed for soft tissue reconstruction surgery, there are other soft tissue reconstruction surgery products derived solely, or in part, from other biological sources.

Most of the other soft tissue reconstruction surgery products currently have a greater penetration into the soft tissue reconstruction surgery market. Often, other soft tissue reconstruction surgery products with which our products compete are marketed as part of a bundled product line, which may provide our potential customers a better price-per-product than we could offer. If we are unable to penetrate the soft tissue reconstruction surgery market, or offer competitive pricing on our products compared with products sold as part of a bundled product line, it could have a material adverse effect on our business, financial condition and results of operations.

In addition, competitors with greater financial resources could acquire other companies to gain enhanced name recognition and market share, as well as new technologies or products that could effectively compete with our existing products, which may cause our revenue to decline and would harm our business.

We may be unable to obtain additional contract positions with major GPOs and integrated delivery networks, or IDNs, for our products, and even if we are able to do so, such contracts may not generate sufficient sales of our products.

Many existing and potential customers for our products within the U.S. are members of GPOs and IDNs, including accountable care organizations or public-based purchasing organizations, and our business strategy is focused on entering into major contracts with these organizations. Our products can be contracted under national tenders or with larger hospital GPOs. GPOs and IDNs typically award contracts on a category-by-category basis through a competitive bidding process. We are currently responding to bids and negotiating a number of GPO and IDN agreements.

Due to the highly competitive nature of the bidding process and the GPO and IDN contracting processes in the U.S., we may not be able to obtain contract positions with major GPOs and IDNs for our products. In addition, while having a contract with a major purchaser for a given product category can facilitate sales, sales volumes of those products may not be maintained. For example, GPOs and IDNs are increasingly awarding contracts to multiple suppliers for the same product category. Even if we are the sole contracted supplier of a GPO or IDN for our product category, members of the GPO or IDN generally are free to purchase from other suppliers. Furthermore, GPO and IDN contracts typically are terminable without cause upon 60 to 90 days' notice.

We face the risk of product liability claims that could be expensive, divert management's attention and harm our reputation and business.

Our business exposes us to the risk of product liability claims that are inherent in the testing, manufacturing and marketing of medical devices. This risk exists even if a product is cleared or approved for commercial sale by the FDA or EMA, and manufactured in facilities licensed and regulated by the FDA or EMA. Any side effects, manufacturing defects or misuse associated with our products could result in patient injury or death. The industry in which we operate has historically been subject to extensive litigation over product liability claims, and we cannot offer any assurance that we will not face product liability suits. We may be subject to product liability claims if our products cause, or merely appear to have caused, patient injury or death. In addition, an injury that is caused by the activities of Aroa may be the basis for a claim against us. Product liability claims may be brought against us by patients, healthcare providers or others selling or otherwise coming into contact with our products. If we cannot successfully defend ourselves against product liability claims, we will incur substantial liabilities and reputational harm. In addition, regardless of merit or eventual outcome, product liability claims may result in substantial litigation costs, product recalls or market withdrawals, decreased sales and demand for our products and damage to our reputation.

While we may attempt to manage our product liability exposure by proactively recalling or withdrawing from the market any defective products, any recall or market withdrawal of our products may delay the supply of those products to our customers and may impact our reputation. We can provide no assurance that we will be successful in initiating appropriate market recall or market withdrawal efforts that may be required in the future or that these efforts will have the intended effect of preventing product malfunctions and the accompanying product liability that may result. Such recalls and withdrawals may also be used by our competitors to harm our reputation for safety or be perceived by patients as a safety risk when considering the use of our products, either of which could have a material adverse effect on our business, financial condition and results of operations.

Although we have product liability insurance that we believe is appropriate, this insurance is subject to deductibles and coverage limitations. In addition, our current product liability insurance may not continue to be available to us on acceptable terms, if at all, and, if available, coverage may not be adequate to protect us against any future product liability claims. A product liability claim, recall or other claim with respect to uninsured liabilities or for amounts in excess of insured liabilities could have a material adverse effect on our business, financial condition and results of operations.

The continuing development of our products depends upon our maintaining strong working relationships with surgeons.

The research, development, marketing and sale of our current and future products and any future product indications for which we receive regulatory clearance or approval depend upon our maintaining working relationships with surgeons. We rely on these professionals to provide us with considerable knowledge and experience regarding the development, marketing and sale of our products. Surgeons assist us in clinical trials and in marketing, and as researchers, product consultants and public speakers. If we cannot maintain our strong working relationships with these professionals and continue to receive their advice and input, the development and marketing of our products could suffer, which could have a material adverse effect on our business, financial condition and results of operations. At the same time, the medical device industry's relationship with surgeons is under increasing scrutiny by the U.S. Department of Health and Human Services Office of Inspector General ("OIG"), the U.S. Department of Justice ("DOJ"), the state attorneys general and other foreign and domestic government agencies. Our failure to comply with requirements governing the industry's relationships with surgeons or an investigation into our compliance by the OIG, the DOJ, state attorneys general and other government agencies, could have a material adverse effect on our business, financial condition and results of operations. Additional information regarding the laws impacting our relationships with surgeons and other healthcare professionals can be found above under "Risks Related to Government Regulation."

We have limited data and experience regarding the safety and efficacy of our products. Results of earlier studies may not be predictive of future clinical trial results, or the safety or efficacy profile for such products.

We currently have 91 patients enrolled in our ongoing prospective, single arm multicenter post-market clinical study, or our BRAVO study, which we are conducting to support the marketing of our OviTex products for their cleared indicated uses, and do not currently have any clinical data for use of our OviTex PRS products in patients. The long-term effects of using our products in a large number of patients have not been studied and the results of short-term clinical use of such products do not necessarily predict long-term clinical benefits or reveal long-term adverse effects. The results of preclinical studies and clinical studies of our products conducted to date and ongoing or future studies and trials of our current, planned or future products may not be predictive of the results of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Our interpretation of data and results from our clinical trials do not ensure that we will achieve similar results in future clinical trials in other patient populations. In addition, preclinical and clinical data are often susceptible to various interpretations and analyses, and many companies that have believed their products performed satisfactorily in preclinical studies and earlier clinical trials have nonetheless failed to replicate results in later clinical trials. Products in later stages of clinical trials may fail to show the desired safety and efficacy despite having progressed through nonclinical studies and earlier clinical trials.

Interim or preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose interim or preliminary data from our BRAVO study or other clinical studies that we may conduct in the future, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a full analyses of all data related to the particular trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the interim results that we report may differ from future results of the same trials, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Interim or preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we

previously published. As a result, interim or preliminary data should be viewed with caution until the final data are available. We may also disclose interim data from our clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between preliminary or interim data and final data could significantly harm our business prospects.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our business in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular drug, product candidate or our business. If the interim or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to use such results to support the marketing of our products may be jeopardized.

The sizes of the markets for our current and future products have not been established with precision, and may be smaller than we estimate.

Our estimates of the annual total addressable markets for our current products and products under development are based on a number of internal and third-party estimates, including, without limitation, the number of hernia and soft tissue reconstruction surgery patients and overall market and the assumed prices at which we can sell our products. While we believe our assumptions and the data underlying our estimates are reasonable, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates may change at any time, thereby reducing the predictive accuracy of these underlying factors. As a result, our estimates of the annual total addressable market for our products may prove to be incorrect. If the price at which we can sell future products, or the annual total addressable market for our products is smaller than we have estimated, it may impair our sales growth and have an adverse impact on our business.

Our results of operations could be materially harmed if we are unable to accurately forecast customer demand for our products and manage our inventory.

Our reinforced tissue matrix products have a limited shelf life and will expire if not timely used. To ensure adequate inventory supply, we must forecast inventory needs and place orders with Aroa based on our estimates of future demand for our reinforced tissue matrix products. Our ability to accurately forecast demand for such products could be negatively affected by many factors, including:

- product introductions by competitors;
- an increase or decrease in surgeon demand for our products or for products of our competitors;
- our failure to accurately manage our expansion strategy;
- our failure to accurately forecast surgeon acceptance of new products;
- our failure to obtain contracts with a significant number of GPOs and IDNs;
- unanticipated changes in general market conditions or regulatory matters;
- the severity and duration of market disruptions as a result of the COVID-19 outbreak; and
- weakening of economic conditions or consumer confidence.

Inventory levels in excess of customer demand may result in inventory write-downs or write-offs, which would cause our gross margin to be adversely affected and could impair the strength of our brand. Additionally, we are subject to the risk that a portion of our inventory will expire, which could have a material adverse effect on our earnings and cash flows due to the resulting costs associated with the inventory impairment charges and costs required to replace such inventory. Conversely, if we underestimate customer demand for our products, Aroa may not be able to deliver products to meet our requirements, and this could result in damage to our reputation and customer relationships. In addition, if we experience a significant increase in demand, additional supplies of raw materials or additional manufacturing capacity may not be available when required on terms that are acceptable to us, or at all, or Aroa may not be able to allocate sufficient capacity to meet our increased requirements, which could have an adverse effect on our ability to meet customer demand for our products and our results of operations.

Our ability to maintain our competitive position depends on our ability to attract and retain senior management and other highly qualified personnel.

We are highly dependent on our senior management and other key personnel. Our success depends in part on our continued ability to attract, retain and motivate highly qualified senior management and attract, retain and motivate qualified employees, including sales and marketing professionals, clinical specialists and other highly skilled personnel. Competition for skilled personnel in our market is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms, or at all. If we are not successful in attracting and retaining highly qualified personnel, it would have a material adverse effect on our business, financial condition and results of operations. The loss of highly qualified employees could result in delays in product development and commercialization and harm our business.

Although we have entered into employment agreements with all of our executive officers, each of them may terminate their employment with us at any time. The replacement of any of our key personnel likely would involve significant time and costs and may significantly delay or prevent the achievement of our business objectives and could therefore have an adverse effect on our business. We also do not maintain “key man” insurance policies on the lives of these individuals or the lives of any of our other employees.

We rely on our own direct sales force for our products, which may result in higher fixed costs than our competitors and may slow our ability to reduce costs.

We rely on our own direct sales force, which as of December 31, 2019 consisted of 29 representatives in the U.S. and 2 representatives in Europe, to market and sell our products. A direct sales force may subject us to higher fixed costs than those of companies that market competing products through independent third parties, due to the costs that we will bear associated with employee benefits, training and managing sales personnel. As a result, we may be at a competitive disadvantage. Additionally, these fixed costs may slow our ability to reduce costs in the face of a sudden decline in demand for our products, which could have a material adverse effect on our business, financial condition and results of operations.

Our employees, independent contractors, consultants, commercial partners, distributors and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk that our employees, independent contractors, consultants, commercial partners and vendors may engage in fraudulent or illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violates: (i) the rules of the FDA and other similar foreign regulatory bodies; (ii) manufacturing standards; (iii) healthcare fraud and abuse laws in the U.S. and similar foreign fraudulent misconduct laws; (iv) data privacy laws and other similar non-U.S. laws; or (v) laws that require the true, complete and accurate reporting of financial information or data. These laws may impact, among other things, future sales, marketing and education programs.

It is not always possible to identify and deter misconduct by our employees and other third parties, and the precautions we take to detect and prevent these activities 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 be in compliance with such laws or regulations. In addition, we are subject to the risk that a person or government could allege

such fraud or other misconduct, even if none occurred. If any such actions are instituted against us and we are not successful in defending ourselves or asserting our rights, those actions could result in the imposition of significant fines or other sanctions, including the imposition of civil, criminal and administrative penalties, additional integrity reporting and oversight obligations and possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, any of which could adversely affect our ability to operate our business and our results of operations. Whether or not we are successful in defending against any such actions or investigations, we could incur substantial costs, including legal fees, and divert the attention of management in defending ourselves against any of these claims or investigations, which could have a material adverse effect on our business, financial condition and results of operations.

We could be adversely affected by any interruption to our ability to conduct business at our current location.

We do not have redundant facilities. We perform substantially all of our research and development and back office activity and maintain all our finished goods inventory in a single location in Malvern, Pennsylvania. Our facility, equipment and inventory would be costly to replace and could require substantial lead time to repair or replace. The facility may be harmed or rendered inoperable by natural or man-made disasters, including, but not limited to, tornadoes, flooding, fire, public health emergencies such as pandemics and power outages, which may render it difficult or impossible for us to perform our customer service research, development and commercialization activities for some period of time. The inability to perform those activities, combined with the time it may take to rebuild our inventory of finished product, may result in the loss of customers or harm to our reputation. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and this insurance may not continue to be available to us on acceptable terms, or at all.

If we experience significant disruption or a breach in our information technology systems, our business could be adversely affected.

We rely extensively on information technology systems to conduct our business. These systems affect, among other things, ordering and managing products, shipping products to customers, processing transactions, summarizing and reporting results of operations, complying with regulatory, legal and tax requirements, data security and other processes necessary to manage our business. If our systems are damaged or cease to function properly due to any number of causes, ranging from catastrophic events to power outages to security breaches, and our business continuity plans do not effectively compensate on a timely basis, we may experience interruptions in our operations, which could have an adverse effect on our business. Furthermore, any breach in our information technology systems could lead to the unauthorized access, disclosure and use of non-public information from our patient registry or other patient information which is protected by HIPAA and other laws. 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 and damage to our reputation.

Economic conditions may adversely affect our business.

Adverse worldwide economic conditions may negatively impact our business. Our general business strategy may be adversely affected by such economic conditions or the presence of a volatile business environment or unpredictable and unstable market conditions, such as the economic turmoil resulting from the spread of the COVID-19 outbreak. Adverse worldwide economic conditions may also adversely impact our suppliers' ability to provide us with materials and components, which could have a material adverse effect on our business, financial condition and results of operations.

If we become profitable, our ability to use our net operating loss carryforwards and other tax attributes to offset future taxable income or taxes may be subject to limitations.

As described under “—Risks Related to Our Limited Operating History, Financial Position and Capital Requirements,” we have incurred net losses since our inception, and expect to continue to incur operating losses for the foreseeable future. If we become profitable in the future, our ability to use net operating loss carryforwards (“NOLs”) and other tax attributes to offset future taxable income or reduce taxes may be subject to limitations. In general, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an “ownership change” (generally defined as a greater than 50% cumulative change by value in its equity ownership of certain

stockholders over a rolling three-year period) is subject to an annual limitation on its ability to utilize its pre-change NOLs and other tax attributes (including any research and development credit carryforwards). Similar provisions of state tax law may also apply to limit the use of our state NOLs and other tax attributes.

We have not performed an analysis to determine whether our past issuances of stock and other changes in our stock ownership may have resulted in one or more ownership changes within the meaning of Sections 382 and 383 of the Code. In addition, we may experience an ownership change in the future as a result of subsequent changes in our stock ownership, some of which are outside our control. If an ownership change has occurred in the past or occurs in the future, we may not be able to use a material portion of our NOLs and other tax attributes to offset future taxable income or taxes if we attain profitability.

In addition to any limitation imposed by Section 382 of Code, the use of NOLs arising after December 31, 2017 generally is limited to a deduction of 80% of taxable income for the corresponding taxable year. NOLs arising after December 31, 2017 may not be carried back to previous taxable years, but may be carried forward indefinitely.

Risks Related to Our Securities

The trading price of the shares of our common stock has been and could in the future be highly volatile.

The price of our common stock has been and may continue to be volatile. Even though our common stock is now listed on the Nasdaq Global Market, (“Nasdaq”) an active trading market for our common stock may not be sustained. The lack of an active trading market may impair the value of your shares and your ability to sell your shares at the time you wish to sell them. An inactive trading market may also impair our ability to raise capital by selling shares of our common stock and enter into strategic partnerships or acquire other complementary products, technologies or businesses by using shares of our common stock as consideration. Furthermore, there can be no guarantee that we will continue to satisfy the continued listing standards of Nasdaq. If we fail to satisfy the continued listing standards, we could be de-listed, which would have a negative effect on the price of our common stock.

We cannot predict the prices at which our shares of common stock may trade. The market price of our common stock is likely to be highly volatile and may fluctuate substantially due to many factors, including:

- the volume and timing of sales of our products;
- the introduction of new products or product enhancements by us or others in our industry;
- disputes or other developments with respect to our or others’ intellectual property rights;
- our ability to develop, obtain regulatory clearance for, and market new and enhanced products on a timely basis;
- product liability claims or other litigation;
- quarterly variations in our results of operations or those of others in our industry;
- media exposure of our products or of those of others in our industry;
- changes in governmental regulations or in reimbursement;
- changes in earnings estimates or recommendations by securities analysts; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors, including any economic downturn as a result of the COVID-19 outbreak.

In recent years, the stock markets generally have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors may significantly affect the market price of our common stock, regardless of our actual operating performance.

In addition, in the past, class action litigation has often been instituted against companies whose securities have experienced periods of volatility in market price. Securities litigation brought against us following volatility in our stock price, regardless of the merit or ultimate results of such litigation, could result in substantial costs, which would hurt our financial condition and operating results and divert management's attention and resources from our business.

We do not intend to pay cash dividends on our common stock for the foreseeable future.

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. In addition, the agreement governing our credit facility precludes, and any future debt agreements may preclude, us from paying cash dividends. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on, among other factors, our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant. Any return to stockholders will therefore be limited to the appreciation in the value of their stock, if any.

Our directors, officers and principal stockholders have significant voting power and may take actions that may not be in the best interests of our other stockholders.

Our officers, directors and principal stockholders each holding more than 5% of our common stock, collectively, control approximately 77.4% of our outstanding common stock. As a result, these stockholders, if they act together, will be able to significantly influence our management and affairs and most matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. The interests of these stockholders may not be the same as or may even conflict with your interests. For example, these stockholders could attempt to delay or prevent a change in control, even if such change in control would benefit our other stockholders, which could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our capital stock or our assets, and might affect the prevailing market price of our common stock due to investors' perceptions that conflicts of interest may exist or arise. As a result, this concentration of ownership may not be in the best interests of our other stockholders.

A significant portion of our outstanding shares of common stock are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that these sales may occur, could result in a decrease in the market price of our common stock. In connection with the IPO, approximately 6.6 million shares of common stock are restricted from sale as a result of securities laws or 180-day lock-up agreements but will generally be able to be sold beginning in May 2020. Moreover, holders of an aggregate of up to 6.3 million shares of our common stock, have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market, subject to volume limitations applicable to affiliates and the lockup agreements referred to above.

We are an emerging growth company and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors.

We are an emerging growth company, as defined in the JOBS Act, and we may take advantage of certain exemptions and relief from various reporting requirements that are applicable to other public companies that are not "emerging growth companies." In particular, while we are an "emerging growth company" (i) we will not be required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, (ii) we will be exempt from any

rules that could be adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotations or a supplement to the auditor's report on financial statements, (iii) we will be subject to reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and (iv) we will not be required to hold nonbinding advisory votes on executive compensation or stockholder approval of any golden parachute payments not previously approved.

We may remain an emerging growth company until as late as December 31, 2024, the fiscal year-end following the fifth anniversary of the completion of our IPO, though we may cease to be an "emerging growth company" earlier under certain circumstances, including if (i) we have more than \$1.07 billion in annual revenue in any fiscal year, (ii) the market value of our common stock that is held by non-affiliates exceeds \$700 million as of any June 30 or (iii) we issue more than \$1.0 billion of non-convertible debt over a three-year period.

The exact implications of the JOBS Act are still subject to interpretations and guidance by the SEC and other regulatory agencies, and we cannot assure you that we will be able to take advantage of all of the benefits of the JOBS Act. In addition, investors may find our common stock less attractive to the extent we rely on the exemptions and relief granted by the JOBS Act. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may decline or become more volatile.

We expect to incur significant additional costs as a result of being a public company.

We expect to incur costs associated with corporate governance requirements applicable to us as a public company, including rules and regulations of the SEC, under the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, and the Securities Exchange Act of 1934, as amended (the "Exchange Act") as well as the rules of Nasdaq. These rules and regulations are expected to significantly increase our accounting, legal and financial compliance costs and make some activities more time-consuming. These rules and regulations make it more expensive for us to secure and maintain directors' and officers' liability insurance at adequate coverage amounts. Accordingly, increases in costs incurred as a result of becoming a publicly traded company may adversely affect our business, financial condition and results of operations.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

We are subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to provide reasonable assurance that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures, no matter how well those controls and procedures are conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

We are at risk of securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because medical device companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will be influenced to some extent by the research and reports that industry or financial analysts publish about us and our business. We do not control these analysts. As a newly public company, we may be slow to attract research coverage and the analysts who publish information about our common stock will have had relatively little experience with us or our business and products, which could affect their ability to accurately forecast our results and could make it more likely that we fail to meet their estimates. In the event we obtain securities or industry analyst coverage, if any of the analysts who cover us provide inaccurate or unfavorable research or issue an adverse opinion regarding our stock price, our stock price could decline. If one or more of these analysts cease coverage of us or fail to publish reports covering us regularly, we could lose visibility in the market, which in turn could cause our stock price or trading volume to decline and result in the loss of all or a part of your investment in us.

Provisions in our corporate charter documents and under Delaware law could discourage another company from acquiring us and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our fourth amended and restated certificate of incorporation and our second amended and restated bylaws may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also 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. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. As our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. These provisions provide, among other things, that:

- our board of directors has the exclusive right to expand the size of our board of directors and to elect directors to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered three-year terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- our stockholders may not act by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- a special meeting of stockholders may be called only by the chair of our board of directors, our chief executive officer (or president, in the absence of a chief executive officer) or a majority of our board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- our fourth amended and restated certificate of incorporation prohibits cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- our board of directors may alter certain provisions of our second amended and restated bylaws without obtaining stockholder approval;
- the approval of the holders of at least two-thirds of our shares entitled to vote at an election of our board of directors is required to adopt, amend or repeal our second amended and restated bylaws or repeal the provisions of our fourth amended and restated certificate of incorporation regarding the election and removal of directors;

- stockholders must provide advance notice and additional disclosures to nominate individuals for election to the board of directors or to propose matters that can be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain voting control of our shares; and
- our board of directors is authorized to issue shares of preferred stock and to determine the terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware ("DGCL") which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Our fourth amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our fourth amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the United State District Court for the District of Delaware) is the exclusive forum, to the fullest extent permitted by law, for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL or our fourth amended and restated certificate of incorporation or second amended and restated bylaws or (iv) any action asserting a claim governed by the internal affairs doctrine, except, in each case, (A) any claim as to which such court determines that there is an indispensable party not subject to the jurisdiction of such court (and the indispensable party does not consent to the personal jurisdiction of such court within 10 days following such determination), (B) which is vested in the exclusive jurisdiction of a court or forum other than such court, or (C) for which such court does not have subject matter jurisdiction, in all cases subject to the courts having jurisdiction over indispensable parties named as defendants. This provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. For example, stockholders who do bring a claim in the Court of Chancery could face additional litigations costs in pursuing any such claim, particularly if they do not reside in or near the State of Delaware. The Court of Chancery may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any applicable action brought against us, a court could find the choice of forum provisions contained in our fourth amended and restated certificate of incorporation to be inapplicable or unenforceable in such action. Alternatively, if a court were to find the choice of forum provision contained in our fourth amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions. This provision will not apply to actions arising under the Securities Act or Exchange Act. Our fourth amended and restated certificate of incorporation and second amended and restated bylaws further provide that the federal district courts of the U.S. will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Section 22 of the Securities Act, however, creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Accordingly, there is uncertainty as to whether a court would enforce such a forum selection provision as written in connection with claims arising under the Securities Act.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our products are manufactured by our exclusive manufacturer and supplier of our products, Aroa, at their facility in Auckland, New Zealand which currently totals approximately 25,000 square feet.

We lease our corporate headquarters in Malvern, Pennsylvania, which houses our research and development operations, controlled environment room, and office space, and currently totals approximately 15,000 square feet.

We believe that our current facilities meet our current and future anticipated needs, although we may seek to negotiate new leases or evaluate additional or alternate space for our operations. We believe appropriate office space will be readily available on commercially reasonable terms.

ITEM 3. LEGAL PROCEEDINGS

We may be subject to other legal proceedings and claims in the ordinary course of business. We cannot predict the results of any such disputes, and despite the potential outcomes, the existence thereof may have an adverse material impact on us due to diversion of management time and attention as well as the financial costs related to resolving such disputes.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Market Information

Our common stock has been publicly traded on the Nasdaq Global Market under the symbol "TELA" since November 8, 2019.

Holders

As of March 20, 2020, the Company had approximately 95 record holders of its common stock.

Dividends

The Company has not declared or paid any dividends since its inception nor does it expect to pay dividends in the foreseeable future.

Securities Authorized for Issuance Under Equity Compensation Plans

The information under the heading "Securities Authorized for Issuance Under Equity Compensation Plans" will be filed in the Company's definitive proxy statement for the 2020 annual meeting of stockholders and is incorporated herein by reference.

Resent Sales of Unregistered Securities

Except as previously reported in our quarterly report on Form 10-Q filed with the SEC on December 18, 2019, there were no unregistered sales of equity securities during the period.

Use of Proceeds

The registration statement on Form S-1 (File No. 333-234217) relating to the IPO of shares of our common stock, became effective on November 7, 2019. The registration statement registered the offer and sale of 4,000,000 shares of our common stock (including 600,000 shares of our common stock subject to the underwriters' option to purchase additional shares). In November 2019, we completed the sale of 4,398,700 of the shares of our common stock registered thereunder at an initial public offering price of \$13.00 per share for an aggregate offering price of approximately \$57.2 million, which included 398,700 shares of our common stock pursuant to the underwriters' option to purchase additional shares. The underwriters of the offering were Jefferies LLC, Piper Jaffray & Co., Canaccord Genuity LLC and JMP Securities LLC. Following the sale of the shares in connection with the closing of the IPO, the offering terminated.

We received net proceeds of approximately \$50.6 million after deducting underwriting discount and commissions of \$4.0 million and offering costs of \$2.6 million. No payments for such expenses were made directly or indirectly to (i) any of our officers or directors or their associates, (ii) any persons owning 10% or more of any class of our equity securities, or (iii) any of our affiliates.

As of December 31, 2019, we have not used any of the proceeds from our IPO. There has been no material change in the planned use of proceeds from our IPO from that described in the Prospectus filed with the SEC on November 8, 2019 pursuant to Rule 424(b)(4).

Issuer Purchases of Equity Securities

None.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

You should read the following selected consolidated financial data together with the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes included elsewhere in this Annual Report. The selected consolidated financial data included in this section are not intended to replace the consolidated financial statements and are qualified in their entirety by the consolidated financial statements and the related notes included elsewhere in this Annual Report.

We derived the selected consolidated financial data from our audited consolidated financial statements for each of the periods presented. Our historical results are not necessarily indicative of the results that may be expected for any period in the future.

	Year Ended December 31,		
	2019	2018	2017
	(in thousands, except share and per share data)		
Statement of Operations:			
Revenue	\$ 15,446	\$ 8,274	\$ 4,245
Cost of revenue (excluding amortization of intangible assets)	5,870	4,547	1,713
Amortization of intangible assets	304	785	—
Gross profit	9,272	2,942	2,532
Operating expenses:			
Sales and marketing	18,060	13,646	8,712
General and administrative	6,223	4,899	4,958
Research and development	4,151	4,339	5,786
Gain on litigation settlement	—	(2,160)	—
Total operating expenses	28,434	20,724	19,456
Loss from operations	(19,162)	(17,782)	(16,924)
Other (expense) income:			
Interest expense	(3,609)	(1,802)	(4,558)
Loss on extinguishment of debt	—	(1,822)	—
Change in fair value of preferred stock warrant liability	(5)	244	54
Other income	351	70	94
Total other (expense) income	(3,263)	(3,310)	(4,410)
Net loss	(22,425)	(21,092)	(21,334)
Accretion of redeemable convertible preferred stock to redemption value	(7,783)	(8,823)	(5,893)
Net loss attributable to common stockholders	\$ (30,208)	\$ (29,915)	\$ (27,227)
Net loss per common share, basic and diluted	\$ (17.10)	\$ (101.41)	\$ (93.26)
Weighted average common, shares outstanding, basic and diluted	1,766,408	294,988	291,963

	As of December 31,		
	2019	2018	2017
Balance Sheet Data (in thousands):			
Cash, cash equivalents and short-term investments	\$ 54,587	\$ 17,278	\$ 11,346
Working capital ⁽¹⁾	57,621	13,695	8,199
Total assets	67,922	27,227	15,532
Long-term debt	30,243	29,733	3,610
Redeemable convertible preferred stock	—	124,150	111,349
Total stockholders’ equity (deficit)	\$ 30,962	\$ (137,860)	\$ (108,171)

(1) We define working capital as current assets minus current liabilities.

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

You should read the following discussion and analysis of our financial condition and results of operations together with the section titled "Selected Consolidated Financial Data" and the consolidated financial statements and the related notes included elsewhere in this Annual Report. In addition to historical financial information, the following discussion contains forward-looking statements based upon our current plans, expectations and beliefs that involve risks, uncertainties and assumptions. Our actual results may differ materially from those described in or implied by these forward-looking statements as a result of many factors, including those set forth under the section titled "Risk Factors" and in other parts of this Annual Report.

Overview

We are a commercial stage medical technology company focused on designing, developing and marketing a new category of tissue reinforcement materials to address unmet needs in soft tissue reconstruction. We offer a portfolio of advanced reinforced tissue matrices that improve clinical outcomes and reduce overall costs of care in hernia repair, abdominal wall reconstruction and plastic and reconstructive surgery. Our products are an innovative solution that integrate multiple layers of minimally-processed biologic material with interwoven polymers in a unique embroidered pattern, which we refer to as a reinforced tissue matrix.

Our first portfolio of products, OviTex, addresses unmet needs in hernia repair and abdominal wall reconstruction by combining the benefits of biologic matrices and polymer materials while minimizing their shortcomings, at a cost-effective price. Our OviTex products have received 510(k) clearance from the FDA, which clearance was obtained and is currently held by Aroa and have demonstrated safety and clinical effectiveness in our BRAVO study. The first 32 patients who reached one year follow-up in the BRAVO study had experienced no ventral hernia recurrences, no explantations and no surgical site occurrences requiring follow-up surgery. Our second portfolio of products, OviTex PRS, addresses unmet needs in plastic and reconstructive surgery.

We began commercialization of our OviTex products in the U.S. in July 2016 and they are now sold to more than 250 hospital accounts. In the first half of 2017, we began scaling our U.S. direct commercial presence and we initiated our BRAVO study in April 2017. Our OviTex portfolio consists of multiple products for hernia repair and abdominal wall reconstruction, inguinal hernia repair and hiatal hernia repair. In addition, to address the significant increase in the number of robotic-assisted hernia repairs over the last several years we have designed an OviTex product for use in laparoscopic and robotic-assisted surgery called OviTex LPR which we began commercializing in November 2018. We introduced additional sizes of our OviTex products in both 25 × 30 cm and 25 × 40 cm sizes in January 2019. In April 2019, our OviTex PRS products received 510(k) clearance from the FDA for plastic and reconstructive surgery, which clearance was obtained by Aroa and is currently held by us. We commenced a limited launch in May 2019 and expect to continue commercializing in a controlled manner to gradually expand our surgeon network throughout 2020.

Our commercial efforts are predominantly focused on the U.S. market where we have established strong relationships in the U.S. with key constituencies, including hospitals, ambulatory surgery centers, GPOs, IDN, third-party payors and other key clinical and economic decision makers by offering a unique high quality, cost-effective product. We market our products through a single direct sales force, predominantly in the U.S. We plan to continue to invest in our commercial organization by adding account managers, clinical development specialists, business managers and administrative support staff in order to cover the highest potential of accounts for soft tissue reconstruction procedures. We plan to continue to contract with GPOs and IDNs to increase access to and penetration of hospital accounts. We plan to adjust our commercial expansion plan as appropriate as we continue to better understand the effects of COVID-19 pandemic on our sales and marketing efforts, which could be negatively impacted by a potential decrease in the number of patients seeking procedures which utilize our products and by restrictions on the ability of our sales professionals to effectively market to physicians, as hospitals defer elective surgeries, reduce and divert staffing, divert resources to patients suffering from the infectious disease and limit hospital access for non-patients.

Prior to obtaining FDA clearance for our first OviTex product, we devoted substantially all of our resources to the design and development of our reinforced tissue matrices. Our development efforts to date have included an extensive non-

human primate preclinical research data set for OviTex. In addition to our current portfolio, we are developing new product features and designs for both our OviTex and OviTex PRS portfolios. We intend to continue to make investments in research and development efforts to develop improvements and enhancements.

Substantially all of our revenue to date has been generated by the sale of our OviTex products. Our revenue for the years ended December 31, 2019 and 2018 was \$15.4 million and \$8.3 million, respectively, an increase of \$7.2 million, or 87% in the year ended December 31, 2019 as compared to the year ended December 31, 2018. Net loss increased from \$21.1 million in the year ended December 31, 2018 to \$22.4 million in the year ended December 31, 2019. We have not been profitable since inception and as of December 31, 2019, we had an accumulated deficit of \$167.9 million. We expect to incur losses for the foreseeable future.

During 2019, we received net proceeds of \$14.4 million from the issuance of Series B preferred stock and then, in November 2019, we closed our IPO and received net proceeds of \$50.6 million after deducting underwriting discounts, commissions and other offering expenses.

Our products are manufactured by Aroa at their FDA registered and ISO 13485 facility in Auckland, New Zealand. We maintain our Aroa License for the exclusive supply of ovine rumen and manufacture of our reinforced tissue matrices under which we purchase product from Aroa at a fixed cost equal to 27% of our net sales of licensed products. This revenue sharing arrangement allows us to competitively price our products and pass along cost-savings to our customers.

Components of Our Results of Operations

Revenue

Substantially all of our revenue consists of direct sales of our products to hospital accounts in the U.S. Depending on the terms of our agreements with our customers, we recognize revenue related to product sales either when control transfers, which generally occurs when the product is shipped to the customer, or when the product is utilized in a surgical procedure in the case of consignment agreements. Fees charged to customers for shipping are recognized as revenue. Recent revenue growth has been driven by, and we expect continued growth as a result of, increasing revenue from product sales due to our expanding customer base.

Cost of Revenue

Cost of revenue primarily consists of the costs of licensed products purchased from Aroa, charges related to excess and obsolete inventory adjustments, and costs related to shipping. We purchase product from Aroa at a fixed cost equal to 27% of our net sales of licensed products. The initial term of our Aroa License terminates on the later of (i) August 3, 2022, or (ii) the expiration of the last patent covering bovine and ovine products, with an option to extend for an additional ten year period. We expect our cost of revenue to increase in absolute dollars as, and to the extent, our sales volume grows.

Amortization of Intangible Assets

Amortization of intangible assets relates to the amortization of capitalized milestone amounts paid or probable to be paid to Aroa related to license fees or commercialization rights after future economic benefit has been established for a product. These capitalized milestone amounts relate to regulatory clearances, the receipt of certain supply quantities of product, and amounts based upon aggregate net sales thresholds within a specified territory, and are amortized over the remaining useful life of the intellectual property.

Gross Profit and Gross Margin

Our gross profit is calculated by subtracting our cost of revenue and amortization of intangible assets from our revenue. We calculate our gross margin percentage as our gross profit divided by our revenue. Our gross margin has been, and we expect it will continue to be, affected by a variety of factors, including sales volume and excess and inventory obsolescence costs. Our gross profit may increase to the extent our revenue grows.

Sales and Marketing Expenses

Sales and marketing expenses consist of market research and commercial activities related to the sale of OviTex and OviTex PRS and salaries and related benefits, sales commissions and stock-based compensation for employees focused on these efforts. Other significant sales and marketing expenses include costs incurred with post-market clinical studies, conferences and trade shows, promotional and marketing activities, as well as travel and training expenses.

Over time we expect our sales and marketing expenses to increase in absolute dollars as we continue to expand our commercial organization to both drive and support our planned growth in revenue. We expect our sales and marketing expenses to continue to decrease as a percentage of revenue primarily as, and to the extent, our revenue grows.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related benefits, including stock-based compensation for personnel in executive, finance, information technology and administrative functions. General and administrative expenses also include professional service fees for legal, accounting, consulting, investor and public relations, insurance costs and direct and allocated facility-related costs.

We expect that our general and administrative expenses will increase in absolute dollars as we expand our headcount to support our growth and incur additional expenses related to operating as a public company, including director and officer insurance coverage, legal costs, accounting costs, costs related to exchange listing and costs related to SEC compliance and investor relations. We expect our general and administrative expenses to continue to decrease as a percentage of revenue primarily as, and to the extent, our revenue grows.

Research and Development Expenses

Research and development expenses consist primarily of product research, engineering, product development, regulatory compliance and clinical development. These expenses include salaries and related benefits, stock-based compensation, consulting services, costs associated with our preclinical studies, costs incurred with our manufacturing partner under development agreements related to technology transfer, laboratory materials and supplies and an allocation of related facilities costs. We expense research and development costs as they are incurred.

We expect research and development expenses in absolute dollars to increase in the future as we develop new products and enhance existing products. We expect research and development expenses as a percentage of revenue to vary over time depending on the level and timing of new product development initiatives.

Interest Expense

Interest expense consists of cash interest under our credit facilities, non-cash interest attributable to the accrual of final payment fees and the amortization of deferred financing costs related to our indebtedness.

Loss on Extinguishment of Debt

Loss on extinguishment of debt consists of the excess consideration paid over the net carrying value of our debt at the time of extinguishment.

Change in Fair Value of Preferred Stock Warrant Liability

Prior to our IPO, our outstanding warrants to purchase shares of our preferred stock were classified as liabilities, recorded at fair value and were subject to remeasurement at each balance sheet date until they were exercised, expired or were otherwise settled. The change in fair value of our preferred stock warrant liability reflected a non-cash charge primarily driven by changes in the fair value of our underlying Series B preferred stock. All outstanding warrants to purchase shares of our preferred stock were converted into warrants to purchase shares of our common stock after our IPO.

Other Income

Other income consists primarily of income earned on our cash, cash equivalents and short-term investments.

Results of Operations**Comparison of the Year Ended December 31, 2019 and 2018**

	Year Ended December 31,		Change	
	2019	2018	Dollar	Percentage
	(in thousands except percentages)			
Revenue	\$ 15,446	\$ 8,274	\$ 7,172	87 %
Cost of revenue (excluding amortization of intangible assets)	5,870	4,547	1,323	29 %
Amortization of intangible assets	304	785	(481)	(61)%
Gross profit	9,272	2,942	6,330	215 %
Gross margin	60 %	36 %		
Operating expenses:				
Sales and marketing	18,060	13,646	4,414	32 %
General and administrative	6,223	4,899	1,324	27 %
Research and development	4,151	4,339	(188)	(4)%
Gain on litigation settlement	—	(2,160)	2,160	(100)%
Total operating expenses	28,434	20,724	7,710	37 %
Loss from operations	(19,162)	(17,782)	(1,380)	8 %
Other (expense) income:				
Interest expense	(3,609)	(1,802)	(1,807)	100 %
Loss on extinguishment of debt	—	(1,822)	1,822	(100)%
Change in fair value of preferred stock warrant liability	(5)	244	(249)	(102)%
Other income	351	70	281	401 %
Total other (expense) income	(3,263)	(3,310)	47	(1)%
Net loss	<u>\$ (22,425)</u>	<u>\$ (21,092)</u>	<u>\$ (1,333)</u>	6 %

Revenue

Revenue increased by \$7.2 million, or 87%, to \$15.4 million for the year ended December 31, 2019 from \$8.3 million for the year ended December 31, 2018. The increase in revenue was primarily driven by an increase in unit sales of our products due to the expansion of our commercial organization with increased penetration within existing customer accounts as well as the introduction of larger sizes of OviTex during 2019. During the year ended December 31, 2019, we sold 3,779 units of OviTex compared to 2,110 units of OviTex during the year ended December 31, 2018, a 79% increase in unit sales volume. We commenced a limited launch of OviTex PRS in May 2019, selling 240 units during the year ended December 31, 2019.

Cost of Revenue

Cost of revenue (excluding amortization of intangible assets) increased by \$1.3 million to \$5.9 million for the year ended December 31, 2019 from \$4.5 million for the year ended December 31, 2018. The increase in cost of revenue was primarily the result of higher revenue due to the growth in the number of OviTex and OviTex PRS units sold offset by a lower charge to excess and obsolete inventory of \$0.7 million during the year ended December 31, 2019 compared to the prior year. The larger reserve expense recognized during the year ended December 31, 2018 was primarily due to Aroa reducing the shelf life of a certain product line during the year.

Amortization of Intangible Assets

Amortization of intangible assets was \$0.3 million for the year ended December 31, 2019 as compared to \$0.8 million for the year ended December 31, 2018. In May 2018, we achieved one of our regulatory milestones, and we determined

that certain commercial sales milestone targets under our licensing agreement with Aroa became probable of being met. As a result, we recorded these milestone payments as intangible assets that required a cumulative amortization charge during 2018.

Gross Margin

Gross margin increased to 60% for the year ended December 31, 2019 from 36% for the year ended December 31, 2018. The increase was primarily due to a lower expense recognized for excess and obsolete inventory adjustments as a percentage of revenue during the year ended December 31, 2019 as compared to the prior year and the \$0.4 million cumulative amortization charge recognized during the year ended December 31, 2018.

Sales and Marketing

Sales and marketing expenses increased by \$4.4 million, or 32%, to \$18.1 million for the year ended December 31, 2019 from \$13.6 million for the year ended December 31, 2018. The increase was primarily due to higher salary, benefits and commission costs of \$4.4 million due to our sales expansion activities, including the hiring of additional sales personnel.

General and Administrative

General and administrative expenses increased by \$1.3 million, or 27%, to \$6.2 million for the year ended December 31, 2019 from \$4.9 million for the year ended December 31, 2018. The increase was primarily due to higher salary and benefits costs of \$0.7 million, increased insurance costs of \$0.4 million and higher professional fees of \$0.1 million.

Research and Development

Research and development expenses decreased by \$0.2 million, or 4%, to \$4.2 million for the year ended December 31, 2019 from \$4.3 million for the year ended December 31, 2018. The decrease in research and development expense primarily relates to a decrease in external development and testing.

Gain on Litigation Settlement

In 2018, we recognized a gain on litigation settlement of \$2.2 million related to a litigation claim that we had brought against the former carrier for our directors and officer and employment practices liability insurance for breach of contract and failure to reimburse us for defense costs incurred in litigation against LifeCell that was fully settled in 2016.

Interest Expense

Interest expense increased by \$1.8 million, or 100%, to \$3.6 million for the year ended December 31, 2019 from \$1.8 million for the year ended December 31, 2018. The increase was primarily due to having a larger principal balance outstanding with a higher interest rate during the year ended December 31, 2019 compared to the prior year.

Loss on Extinguishment of Debt

We recorded a loss on the extinguishment of debt of \$1.8 million during the year ended December 31, 2018 related to the repayment of borrowings and cancellation of refinancing of our credit facilities with Hercules and MidCap Financial Trust (“MidCap”) in April and November, respectively. The losses were primarily comprised of the write-off of unamortized debt discounts and prepayment penalties at the time of extinguishment.

Change in Fair Value of Preferred Stock Warrant Liability

We recognized a loss on the change in the fair value of our preferred stock warrant liability of \$5,000 during the year ended December 31, 2019. All outstanding warrants to purchase shares of our preferred stock were converted into warrants to purchase shares of our common stock and the liability was reclassified to additional paid-in capital in the accompanying consolidated balance sheet.

Other Income

Other income increased by \$0.3 million, which was primarily attributable to having larger cash, cash equivalents and short-term investment balances, which earned more interest income during the year ended December 31, 2019 as compared to the prior year.

Comparison of the Years Ended December 31, 2018 and 2017

	Year Ended December 31,		Change	
	2018	2017	Dollar	Percentage
	(in thousands, except percentages)			
Revenue	\$ 8,274	\$ 4,245	\$ 4,029	95 %
Cost of revenue (excluding amortization of intangible assets)	4,547	1,713	2,834	165 %
Amortization of intangible assets	785	—	785	— %
Gross profit	2,942	2,532	410	16 %
Gross margin	36 %	60 %		
Operating expenses:				
Sales and marketing	13,646	8,712	4,934	57 %
General and administrative	4,899	4,958	(59)	(1)%
Research and development	4,339	5,786	(1,447)	(25)%
Gain on litigation settlement	(2,160)	—	(2,160)	— %
Total operating expenses	20,724	19,456	1,268	7 %
Loss from operations	(17,782)	(16,924)	(858)	5 %
Other (expense) income:				
Interest expense	(1,802)	(4,558)	2,756	(60)%
Loss on extinguishment of debt	(1,822)	—	(1,822)	— %
Change in fair value of preferred stock warrant liability	244	54	190	352 %
Other income	70	94	(24)	(26)%
Total other (expense) income	(3,310)	(4,410)	1,100	(25)%
Net loss	\$ (21,092)	\$ (21,334)	\$ 242	(1)%

Revenue

Revenue increased by \$4.0 million, or 95%, to \$8.3 million for the year ended December 31, 2018 from \$4.2 million for the year ended December 31, 2017. The increase in revenue was primarily driven by an increase in unit sales of our products due to the expansion of our commercial organization and increased penetration within the market. During 2018, we sold 2,110 units of OviTex as compared to 1,027 units of OviTex during 2017, a 105% increase in unit sales volume.

Cost of Revenue

Cost of revenue (excluding amortization of intangible assets) increased by \$2.8 million, or 165%, to \$4.5 million for the year ended December 31, 2018 from \$1.7 million for the year ended December 31, 2017. The increase in cost of revenue was primarily the result of an increase in revenue as well as a \$1.8 million increase in our excess and obsolete inventory reserve recognized during the year ended December 31, 2018 as compared to the prior year, primarily due to Aroa reducing the shelf life of a certain product line.

Amortization of Intangible Assets

Amortization of intangible assets was \$0.8 million for the year ended December 31, 2018. In May 2018, we determined that certain milestone targets under our licensing agreement with Aroa became probable of being met and recorded the payment obligation as an intangible asset. There were no intangible assets or related amortization expense during the year ended December 31, 2017.

Gross Margin

Gross margin decreased to 36% for the year ended December 31, 2018 from 60% for the year ended December 31, 2017. The decrease was primarily due to a \$1.8 million increase in excess and obsolete inventory adjustments recognized during 2018 as compared to the prior year, primarily due to Aroa reducing the shelf life of a certain product line during 2018. We also recognized \$0.8 million in amortization of intangible assets in 2018. There was no such expense in 2017.

Sales and Marketing

Sales and marketing expenses increased by \$4.9 million, or 57%, to \$13.6 million for the year ended December 31, 2018 from \$8.7 million for the year ended December 31, 2017. The increase was primarily due to higher salary and commission costs of \$2.6 million as a result of our sales expansion activities, including hiring of additional sales personnel and expansion of marketing activity costs of \$2.3 million, consistent with our growth in revenue.

General and Administrative

General and administrative expenses remained flat for the year ended December 31, 2018 compared to the year ended December 31, 2017.

Research and Development

Research and development expenses decreased by \$1.4 million, or 25%, to \$4.3 million for the year ended December 31, 2018 from \$5.8 million for the year ended December 31, 2017. The decrease in research and development expense was primarily attributable to a decrease in licensing payments of \$0.5 million, a decrease in external testing and analysis costs of \$0.2 million and a decrease of \$0.7 million in overall research and development efforts as we shifted our focus to the commercialization of our approved products.

Gain on Litigation Settlement

In 2018, we recognized a gain on litigation settlement of \$2.2 million related to a litigation claim that we had brought against the former carrier for our directors and officer and employment practices liability insurance for breach of contract and failure to reimburse us for defense costs incurred in litigation against LifeCell that was fully settled in 2016.

Interest Expense

Interest expense decreased by \$2.8 million, or 60%, to \$1.8 million for the year ended December 31, 2018 from \$4.6 million for the year ended December 31, 2017. The decrease was primarily due to a decrease of \$1.4 million related to non-cash accretion expense, and a decrease of \$1.4 million related to the recognition of a beneficial conversion feature recognized in 2017.

Loss on Extinguishment of Debt

We recorded a loss on the extinguishment of debt of \$1.8 million during the year ended December 31, 2018 related to the repayment of borrowings and cancellation of refinancing of our credit facilities with Hercules and MidCap, in April and November, respectively. The losses were primarily comprised of the write-off of unamortized debt discounts and prepayment penalties at the time of extinguishment.

Change in Fair Value of Preferred Stock Warrant Liability

The fair value of our preferred stock warrant liability decreased during both of the years ended December 31, 2018 and 2017, primarily attributable to the decrease in the remaining contractual term of the outstanding warrants. As a result, we recognized a gain on the change in the fair value of our preferred stock warrant liability of \$0.2 million and \$54,000 during the years ended December 31, 2018 and 2017, respectively.

Liquidity and Capital Resources

Overview

As of December 31, 2019, we had cash, cash equivalents and short-term investments of \$54.6 million, working capital of \$57.6 and an accumulated deficit of \$167.9 million. As of December 31, 2018, we had cash and cash equivalents of \$17.3 million, working capital of \$13.7 million and an accumulated deficit of \$137.9 million as of December 31, 2018.

On November 13, 2019, we closed our IPO in which we issued and sold 4,398,700 shares of our common stock at a public offering price of \$13.00 per share, which included 398,700 shares of our common stock sold pursuant to the underwriters' option to purchase additional shares. We received net proceeds of \$50.6 million after deducting underwriting discounts and commissions and other expenses.

We have incurred operating losses since our inception, and we anticipate that our operating losses will continue in the near term as we seek to expand our sales and marketing initiatives to support our growth in existing and new markets and invest funds in additional research and development activities. We will also incur additional costs of operating as a public company. As of December 31, 2019, we had \$30.0 million of borrowings outstanding under our credit facility (the "OrbiMed Credit Facility"). This credit facility matures in November 2023 and had \$5.0 million of additional capacity through December 31, 2019, which we did not borrow. This facility requires that we maintain a minimum cash balance of \$2.0 million.

Based on our current business plan, we believe that our existing cash resources and short-term investments will be sufficient to meet our capital requirements and fund our operations for at least the next 12 months from the issuance of this Annual Report. If these sources are insufficient to satisfy our liquidity requirements, we may seek to sell additional common or preferred equity or debt securities, or enter into a new credit facility. If we raise additional funds by issuing equity or equity-linked securities, our stockholders would experience dilution and any new equity securities could have rights, preferences and privileges superior to those of holders of our common stock. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. We cannot be assured that additional equity, equity-linked or debt financing will be available on terms favorable to us or our stockholders, or at all, including as a result of market volatility following the COVID-19 outbreak. If we are unable to obtain adequate financing we may be required to delay the development, commercialization and marketing of our products.

Cash Flows

The following table summarizes our sources and uses of cash for each of the periods presented:

(in thousands)	Year Ended December 31,		
	2019	2018	2017
Cash used in operating activities	\$ (25,524)	\$ (19,924)	\$ (16,368)
Cash used in investing activities	(11,980)	(1,558)	(101)
Cash provided by financing activities	65,532	27,414	26,335
Effect of exchange rate on cash	(4)	—	—
Net increase in cash and cash equivalents	\$ 28,024	\$ 5,932	\$ 9,866

Operating Activities

During the year ended December 31, 2019, we used \$25.5 million of cash in operating activities, resulting from our net loss of \$22.4 million and the change in operating assets and liabilities of \$6.3 million, offset by non-cash charges of \$3.2 million. Our non-cash charges were primarily comprised of our excess and obsolete inventory charge of \$1.6 million, stock-based compensation expense of \$0.5 million, interest expense of \$0.5 million, depreciation of \$0.3 million and amortization of intangibles of \$0.3 million. The change in our operating assets was primarily related to increases in accounts receivable, inventory and prepaid expenses and other assets.

During the year ended December 31, 2018, we used \$19.9 million of cash in operating activities, resulting from our net loss of \$21.1 million and the change in operating assets and liabilities of \$4.5 million offset by non-cash charges of \$5.6 million. Our non-cash charges were comprised of depreciation of \$0.5 million, the amortization of intangibles of \$0.8 million, interest expense of \$0.7 million, the recognition of a loss on extinguishment of debt of \$1.8 million, and our excess and obsolete inventory charge of \$2.2 million. We also had stock-based compensation expense of \$0.2 million and a change in the fair value of our warrants of \$0.2 million. The change in our operating assets was primarily related to a \$4.8 million increase in inventory, a \$0.5 million increase in accounts receivable, and a decrease in accrued expenses and other liabilities of \$1.2 million. These amounts were slightly offset by a \$1.9 million increase in accounts payable.

Investing Activities

During the year ended December 31, 2019, cash used in investing activities was \$12.0 million, consisting of purchases of short-term investments of \$9.3 million, payments made for our intangible assets of \$2.5 million and purchases of property and equipment of \$0.2 million.

During the year ended December 31, 2018, cash used in investing activities was \$1.6 million, consisting of payments made for our intangible assets of \$1.5 million, and purchases of property and equipment of \$0.1 million.

Financing Activities

During the year ended December 31, 2019, cash provided by financing activities was \$65.5 million, consisting primarily from the net proceeds received from our IPO and the net proceeds from the issuance of our Series B preferred stock.

During the year ended December 31, 2018, cash provided by financing activities was \$27.4 million, consisting primarily of \$30.0 million in proceeds received from the issuance of long-term related party debt with OrbiMed, \$8.0 million in proceeds from the issuance of long-term debt with MidCap, \$4.0 million in net proceeds received from the issuance of our Series B preferred stock, partially offset by \$13.0 million in repayments made on our long-term debt with MidCap and Hercules and \$1.6 million in payments of issuance costs related to our debt financings.

Indebtedness

In November 2018, we entered into the OrbiMed Credit Facility, which consists of up to \$35.0 million in term loans (the "OrbiMed Term Loans"). The OrbiMed Term Loans consist of two tranches, a \$30.0 million Tranche 1 ("Tranche 1") and a \$5.0 million Tranche 2 ("Tranche 2"). Upon closing, we borrowed \$30.0 million of Tranche 1 and used a portion of the proceeds to repay borrowings under our credit facility with MidCap and intend to use the remaining proceeds to fund operations and capital expenditures. We elected not to borrow Tranche 2 prior to its expiration on December 31, 2019.

Pursuant to the OrbiMed Credit Facility, we provided a first priority security interest in all existing and future acquired assets, excluding intellectual property and certain other assets, owned by us. The OrbiMed Credit Facility contains a negative pledge on intellectual property owned by us. The OrbiMed Credit Facility also contains customary indemnification obligations and customary events of default, including, among other things, (i) non-payment, (ii) breach of warranty, (iii) non-performance of covenants and obligations, (iv) default on other indebtedness, (v) judgments, (iv) change of control, (vii) bankruptcy and insolvency, (viii) impairment of security, (ix) key permit events, (x) key person event, (xi) regulatory matters, (xii) and key contracts. In addition, we must maintain a minimum cash balance of \$2.0 million. In the event of default under the OrbiMed Credit Facility, we would be required to pay interest on principal and all other due and unpaid obligations at the current rate in effect plus 3%.

The OrbiMed Term Loans mature on November 16, 2023 and bear interest at a rate equal to 7.75% plus the greater of one-month LIBOR or 2.0%. We are required to make 60 monthly interest payments beginning on November 30, 2018 with the entire principal payment due at maturity. The OrbiMed Term Loans have a prepayment penalty equal to 10.0% of the prepaid principal amount prior to the second anniversary of the OrbiMed Term Loans, 5.0% of the prepaid principal amount after the second anniversary but prior to the third anniversary and 2.5% of the prepaid principal amount

after the third anniversary. We are also required to pay an administration fee equal to \$10,000 on the last day of each quarter until all obligations have been paid in full and an exit fee at the time of maturity or prepayment event equal to \$3.0 million.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as of December 31, 2019 and the effects that such obligations are expected to have on our liquidity and cash flows in future periods:

(in thousands)	Payments due by Period				
	Total	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
Principal payments on long-term debt	\$ 30,000	\$ —	\$ —	\$ 30,000	\$ —
Interest and end of term charge on long-term debt ⁽¹⁾	14,339	2,925	5,850	5,564	—
Operating lease commitments ⁽²⁾	309	217	92	—	—
Purchase commitments with Aroa	8,250	4,000	3,250	1,000	—
Total ⁽³⁾	\$ 52,898	\$ 7,142	\$ 9,192	\$ 36,564	\$ —

- (1) Interest payable reflects the rate in effect as of December 31, 2019. The interest rate on borrowings under the OrbiMed Credit Facility is variable and resets monthly. End of term fee reflects final payment fee due at maturity.
- (2) Reflects payments due for our lease of office and laboratory space in Malvern, Pennsylvania under an operating lease agreement that expires in 2021.
- (3) This table does not include (a) any milestone payments that are not deemed probable under license agreements as the timing and likelihood of such payments are not known with certainty and (b) contracts that are entered into in the ordinary course of business that are not material in the aggregate in any period presented above. Excluded amounts primarily consist of a \$1,000 milestone payment due to Aroa when certain sales milestones are met.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our cash is held on deposit in demand accounts at high credit quality financial institutions in amounts in excess of the Federal Deposit Insurance Corporation (“FDIC”) insurance coverage limit of \$250,000 per depositor, per FDIC-insured bank, per ownership category. We have reviewed the consolidated financial statements of these institutions and believe they have sufficient assets and liquidity to conduct their operations in the ordinary course of business with little or no credit risk to us.

Financial instruments that potentially subject us to concentrations of credit risk principally consist of cash equivalents, short-term investments and accounts receivable. We limit our credit risk associated with cash equivalents by placing investments in highly-rated money market funds, corporate debt securities and agency securities. Our short-term investments are classified as available-for sale-securities and are reported at fair value in the accompanying consolidated balance sheet. We limit our credit risk with respect to accounts receivable by performing credit evaluations when deemed necessary, but we do not require collateral to secure amounts owed to us by our customers.

As discussed above in the section of this Annual Report entitled “Liquidity and Capital Resources — Indebtedness,” The OrbiMed Credit Facility bears interest at a floating rate of interest, which resets monthly and is equal to 7.75% plus the greater of one-month LIBOR or 2.0%. As a result, we are exposed to risks from changes in interest rates. A 1.0% increase in interest rates would have resulted in a \$0.3 million increase to our interest expense for the year ended December 31, 2019.

Inflationary factors, such as increases in our cost of revenue and operating expenses, may adversely affect our operating results. Although we do not believe inflation has had a material impact on our financial condition, results of operations or cash flows to date, a high rate of inflation in the future may have an adverse effect on our ability to maintain and

increase our gross margin or decrease our operating expenses as a percentage of our revenue if our selling prices of our products do not increase as much or more than our costs increase.

We do not currently have any material exposure to foreign currency fluctuations and do not engage in any hedging activities as part of our normal course of business.

Critical Accounting Policies and Significant Judgments and Estimates

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles in the U.S. ("GAAP"). The preparation of our consolidated financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amount of revenue and expenses during the reporting period. We base our estimates on historical experience, known trends and events, and various other factors that we believe are 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. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 3 to our consolidated financial statements appearing elsewhere in this Annual Report, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

We account for revenue in accordance with Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* ("ASC 606") which was adopted on January 1, 2019 using the modified retrospective method. The adoption of this guidance had no cumulative adjustment to our consolidated financial statements. Under ASC 606, we recognize revenue when our customer obtains control of our promised good, in an amount that reflects the consideration that the entity expects to be entitled in exchange for those goods.

Prior to the adoption of ASC 606 in January 2019, revenue was recognized when persuasive evidence of an arrangement exists, the price was fixed and determinable, delivery has occurred, and there was reasonable assurance of collection of the sales proceeds. Revenue for products sold to a customer was recognized when the product was shipped to the customer, at which time title passed to the customer. Fees charged to customers for shipping were recognized as revenue. In the case of consigned inventory, revenue was recognized when the product was utilized in a surgical procedure.

Inventory Valuation

Inventory is stated at the lower of cost or net realizable value, with cost determined using the first-in-first-out method. Inventory, which consists of our OviTex and OviTex PRS product held on consignment or held in our warehouse, is considered finished goods and is purchased from a third party.

We evaluate the carrying value of our inventory in relations to the estimated forecast of product demand, which takes into consideration the expiration date of the products. A significant decrease in demand could result in an increase in the amount of excess inventory on hand, which could lead to additional charges for excess and obsolete inventory. The need to maintain substantial levels of inventory impacts our estimates for excess and obsolete inventory. In addition, we continue to introduce new products and sizes, which we believe will increase our revenue. As a result, we may be required to take additional charges for excess and obsolete inventory in the future if the purchased units do not align with sales.

Stock-Based Compensation

The following table summarizes stock-based compensation expense resulting from stock options:

(in thousands)	Year Ended December 31,		
	2019	2018	2017
Sales and marketing	\$ 164	\$ 68	\$ 44
General and administrative	225	115	116
Research and development	68	33	37
Total stock-based compensation	\$ 457	\$ 216	\$ 197

We measure stock options and other stock-based awards based on their estimated fair value on the date of the grant and recognize compensation expense for those awards over the requisite service period, which is generally the vesting period of the respective award, while awards containing a performance condition are recognized when the achievement of the performance criteria is considered probable. We apply the straight-line method of expense recognition to all awards with service-based vesting conditions.

We estimate the fair value of stock options using the Black-Scholes option-pricing model, which requires assumptions, including the fair value of our common stock, volatility, the expected term of our stock options, the risk-free interest rate for a period that approximates the expected term of our stock options, and our expected dividend yield. Certain assumptions used in our Black-Scholes option-pricing model represent management's best estimates and involve a number of variables, uncertainties and assumptions and the application of management's judgment, as they are inherently subjective. If any assumptions change, our stock-based compensation expense could be materially different in the future.

These subjective assumptions are estimated as follows:

- *Expected volatility.* The expected volatility was based on the historical stock volatility of several of our comparable publicly traded companies over a period of time equal to the expected term of the options, as we do not have any trading history to use the volatility of our own common stock.
- *Fair value of common stock.* On November 13, 2019, we closed our IPO. Following the closing, the fair value of common stock was the closing price of our common stock on the Nasdaq Global Market as reported on the date of the grant. Prior to that, our common stock had not historically been publicly traded and we had to periodically estimate the fair value of common stock.

Estimating the Fair Value of Common Stock

Prior to the closing of our IPO, there was no public market for our common stock and the estimated fair value of our common stock was determined by our board of directors as of the date of each option grant, with input from management, considering the most recently available third-party valuation of common stock, and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. In addition to considering the results of these third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common stock as of each grant date, including:

- the prices at which we sold shares of preferred stock and the superior rights and preferences of the preferred stock relative to our common stock at the time of each grant;
- the progress of our commercialization efforts;

- the progress of our research and development programs, including the status and results of preclinical studies for our product candidates;
- our stage of development and our business strategy;
- external market conditions affecting the medical device industry and trends within the medical device industry;
- our financial position, including cash on hand, and our historical and forecasted performance and operating results;
- the lack of an active public market for our common stock and our preferred stock;
- the likelihood of achieving a liquidity event, such as an IPO, or sale of our company in light of prevailing market conditions; and
- the analysis of IPOs and the market performance of similar companies in the medical device industry.

In determining the estimated fair value of common stock, our board of directors considered the subjective factors discussed above in conjunction with the most recent valuations of our common stock that were prepared by an independent third-party.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Recently Issued and Adopted Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 3 to our consolidated financial statements appearing elsewhere in this Annual Report.

JOBS Act Accounting Election

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act, and are eligible to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933 for complying with new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. Section 107 of the JOBS Act provides that we can elect to opt out of the extended transition period at any time, which election is irrevocable. We have elected to avail ourselves of this exemption from complying with new or revised accounting standards and, therefore, will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item is set forth on pages F-1 through F-26 hereto.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Internal Controls over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with GAAP. This Annual Report does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of the of the Company's registered public accounting firm due to a transition period established by rules of the SEC for newly public companies. We will be required, under Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting beginning with our Annual Report on Form 10-K for the year ending December 31, 2020. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. The SEC defines a material weakness as a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of a company's annual or interim consolidated financial statements will not be detected or prevented on a timely basis.

In accordance with the provisions of the Sarbanes-Oxley Act, neither we nor our independent registered public accounting firm has performed an evaluation of our internal control over financial reporting during any period included in this annual report.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information concerning directors and compliance with Section 16(a) of the Exchange Act and our Code of Conduct that applies to our principal executive officer, principal financial officer, principal accounting officer or controller called for by Item 10 of Form 10-K will be set forth in our definitive proxy statement for the 2020 annual meeting of stockholders, to be filed within 120 days after the end of the fiscal year covered by this annual report on Form 10-K, and is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 11 of Form 10-K is incorporated by reference to the information contained in our definitive proxy statement for the 2020 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 Form 10-K is incorporated by reference to the information contained in our definitive proxy statement for the 2020 annual meeting of stockholders.

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

The information required by Item 13 of Form 10-K is incorporated by reference to the information contained in our definitive proxy statement for the 2020 annual meeting of stockholders.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by Item 14 of Form 10-K is incorporated by reference to the information contained in our definitive proxy statement for the 2020 annual meeting of stockholders.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) 1. Financial Statements

See Index to the Consolidated Financial Statements on page F-1 of this Annual Report.

2. Financial Statement Schedules

None, as all information required in these schedules is included in the Notes to the Consolidated Financial Statements.

3. Exhibits

Reference is made to the Exhibit Index on page 92 of this Annual Report for a list of exhibits required by Item 601 of Regulation S-K to be filed as part of this Annual Report.

TELA BIO, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors
TELA Bio, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of TELA Bio, Inc. and its subsidiary (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditors since 2013.

Philadelphia, Pennsylvania
March 30, 2020

TELA Bio, Inc.
Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	December 31,	
	2019	2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 45,302	\$ 17,278
Short-term investments	9,285	—
Accounts receivable, net	2,836	1,298
Inventory	4,603	4,348
Prepaid expenses and other assets	2,308	330
Total current assets	64,334	23,254
Property and equipment, net	677	758
Intangible assets, net	2,911	3,215
Total assets	<u>\$ 67,922</u>	<u>\$ 27,227</u>
Liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	\$ 3,171	\$ 3,421
Accrued expenses	3,533	5,153
Other current liabilities	9	985
Total current liabilities	6,713	9,559
Long-term debt with related party	30,243	29,733
Preferred stock warrant liability	—	1,640
Other long-term liabilities	4	5
Total liabilities	<u>36,960</u>	<u>40,937</u>
Contingencies and commitments (Note 11)		
Redeemable convertible preferred stock; \$0.001 par value:		
Series A Preferred stock: 22,501,174 shares previously authorized, no shares issued or outstanding at December 31, 2019 and 22,501,174 issued and outstanding at December 31, 2018	—	33,112
Series B Preferred stock: 82,891,619 shares previously authorized, no shares issued or outstanding at December 31, 2019 and 63,032,500 issued and outstanding at December 31, 2018	—	91,038
Total redeemable convertible preferred stock	<u>—</u>	<u>124,150</u>
Stockholders' equity (deficit):		
Preferred stock; \$0.001 par value: 10,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock; \$0.001 par value: 200,000,000 shares authorized; 11,406,976 and 296,629 shares issued and 11,406,221 and 295,717 shares outstanding at December 31, 2019 and 2018, respectively	11	—
Additional paid-in capital	198,829	—
Accumulated other comprehensive loss	(19)	—
Accumulated deficit	(167,859)	(137,860)
Total stockholders' equity (deficit)	<u>30,962</u>	<u>(137,860)</u>
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	<u>\$ 67,922</u>	<u>\$ 27,227</u>

See accompanying notes to consolidated financial statements.

TELA Bio, Inc.
Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)

	Year ended December 31,		
	2019	2018	2017
Revenue	\$ 15,446	\$ 8,274	\$ 4,245
Cost of revenue (excluding amortization of intangible assets)	5,870	4,547	1,713
Amortization of intangible assets	304	785	—
Gross profit	<u>9,272</u>	<u>2,942</u>	<u>2,532</u>
Operating expenses:			
Sales and marketing	18,060	13,646	8,712
General and administrative	6,223	4,899	4,958
Research and development	4,151	4,339	5,786
Gain on litigation settlement	—	(2,160)	—
Total operating expenses	<u>28,434</u>	<u>20,724</u>	<u>19,456</u>
Loss from operations	<u>(19,162)</u>	<u>(17,782)</u>	<u>(16,924)</u>
Other (expense) income:			
Interest expense	(3,609)	(1,802)	(4,558)
Loss on extinguishment of debt	—	(1,822)	—
Change in fair value of preferred stock warrant liability	(5)	244	54
Other income	351	70	94
Total other (expense) income	<u>(3,263)</u>	<u>(3,310)</u>	<u>(4,410)</u>
Net loss	<u>(22,425)</u>	<u>(21,092)</u>	<u>(21,334)</u>
Accretion of redeemable convertible preferred stock to redemption value	<u>(7,783)</u>	<u>(8,823)</u>	<u>(5,893)</u>
Net loss attributable to common stockholders	<u>\$ (30,208)</u>	<u>\$ (29,915)</u>	<u>\$ (27,227)</u>
Net loss per common share, basic and diluted	<u>\$ (17.10)</u>	<u>\$ (101.41)</u>	<u>\$ (93.26)</u>
Weighted average common shares outstanding, basic and diluted	<u>1,766,412</u>	<u>294,988</u>	<u>291,963</u>
Comprehensive loss:			
Net loss	\$ (22,425)	\$ (21,092)	\$ (21,334)
Foreign currency translation adjustment	(15)	—	—
Unrealized loss on short-term investments	(4)	—	—
Comprehensive loss	<u>\$ (22,444)</u>	<u>\$ (21,092)</u>	<u>\$ (21,334)</u>

See accompanying notes to consolidated financial statements.

TELA Bio, Inc.
Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)
(In thousands, except share amounts)

	Redeemable Convertible Preferred Stock				Stockholders' Equity (Deficit)					
	Series A		Series B		Common stock		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance at January 1, 2017	22,501,174	\$ 28,811	39,543,222	\$ 52,452	286,432	\$ —	\$ —	\$ —	\$ (81,174)	\$ (81,174)
Vesting of common stock previously subject to repurchase	—	—	—	—	6,955	—	31	—	—	31
Exercise of stock options	—	—	—	—	404	—	2	—	—	2
Issuance of Series B redeemable convertible preferred stock upon conversion of promissory notes	—	—	6,951,175	9,462	—	—	—	—	—	—
Sale of Series B redeemable convertible preferred stock, net of stock issue costs of \$269	—	—	12,931,034	14,731	—	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	197	—	—	197
Accretion of redeemable convertible preferred stock to redemption value	—	2,129	—	3,764	—	—	(230)	—	(5,663)	(5,893)
Net loss	—	—	—	—	—	—	—	—	(21,334)	(21,334)
Balance at December 31, 2017	22,501,174	30,940	59,425,431	80,409	293,791	—	—	—	(108,171)	(108,171)
Vesting of common stock previously subject to repurchase	—	—	—	—	549	—	5	—	—	5
Exercise of stock options	—	—	—	—	1,377	—	5	—	—	5
Sale of Series B redeemable convertible preferred stock, net of stock issue costs of \$206	—	—	3,607,069	3,978	—	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	216	—	—	216
Accretion of redeemable convertible preferred stock to redemption value	—	2,172	—	6,651	—	—	(226)	—	(8,597)	(8,823)
Net loss	—	—	—	—	—	—	—	—	(21,092)	(21,092)
Balance at December 31, 2018	22,501,174	33,112	63,032,500	91,038	295,717	—	—	—	(137,860)	(137,860)
Vesting of common stock previously subject to repurchase	—	—	—	—	628	—	4	—	—	4
Exercise of stock options	—	—	—	—	2,527	—	14	—	—	14
Sale of Series B redeemable convertible preferred stock, net of stock issue costs of \$165	—	—	12,527,956	14,367	—	—	—	—	—	—
Unrealized loss on short-term investments	—	—	—	—	—	—	—	(4)	—	(4)
Foreign currency translation adjustment	—	—	—	—	—	—	—	(15)	—	(15)
Stock-based compensation expense	—	—	—	—	—	—	457	—	—	457
Accretion of redeemable convertible preferred stock to redemption value	—	1,563	—	6,220	—	—	(209)	—	(7,574)	(7,783)
Conversion of convertible preferred stock to common stock in connection with the initial public offering	(22,501,174)	(34,675)	(75,560,456)	(111,625)	6,708,649	7	146,293	—	—	146,300
Issuance of common stock upon initial public offering, net of underwriting discounts, commissions and offering costs	—	—	—	—	4,398,700	4	50,625	—	—	50,629
Conversion of preferred stock warrants to common stock warrants	—	—	—	—	—	—	1,645	—	—	1,645
Net loss	—	—	—	—	—	—	—	—	(22,425)	(22,425)
Balance at December 31, 2019	—	\$ —	—	\$ —	11,406,221	\$ 11	\$ 198,829	\$ (19)	\$ (167,859)	\$ 30,962

See accompanying notes to consolidated financial statements.

TELA Bio, Inc.
Consolidated Statements of Cash Flows
(In thousands)

	Year ended December 31,		
	2019	2018	2017
Cash flows from operating activities:			
Net loss	\$ (22,425)	\$ (21,092)	\$ (21,334)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation expense	278	463	761
Noncash interest expense	523	712	2,113
Noncash loss on extinguishment of debt	—	1,469	—
Amortization of intangible assets	304	785	—
Inventory excess and obsolescence charge	1,591	2,224	452
Beneficial conversion feature upon conversion of promissory notes	—	—	1,408
Change in fair value of warrants	5	(244)	(54)
Stock-based compensation expense	457	216	197
Loss (gain) on sale of property and equipment	—	(2)	14
Change in operating assets and liabilities:			
Accounts receivable	(1,528)	(541)	(578)
Inventory	(1,839)	(4,757)	(127)
Prepaid expenses and other assets	(1,977)	99	(58)
Restricted cash	—	24	—
Accounts payable	(773)	1,914	(748)
Accrued expenses and other liabilities	(118)	(1,194)	1,586
Foreign currency remeasurement gain	(21)	—	—
Net cash used in operating activities	(25,523)	(19,924)	(16,368)
Cash flows from investing activities:			
Purchases of short-term investments	(9,284)	—	—
Payment for intangible asset	(2,500)	(1,500)	—
Purchase of property and equipment	(197)	(62)	(114)
Proceeds from sale of property and equipment	—	4	13
Net cash used in investing activities	(11,981)	(1,558)	(101)
Cash flows from financing activities:			
Proceeds from initial public offering net of underwriting discounts, commissions and offering costs	51,151	—	—
Proceeds from issuance of long-term debt with related party	—	30,000	—
Proceeds from issuance of long-term debt and preferred stock warrants	—	8,000	5,000
Repayment of long-term debt	—	(13,000)	—
Borrowings under revolving credit facility	—	5,732	—
Repayments of revolving credit facility	—	(5,732)	—
Proceeds from issuance of Series B redeemable convertible preferred stock, net of offering costs	14,367	3,978	14,731
Proceeds from issuance of convertible promissory notes and preferred stock warrants	—	—	7,386
Payment of deferred financing costs	—	(1,569)	(596)
Payment of capital lease obligations	—	—	(188)
Proceeds from exercise of stock options	14	5	2
Net cash provided by financing activities	65,532	27,414	26,335
Effect of exchange rate on cash	(4)	—	—
Net increase in cash and cash equivalents	28,024	5,932	9,866
Cash and cash equivalents, beginning of year	17,278	11,346	1,480
Cash and cash equivalents, end of year	\$ 45,302	\$ 17,278	\$ 11,346
Supplemental disclosure of cash flow information:			
Cash paid during the period for interest	\$ 3,086	\$ 1,090	\$ 329
Cash paid on loss on extinguishment of debt	\$ —	\$ 353	\$ —
Supplemental disclosures of noncash investing and financing activities:			
Fair value of warrants issued in connection with equity and debt financing	\$ —	\$ 187	\$ 1,751
Accretion of redeemable convertible preferred stock	\$ 7,783	\$ 8,823	\$ 5,893
Conversion of convertible preferred stock to common stock in connection with the initial public offering	\$ 146,300	\$ —	\$ —
Conversion of outstanding preferred stock warrants	\$ 1,645	\$ —	\$ —
Offering costs in accounts payable	\$ 522	\$ —	\$ —
Conversion of convertible promissory notes and accrued interest to Series B redeemable convertible preferred stock	\$ —	\$ —	\$ 8,054
Intangible assets in accrued expenses and other liabilities	\$ —	\$ 2,500	\$ —
Recognition of exit fee for debt discount	\$ —	\$ 3,400	\$ —
Issuance of common stock for early exercised stock options	\$ 4	\$ 5	\$ 31
Unrealized loss on short-term investments	\$ 4	\$ —	\$ —

See accompanying notes to consolidated financial statements.

TELA BIO, INC.

Notes to Consolidated Financial Statements

(1) Background

TELA Bio, Inc. (the “Company”) was incorporated in the state of Delaware on April 17, 2012 and wholly owns TELA Bio Limited, a company incorporated in the United Kingdom. The Company is focused on the commercialization and sale of OviTex Reinforced Tissue Matrix (“OviTex”), which utilizes surgical reconstruction medical device technology licensed from a strategic partner, Aroa Biosurgery (“Aroa”), as described in Note 11, and on the research and development of additional medical devices with Aroa and on other internally developed technologies. In April 2019, the Company received 510(k) clearance from the U.S. Food and Drug Administration (“FDA”) for OviTex PRS Reinforced Tissue Matrix (“OviTex PRS”), which addresses unmet needs in plastic reconstruction surgery. The Company’s principal corporate office and research facility is located in Malvern, Pennsylvania.

(2) Risks and Liquidity

The Company’s operations to date have focused on commercializing products, developing and acquiring technology and assets, business planning, raising capital and organization and staffing. The Company has incurred recurring losses and negative cash flows from operations since inception and has an accumulated deficit of \$167.9 million as of December 31, 2019. The Company anticipates incurring additional losses until such time, if ever, it can generate sufficient revenue from its products to cover its expenses and has limited resources available to fund current commercialization and research and development activities.

In November 2019, the Company closed its initial public offering (“IPO”) in which the Company issued and sold 4,398,700 shares of its common stock at a public offering price of \$13.00 per share, including 398,700 shares of the Company’s common stock sold pursuant to the underwriters’ option to purchase additional shares. The Company received net proceeds of \$50.6 million after deducting underwriting discounts, commissions and other offering expenses.

The operations of the Company are subject to certain risks and uncertainties including, among others, uncertainty of product development, technological uncertainty, commercial acceptance of any developed products, alternative competing technologies, dependence on collaborative partners, uncertainty regarding patents and proprietary rights, comprehensive government regulations, and dependence on key personnel.

(3) Summary of Significant Accounting Policies

Basis of Presentation and Principals of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification (“ASC”) and Accounting Standards Updates (“ASU”) promulgated by the Financial Accounting Standards Board (“FASB”). The consolidated financial statements include the accounts of TELA Bio, Inc. and its wholly owned subsidiary TELA Bio Limited. All intercompany accounts and transactions have been eliminated in consolidation.

Reverse Stock Split

The Company effected a one-for-24.69 reverse stock split of its common stock on October 28, 2019. The reverse stock split combined approximately 25 shares of the Company’s issued and outstanding common stock into one share of common stock and correspondingly adjusted the conversion price of its redeemable convertible preferred stock. No fractional shares were issued in connection with the reverse stock split. Any fractional share resulting from the reverse stock split was rounded down to the nearest whole share, and in lieu of any fractional shares, the Company will pay in cash to the holders of such fractional shares an amount equal to the fair value, as determined by the board of directors, of

TELA BIO, INC.

Notes to Consolidated Financial Statements (continued)

such fractional shares. All common stock, per share and related information presented in the consolidated financial statements and accompanying notes have been retroactively adjusted to reflect the reverse stock split.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and contingent liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. The most significant judgments are employed in estimates used to determine the fair value of redeemable convertible preferred stock, preferred stock warrant liability and stock-based awards issued, and recoverability of the carrying value of the Company's inventory. As future events and their effects cannot be determined with precision, actual results may differ significantly from these estimates.

Segments

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one segment.

Concentration of Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents and short-term investments. The Company places its cash with high-credit-quality financial institutions and invests in money market funds, government agency securities and corporate debt securities. The Company has established guidelines relative to credit ratings and maturities that seek to maintain safety and liquidity.

As described in Note 11, the Company has licensed patents and other intellectual property from Aroa. As part of this agreement, Aroa is also the sole manufacturer of the Company's products. The inability of Aroa to fulfill supply requirements of the Company could materially impact future operating results. A change in the relationship with Aroa, or an adverse change in their business, could materially impact future operating results.

Cash and Cash Equivalents

The Company considers cash equivalents to be highly liquid investments with maturities of three months or less from the date of purchase. Cash equivalents consist of investments in a money market fund. The Company's cash and cash equivalents are carried at the fair value of the investment based on quoted market prices.

Short-Term Investments

Short-term investments consist of investments in corporate debt securities with a maturity of greater than three months when acquired. The Company classifies these investments as available-for-sale securities. These investments are reported at fair value with the related unrealized gains and losses included in accumulated other comprehensive loss, a component of stockholders' equity.

The Company evaluates its investments for other-than-temporary impairment by reviewing factors such as the length of time and extent to which fair value has been below cost basis and the Company's ability and intent to hold the investment for a period of time which may be sufficient for anticipated recovery of the market value. There were no other-than-temporary impairments in 2019.

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)**

Short-term investments consisted of the following at December 31, 2019 (in thousands):

	<u>Cost</u>	<u>Amortization/ Accretion</u>	<u>Unrealized Gains/(Losses)</u>	<u>Estimated Fair Value</u>
Corporate debt securities	\$ 9,284	\$ 5	\$ (4)	\$ 9,285

Inventory

Inventory consists of finished goods and is identified and tracked by lot and stated at the lower of cost or net realizable value, with cost being determined on a first-in, first-out basis. The Company periodically analyzes its inventory levels and writes down inventory that has become obsolete or that has a cost basis in excess of its expected net realizable value based on expected customer demand. As of December 31, 2019 and 2018, the Company had \$1.1 million and \$0.8 million, respectively, in inventory consigned to others.

Property and Equipment

Property and equipment are stated at the aggregate cost incurred to acquire and place the asset in service. Expenditures for routine maintenance and repairs are charged to expense as incurred and costs of improvements and renewals are capitalized. Depreciation is provided over the estimated useful lives of the assets using the straight-line method.

Intangible Assets

Upfront payments and milestone payments due related to licenses or commercialization rights prior to future economic benefit being established are recorded as research and development expenses. Milestone payments due related to licenses or commercialization rights after future economic benefit is established are recorded as intangible assets. In 2018, the Company recorded \$4.0 million in intangible assets as it became probable that the Company would make these payments. In 2019 and 2018, the Company recorded \$0.3 million and \$0.8 million, respectively, of amortization expense related to intangible assets. At December 31, 2019, the remaining life of intangible assets was 9.6 years. The Company anticipates recognizing amortization expense of \$0.3 million for the next five years and \$1.4 million thereafter.

Long-Lived Assets

Long-lived assets, such as property and equipment and intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset or asset group be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by such asset or asset group to its carrying value. If the carrying value of the long-lived asset or asset group exceeds the undiscounted cash flows, an impairment is recognized to the extent the carrying value exceeds its fair value. Fair value is determined using various valuation techniques, including discounted cash flow models, quoted market values, and third-party independent appraisals, as considered necessary. No impairment losses were recognized during the year ended December 31, 2019, 2018 or 2017.

Debt Issuance Costs

Debt issuance costs incurred in connection with debt (Note 6) are amortized to interest expense over the term of the respective financing arrangement using the effective-interest method, and debt issuance costs incurred under the revolver are amortized to interest expense over the term of the respective financing arrangement using the straight-line method. Debt issuance costs, net of related amortization are deducted from the carrying value of the related debt.

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)***Revenue Recognition*

The Company accounts for revenue in accordance with ASC Topic 606, *Revenue from Contracts with Customers*, which was adopted on January 1, 2019, using the modified retrospective method. The Company determined that the new guidance did not have a material impact on its revenue recognition practices as it does not provide customers with price concessions, rebates, volume discounts or other such reductions for which an estimated transaction price must be determined and then allocated to specific deliverables. The adoption of this guidance had no cumulative adjustment to the Company's consolidated financial statements as of the adoption date. Under ASC Topic 606, an entity recognizes revenue when its customer obtains control of the promised good, in an amount that reflects the consideration that the entity expects to be entitled in exchange for those goods.

The Company performs the following five steps to recognize revenue under ASC Topic 606: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract, and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only recognizes revenue when it is probable that it will collect the consideration to which it is entitled in exchange for the goods or services that will be transferred to the customer.

A significant portion of the Company's revenue is generated from product shipped to a customer or from consigned inventory maintained at hospitals. Revenue from the sale of consigned products is recognized when control is transferred to the customer, which occurs at the time the product is used in a surgical procedure. For product that is not held on consignment, the Company recognizes revenue when control transfers to the customer which occurs at the time the product is shipped or delivered. For all of the Company's contracts, the only identified performance obligation is providing the product to the customer.

Payment terms with customers do not exceed one year and, therefore, the Company does not account for a financing component in its arrangements. There are no incremental costs of obtaining a contract that would rise to or enhance an asset other than product costs, which are a component of inventory. The Company expenses incremental costs of obtaining a contract with a customer (e.g., sales commissions) when incurred as the period of benefit is less than one year. Fees charged to customers for shipping are recognized as revenue.

The following table presents revenue disaggregated (in thousands):

	<u>Year ended December 31,</u>
OviTex	\$ 14,041
OviTex PRS	1,405
Total revenue	<u>\$ 15,446</u>

Sales of OviTex accounted for all of the Company's revenue for the years ended December 31, 2018 and 2017.

Prior to the adoption of ASC Topic 606, revenue was recognized when persuasive evidence of an arrangement existed, the price was fixed or determinable, delivery had occurred, and there was a reasonable assurance of collection of the sales proceeds. Revenue for products sold to a customer was recognized when the product was shipped to the customer, at which time title passed to the customer. In the case of consigned inventory, revenue was recognized when the product was utilized in a surgical procedure.

Research and Development

Research and development costs are charged to expense as incurred and consist primarily of salaries, benefits, and other related costs, including stock-based compensation for personnel serving in the research and development functions as

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)**

well as payments to Aroa and related supply and manufacturing costs. At the end of the reporting period, the Company compares payments made to third-party service providers to the estimated progress toward completion of the research or development objectives. Such estimates are subject to change as additional information becomes available. Depending on the timing of payments to the service providers and the progress that the Company estimates has been made as a result of the service provided, the Company may record net prepaid or accrued expense relating to these costs. Costs incurred in obtaining patent and other intellectual property licenses for which there are no alternative future uses are charged to expense as incurred.

Stock-Based Compensation

The Company accounts for stock-based awards in accordance with provisions of ASC Topic 718, *Compensation—Stock Compensation*, under which the Company recognizes the grant-date fair value of stock-based awards issued to employees and nonemployee board members as compensation expense on a straight-line basis over the vesting period of the award while awards containing a performance condition are recognized as expense when the achievement of the performance criteria is considered probable. The Company accounts for stock-based compensation for awards granted to nonemployee consultants by revaluing the award over the vesting period of the awards. The Company uses the Black-Scholes option pricing model to determine the grant-date fair value of stock options. The Company estimates forfeitures that it expects will occur and adjusts expense for actual forfeitures in the periods they occur.

Income Taxes

Income taxes are accounted for under the asset-and-liability method as required by ASC Topic 740 (“ASC 740”), *Income Taxes*. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period corresponding to the enactment date. Under ASC 740, a valuation allowance is required when it is more likely than not all or some portion of the deferred tax assets will not be realized through generating sufficient future taxable income.

ASC Subtopic 740-10 (“ASC 740-10”), *Accounting for Uncertainty of Income Taxes*, defines the criterion an individual tax position must meet for any part of the benefit of the tax position to be recognized in consolidated financial statements prepared in conformity with GAAP. The Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not such tax position will be sustained on examination by the taxing authorities, based solely on the technical merits of the respective tax position. The tax benefits recognized in the consolidated financial statements from such a tax position should be measured based on the largest benefit having a greater than 50% likelihood of being realized upon ultimate settlement with the tax authority. In accordance with the disclosure requirements of ASC 740-10, the Company’s policy on income statement classification of interest and penalties related to income tax obligations is to include such items as part of total interest expense and other expense, respectively.

Fair value of financial instruments

Fair value is the price that could be received to sell an asset or paid to transfer a liability in an orderly transaction among market participants. Fair value determination in accordance with applicable accounting guidance requires that a number of significant judgments are made. Additionally, fair value is used on a nonrecurring basis to evaluate assets for impairment or as required for disclosure purposes by applicable accounting guidance on disclosures about fair value of financial instruments. Depending on the nature of the assets and liabilities, various valuation techniques and assumptions are used when estimating fair value. The carrying amounts of certain of the Company’s financial instruments, including cash and cash equivalents, accounts receivable and other assets, and accounts payable are shown at cost, which approximates fair value due to the short-term nature of these instruments. Due to the related-party relationship of our

TELA BIO, INC.

Notes to Consolidated Financial Statements (continued)

OrbiMed Credit Facility (Note 6), it is impractical to determine the fair value of the debt. Items measured at fair value on a recurring basis included the Company's preferred stock warrants. The warrants were carried at their estimated fair value.

The Company follows the provisions of ASC Topic 820, *Fair Value Measurement*, for financial assets and liabilities measured on a recurring basis. The guidance requires fair value measurements be classified and disclosed in one of the following three categories:

- *Level 1*: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- *Level 2*: Quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liabilities.
- *Level 3*: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

The following fair value hierarchy table presents information about each major category of the Company's financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2019 and 2018 (in thousands):

	<u>Fair value measurement at reporting date using</u>		
	<u>Quoted prices in active markets for identical assets (Level 1)</u>	<u>Significant other observable inputs (Level 2)</u>	<u>Significant unobservable inputs (Level 3)</u>
December 31, 2019:			
Assets:			
Cash equivalents – money market fund	\$ 34,918	\$ —	\$ —
Cash equivalents – corporate debt securities	\$ —	\$ 8,850	\$ —
Cash equivalents – government agency securities	\$ —	\$ 1,000	\$ —
Short-term investments – corporate debt securities	\$ —	\$ 9,285	\$ —
December 31, 2018:			
Assets:			
Cash equivalents – money market fund	\$ 16,002	\$ —	\$ —
Liability:			
Warrant liability	\$ —	\$ —	\$ 1,640

TELA BIO, INC.

Notes to Consolidated Financial Statements (continued)

A rollforward of the warrant liability (Level 3 measurement) is as follows (in thousands):

January 1, 2017	\$ —
Fair value of warrants issued – Convertible promissory notes	1,408
Fair value of warrants issued – Notes payable	343
Change in fair value of warrants	(54)
December 31, 2017	<u>1,697</u>
Fair value of warrants issued – MidCap Credit Facility	187
Change in fair value of warrants	(244)
December 31, 2018	<u>1,640</u>
Change in fair value of warrants	5
Conversion into common stock warrants	(1,645)
December 31, 2019	<u>\$ —</u>

The fair value of the warrants at November 13, 2019 was determined using the Black-Scholes option pricing model with the following assumptions:

	MidCap Credit Facility	Convertible promissory notes	Notes payable
Expected dividend yield	—	—	—
Expected volatility	57.5 %	57.4 %	57.5 %
Risk-free interest rate	2.04 %	1.79 %	1.79 %
Remaining contractual term in years	8.4	7.2	7.4

The fair value of the warrants at December 31, 2018 was determined using the Black-Scholes option pricing model with the following assumptions:

	MidCap Credit Facility	Convertible promissory notes	Notes payable
Expected dividend yield	—	—	—
Expected volatility	58.1 %	57.0 %	57.4 %
Risk-free interest rate	2.69 %	2.64 %	2.64 %
Remaining contractual term in years	9.3	8.1	8.3

Net loss per share

Basic and diluted net loss per common share is determined by dividing net loss attributable to common stockholders by the weighted-average shares of common stock outstanding during the reporting period. The Company's outstanding redeemable convertible preferred stock contractually entitled the holders of such shares to participate in distributions but contractually did not require the holders of such shares to participate in losses of the Company. In periods in which the Company reports a net loss attributable to common stockholders, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders since dilutive shares are not assumed to have been issued if their effect is antidilutive. Therefore, the weighted-average shares used to calculate both basic and diluted loss per share are the same.

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)**

The following potentially dilutive securities have been excluded from the computation of diluted weighted-average shares outstanding as of December 31, 2019 and 2018, as they would be antidilutive.

	Years ended December 31,	
	2019	2018
Series A redeemable convertible preferred stock	—	911,336
Series B redeemable convertible preferred stock	—	2,552,919
Stock options (including shares subject to repurchase)	1,421,697	490,134
Series B redeemable convertible preferred stock warrants	—	88,556
Common stock warrants	88,556	—
Total	<u>1,510,253</u>	<u>4,042,945</u>

Amounts in the above table reflect the common stock equivalents of the noted instrument.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, *Leases*, which requires a lessee to record a right-of-use asset and a corresponding lease liability on the balance sheet for all leases with terms longer than 12 months. A modified retrospective transition approach is required, applying the new standard to all leases existing at the date of initial application. An entity may choose to use either (1) its effective date or (2) the beginning of the earliest comparative period presented in the consolidated financial statements as its date of initial application. If an entity chooses the second option, the transition requirements for existing leases also apply to leases entered into between the date of initial application and the effective date. The standard is effective for the Company beginning January 1, 2021, with early adoption permitted. The Company plans to adopt this standard on January 1, 2021 and is currently evaluating the expected impact that the standard could have on its consolidated financial statements and related disclosures.

In November 2016, the FASB issued ASU No. 2016-18, *Consolidated Statement of Cash Flows: Restricted Cash*. The amendments address diversity in practice that exists in the classification and presentation of changes in restricted cash and require that a consolidated statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. The standard was effective for the Company beginning January 1, 2019. The Company's adoption of this standard did not have a material impact on the Company's consolidated financial statements.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation—Stock Compensation (Topic 718) Improvements to Nonemployee Share-Based Payment Accounting*. The amendments in this update expand the scope of Topic 718 to include stock-based payment transactions for acquiring goods and services from nonemployees. Under this ASU, an entity should apply the requirements of Topic 718 to nonemployee awards except for specific guidance on inputs to an option pricing model and the attribution of costs (i.e., the period of time over which stock-based payment awards vest and the pattern of cost recognition over that period). The guidance is effective for the Company beginning January 1, 2020, with early adoption permitted. The adoption of this guidance is not expected to be material to the Company's consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, *Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurements*, which changes the fair value measurement disclosure requirements of ASC Topic 820. The goal of the ASU is to improve the effectiveness of ASC Topic 820's disclosure requirements. The standard is effective for the Company beginning January 1, 2020. The adoption of this guidance is not expected to be material to the Company's consolidated financial statements and related disclosures.

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)****(4) Property and Equipment**

Property and equipment consisted of the following (in thousands):

Asset description	Estimated useful lives	December 31,	
		2019	2018
Lab equipment	5 Years	\$ 2,250	\$ 2,203
Furniture and fixtures	5 Years	112	110
Computer equipment and software	3 Years	508	398
Leasehold improvements	Lesser of useful life or lease term	1,328	1,290
Total		4,198	4,001
Less accumulated depreciation and amortization		(3,521)	(3,243)
Property and equipment, net		\$ 677	\$ 758

The cost of property and equipment at both December 31, 2019 and 2018 includes \$0.2 million of equipment located at Aroa. Depreciation expense was \$0.3 million, \$0.5 million and \$0.8 million for the years ended December 31, 2019, 2018 and 2017, respectively.

(5) Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	December 31,	
	2019	2018
Compensation and related benefits	\$ 2,310	\$ 1,760
Interest	41	42
Professional fees	641	552
Accrued milestone payments	—	2,500
Research and development expenses	35	133
Other	506	166
	\$ 3,533	\$ 5,153

(6) Debt

Long-term debt consisted of the following at December 31, 2019 and 2018 (in thousands):

	December 31,	
	2019	2018
OrbiMed Term Loan (related party)	\$ 30,000	\$ 30,000
End of term charge	3,000	3,000
Unamortized end of term charge and issuance costs	(2,757)	(3,267)
Long-term debt with related party	\$ 30,243	\$ 29,733

OrbiMed Term Loan (Related Party)

In November 2018, the Company entered into a senior secured term loan facility (“OrbiMed Credit Facility”) with OrbiMed Royalty Opportunities II, LP (“OrbiMed”), a related party as the lender is affiliated with a stockholder of the Company, which consists of up to \$35.0 million in term loans (“OrbiMed Term Loans”). The OrbiMed Term Loans consist of two tranches, a \$30.0 million Tranche 1 (“Tranche 1”) and a \$5.0 million Tranche 2 (“Tranche 2”). In

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)**

November 2018, the Company borrowed \$30.0 million of Tranche 1 and used a portion of the proceeds to repay the MidCap Credit Facility (described below) and will use the remaining proceeds to fund operations and capital expenditures. The Company elected not to borrow Tranche 2 prior to its expiration on December 31, 2019.

Pursuant to the OrbiMed Credit Facility, the Company provided a first priority security interest in all existing and future acquired assets, excluding intellectual property and certain other assets, owned by the Company. The OrbiMed Credit Facility contains a negative pledge on intellectual property owned by the Company. The OrbiMed Credit Facility also contains customary indemnification obligations and customary events of default, including, among other things, (i) nonpayment, (ii) breach of warranty, (iii) nonperformance of covenants and obligations, (iv) default on other indebtedness, (v) judgments, (iv) change of control, (vii) bankruptcy and insolvency, (viii) impairment of security, (ix) key permit events, (x) key person event, (xi) regulatory matters, (xii) and key contracts. In addition, the Company must maintain a minimum cash balance of \$2.0 million. In the event of default under the OrbiMed Credit Facility, the Company would be required to pay interest on principal and all other due and unpaid obligations at the current rate in effect plus 3%.

The OrbiMed Term Loan matures on November 16, 2023 and bear interest at a rate equal to 7.75% plus the greater of one-month LIBOR or 2.0%. At December 31, 2019, the interest rate was 9.75%. The Company is required to make 60 monthly interest payments beginning on November 30, 2018, with the entire principal payment due at maturity. The OrbiMed Term Loans have a prepayment penalty equal to 10.0% of the prepaid principal amount prior to the second anniversary of the Term Loans, 5.0% of the prepaid principal amount after the second anniversary but prior to the third anniversary and 2.5% of the prepaid principal amount after the third anniversary. The Company is also required to pay an exit fee at the time of maturity or prepayment event equal to 10.0% of all principal borrowings (the "End of Term Charge") and an administration fee equal to \$10,000 on the last day of each quarter until all obligations have been paid in full. In conjunction with the closing of the OrbiMed Term Loans, the Company incurred \$0.3 million of third party and lender fees, which along with the End of Term Charge of \$3.0 million were recorded as debt issuance costs, and are being recognized as interest expense over the term of the loan using the effective-interest method. Interest expense associated with the OrbiMed Credit Facility recorded during 2019 and 2018 was \$3.6 million and \$0.6 million, respectively.

MidCap Credit Facility

In April 2018, the Company entered into a \$14.0 million debt financing transaction ("MidCap Credit Facility") with MidCap Financial ("MidCap"), which consisted of a \$3.5 million revolving credit facility ("Revolver") and \$10.5 million in term loans ("MidCap Term Loans"). The Term Loans consisted of two tranches, an \$8.0 million Tranche 1 ("MidCap Tranche 1") and a \$2.5 million Tranche 2 ("MidCap Tranche 2"). In April 2018, the Company borrowed \$8.0 million of MidCap Tranche 1 and used the majority of the proceeds to repay the note payable outstanding. In conjunction with the closing of the MidCap Tranche 1 term loans, the Company issued MidCap warrants to purchase 206,897 shares of the Company's Series B redeemable convertible preferred stock at an exercise price of \$1.16 per share. The warrants have a contractual term equal to the earlier of a change in control or 10 years. The estimated fair value of the warrants of \$0.2 million (determined using the Black-Scholes option pricing model), along with \$0.8 million of third-party and lender fees (including \$0.4 million of End of Term Charge) incurred with the issuance of the debt, were recorded as the End of Term Charge and debt issuance costs and were being recognized as interest expense over the life of the Tranche 1 term loan using the effective-interest method.

The MidCap Term Loans and the Revolver bore interest at a rate equal to one-month LIBOR plus 7.0% and one-month LIBOR plus 3.75%, respectively, until the aggregate principal, interest, and End of Term Charge totaling \$0.4 million were paid with part of the proceeds received from the OrbiMed Credit Facility. As a result of these payments, a \$1.2 million loss on extinguishment was recorded during the year ended December 31, 2018. Interest expense associated with the Midcap Credit Facility recorded during 2018 was \$0.6 million.

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)***Note Payable*

In March 2017, the Company entered into a Loan and Security Agreement (“Loan Agreement”) and borrowed \$5.0 million (“Note A”). Note A bore interest at 9.45% until the aggregate principal, interest, and other termination fees were paid with part of the proceeds received from the MidCap Credit Facility. As a result of these payments, a \$0.6 million loss on extinguishment was recorded during the year ended December 31, 2018. Interest expense associated with Note A recorded during both the years ended December 31, 2018 and 2017 was \$0.4 million. In connection with the Loan Agreement, the Company granted 387,932 Series B warrants with an original term of 10 years with an exercise price of \$1.16 per share.

Convertible Promissory Note

In January 2017, the Company issued \$7.4 million of secured, convertible promissory notes (the “Convertible Notes”), together with warrants, primarily to holders of the Company’s Series B redeemable convertible stock (“Series B”). The Convertible Notes bore interest at the rate of 12%.

The Convertible Notes were secured by a lien on all assets of the Company, including intellectual property and cash, and were scheduled to mature in October 2017. The principal amount of the Convertible Notes and accrued interest thereon of \$0.7 million converted into 6,951,175 shares of the Company’s Series B in connection with the sale of Series B to a new investor in October 2017 (Note 7).

The purchasers of the Convertible Notes also received a 10-year warrant to purchase shares of the Company’s Series B, with the number of shares issuable upon warrant exercise equal to 25% of the note principal divided by \$1.16, or 1,591,864 warrants. The exercise price of the warrants is \$1.16 per share. The estimated fair value of the warrants of \$1.4 million (determined using the Black-Scholes option pricing model) was recorded as a debt discount and was fully amortized to interest expense during 2017 over the term of the Convertible Notes. In addition, in accordance with the applicable FASB accounting guidance, after considering the allocation of a portion of the proceeds to the warrants, the Company determined that the Convertible Notes contained a beneficial conversion feature (“BCF”). The BCF existed at the date of the issuance of the Convertible Notes due to the fact that the original carrying value of the Convertible Notes, after allocation of the proceeds, would be less than the purchase price of the series of preferred stock paid by investors in the next qualified or nonqualified financing, as defined. During the year ended December 31, 2017, the BCF of \$1.4 million was fully recognized as additional interest expense.

Debt issuance costs of \$0.1 million were incurred and were recorded as a discount on the carrying value of the debt, and amortized to interest expense in 2017 through the date of conversion of the Convertible Notes.

(7) Redeemable Convertible Preferred Stock and Stockholders’ Equity (Deficit)*Initial Public Offering*

In November 2019, the Company closed its IPO in which the Company issued and sold 4,398,700 shares of its common stock at a public offering price of \$13.00 per share, including 398,700 shares of the Company’s common stock sold pursuant to the underwriters’ option to purchase additional shares. The Company received net proceeds of \$50.6 million after deducting underwriting discounts, commissions and other offering expenses. In addition, immediately prior to the closing of the IPO, all of the Company’s outstanding shares of redeemable convertible preferred stock, including accrued dividends payable converted into an aggregate of 6,708,649 shares of common stock and the Company’s outstanding warrants to purchase shares of preferred stock were automatically converted into warrants to purchase an aggregate of 88,556 shares of common stock.

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)***Preferred Stock*

Prior to the IPO, all of the Company's redeemable convertible preferred stock was classified outside of stockholders' deficit because the shares contain certain redemption features that were not solely within the control of the Company. At the time of issuance, the redeemable convertible preferred stock was recorded at its issuance price, less issuance costs.

Throughout 2019, the Company entered into various stock purchase agreements with new and existing investors pursuant to which the Company sold an aggregate 12,527,956 shares of the Company's Series B at \$1.16 per share for aggregate gross proceeds of \$14.5 million. Transaction fees of \$0.2 million were recorded as a reduction of the carrying value of the Series B.

Throughout 2018, the Company entered into various stock purchase agreements with new and existing investors pursuant to which the Company sold an aggregate 3,607,069 shares of the Company's Series B at \$1.16 per share for aggregate gross proceeds of \$4.2 million. Transaction fees of \$0.2 million were recorded as a reduction of the carrying value of the Series B.

In October 2017, the Company entered into a stock purchase agreement with a strategic corporate investor pursuant to which the Company sold 12,931,034 shares of the Company's Series B at \$1.16 per share for aggregate gross proceeds of \$15.0 million. Transaction fees of \$0.3 million were recorded as a reduction of the carrying value of the Series B. Concurrent with this financing, a total of 6,951,175 shares of Series B were issued upon conversion of the Convertible Notes plus accrued interest on such notes (Note 6).

Warrants

The Company had the following warrants outstanding to purchase common stock at December 31, 2019:

	<u>Outstanding</u>	<u>Exercise price</u>	<u>Expiration dates</u>
Common stock warrants issued to MidCap	8,379	\$ 28.65	2028
Common stock warrants issued to note payable holders	15,712	28.65	2027
Common stock warrants issued to convertible promissory note holders	64,465	\$ 28.65	2027
	<u>88,556</u>		

(8) Stock-Based Compensation

The Company has two equity incentive plans: the 2012 Stock Incentive Plan and the 2019 Equity Incentive Plan. New awards can only be granted under the 2019 Equity Incentive Plan (the "Plan"). At December 31, 2019, 323,715 shares were available for future issuances. The Plan provides for the grant of incentive stock options, nonqualified stock options, restricted stock awards, restricted stock units and/or stock appreciation rights to employees, directors, and other persons, as determined by the Company's board of directors. The Company's stock options vest based on the terms in each award agreements and generally vest over four years and have a term of 10 years. The Company estimates forfeitures that it expects will occur and adjusts expense for actual forfeitures in the periods they occur.

The Company measures employee and nonemployee stock-based awards at grant-date fair value and records compensation expense on a straight-line basis over the vesting period of the award. The Company recorded stock-based

TELA BIO, INC.

Notes to Consolidated Financial Statements (continued)

compensation expense in the following expense categories of its accompanying consolidated statements of operations (in thousands):

	Year ended December 31,		
	2019	2018	2017
Sales and marketing	\$ 164	\$ 68	\$ 44
General and administrative	225	115	116
Research and development	68	33	37
Total stock-based compensation	<u>\$ 457</u>	<u>\$ 216</u>	<u>\$ 197</u>

The following table summarizes stock option activity for the Plan:

	Number of shares	Weighted average exercise price per share	Weighted average remaining contractual term (years)
Outstanding at January 1, 2017	282,331	\$ 5.77	
Granted	84,587	5.93	
Exercised	(404)	5.19	
Early exercised	(830)	5.93	
Canceled/forfeited	<u>(14,770)</u>	5.87	
Outstanding at December 31, 2017	350,914	5.81	
Granted	152,016	5.93	
Exercised	(1,377)	5.57	
Early exercised	(427)	5.93	
Canceled/forfeited	<u>(11,904)</u>	5.93	
Outstanding at December 31, 2018	489,222	5.84	
Granted	978,415	12.51	
Exercised	(2,527)	5.93	
Early exercised	(471)	5.93	
Canceled/forfeited	<u>(43,697)</u>	8.58	
Outstanding at December 31, 2019	<u>1,420,942</u>	\$ 10.35	8.75
Vested and expected to vest at December 31, 2019	<u>1,317,047</u>	\$ 10.23	8.68
Exercisable at December 31, 2019	<u>345,881</u>	\$ 5.87	6.18

The 2012 Stock Incentive Plan and the 2019 Equity Incentive Plan provide the holders of stock options an election to early exercise prior to vesting. The Company had the right, but not the obligation, to repurchase early exercised options without transferring any appreciation to the employee if the employee terminates employment before the end of the original vesting period. The repurchase price is the lesser of the original exercise price or the then fair value of the common stock. At December 31, 2019, \$4,000 of proceeds from early exercised options are recognized as a current liability in other current liabilities in the accompanying consolidated balance sheet.

TELA BIO, INC.

Notes to Consolidated Financial Statements (continued)

The following table summarizes activity relating to early exercise of stock options:

	Number of shares
Unvested balance at January 1, 2017	7,159
Early exercised	830
Vested	(6,955)
Unvested balance at December 31, 2018	1,034
Early exercised	427
Vested	(549)
Unvested balance at December 31, 2018	912
Early exercised	471
Vested	(628)
Unvested balance at December 31, 2019	755

The weighted average grant-date fair value per share of options granted was \$6.81, \$1.08 and \$0.54 for the years ended December 31, 2019, 2018 and 2017, respectively. The aggregate intrinsic value of options exercised was nominal for the year ended December 31, 2019. As of December 31, 2019, the total unrecognized compensation expense related to unvested employee and nonemployee stock option awards was \$5.7 million, which is expected to be recognized in expense over a weighted-average period of approximately 3.4 years.

Estimating Fair Value of Stock Options

The fair value of each grant of stock options was determined by the Company using the methods and assumptions discussed below. Certain of these inputs are subjective and generally require judgment to determine.

Expected term – The expected term of stock options represents the weighted average period the stock options are expected to be outstanding. The Company uses the simplified method for estimating the expected term as provided by the Securities and Exchange Commission. The simplified method calculates the expected term as the average time to vesting and the contractual life of the options.

Expected volatility – Due to the Company’s limited operating history and lack of company-specific historical or implied volatility, the expected volatility assumption was determined by examining the historical volatilities of a group of industry peers whose share prices are publicly available.

Risk-free interest rate – The risk-free rate assumption is based on the U.S. Treasury instruments, the terms of which were consistent with the expected term of the Company’s stock options.

Expected dividend – The Company has not paid and does not intend to pay dividends.

The fair value of each option was estimated on the date of grant using the weighted average assumptions in the table below:

	Year ended December 31,		
	2019	2018	2017
Expected dividend yield	—	—	—
Expected volatility	55.9 %	56.5 %	50.0 %
Risk-free interest rate	1.82 %	2.77 %	2.07 %
Expected term	6.24 Years	6.25 Years	6.25 Years

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)****(9) Employee Benefit Plans****401(k) Defined Contribution Plan**

The Company sponsors a 401(k) defined-contribution plan covering all employees. Participants are permitted to contribute up to 100% of their eligible annual pretax compensation up to an established federal limit on aggregate participant contributions. Discretionary profit-sharing contributions made by the Company, if any, are determined annually by the board of directors. To date, the Company has not made discretionary profit-sharing contributions under the 401(k) plan but effective January 1, 2020, the Company will match 50% of employees' contributions up to 6%, subject to a maximum annual amount. Participants are immediately vested in their own contributions to the plan and are fully vested in discretionary profit sharing made by the Company after three years of service.

2019 Employee Stock Purchase Plan

In November 2019, the Company adopted the 2019 Employee Stock Purchase Plan (the "ESPP") with a total of 107,887 shares reserved for future issuance under the ESPP. In addition, subject to prior approval by the Company's board of directors, the number of shares authorized and reserved for issuance under the ESPP will be increased annually equal to the least of (i) 107,887 shares of common stock, (ii) 1% of the shares outstanding on the final day of the immediately preceding calendar year, and (iii) such smaller number of shares as determined by the board of directors. The ESPP provides the opportunity to purchase the Company's common stock at a 5% discount to the market price through payroll deductions. As of December 31, 2019, no shares have been issued under the ESPP.

(10) Income Taxes

The Company has incurred losses since inception. Deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of assets and liabilities using enacted tax rates in effect for years in which differences are expected to reverse.

Significant components of the Company's deferred tax assets for federal income taxes as of December 31, 2019 and 2018 consisted of the following (in thousands):

	December 31,	
	2019	2018
Deferred tax assets		
Net operating loss carryforwards	\$ 32,704	\$ 26,993
Research and development credits	853	701
Depreciation and amortization	578	825
Accrued LifeCell settlement	—	252
Accrued expenses and other	259	191
Inventory reserve	417	425
Gross deferred tax asset	34,811	29,387
Valuation allowance	(34,811)	(29,387)
Net deferred tax asset	\$ —	\$ —

The Company does not have unrecognized tax benefits as of December 31, 2019 and 2018. The Company recognizes interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense.

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)**

The Company's net operating loss ("NOL") carryforwards for federal and state income tax purposes consisted of the following (in thousands):

NOL carryforwards	December 31,	
	2019	2018
Federal	\$ 122,925	\$ 99,939
State	106,062	91,797

The NOL carryforwards begin expiring in 2032 for federal purposes and in 2026 for state income tax purposes. The Company recorded a valuation allowance on the deferred tax assets as of December 31, 2019 and 2018 because of the uncertainty of their realization. The valuation allowance increased by \$5.4 million for the year ended December 31, 2019 mainly due to losses incurred and by \$5.5 million for the years ended December 31, 2018, mainly due to losses incurred and the reduction in the tax rate.

In December 2017, the Tax Cuts and Jobs Act (the "Tax Act") was enacted. The Tax Act includes a number of changes to existing U.S. tax laws that impact the Company, most notably a reduction of the U.S. corporate income tax rate from 34% to 21% for tax years beginning after December 31, 2017. The Tax Act also provided for a onetime transition tax on certain foreign earnings and the acceleration of depreciation for certain assets placed into service after September 27, 2017 as well as prospective changes beginning in 2018, including repeal of the domestic manufacturing deduction, acceleration of tax revenue recognition, capitalization of research and development expenditures, additional limitations on executive compensation, and limitations on the deductibility of interest.

Utilization of the net operating losses and general business tax credits carryforwards may be subject to a substantial limitation under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, if changes in ownership of the company have occurred previously or occur in the future. Ownership changes may limit the amount of net operating losses and general business tax credits carryforwards that can be utilized annually to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of 5% shareholders in the stock of a corporation by more than 50 percentage points over a three-year period. If the Company experiences a Section 382 ownership change, the tax benefits related to the NOL carryforwards may be further limited or lost. The Company has not performed an analysis under Section 382 and cannot predict or otherwise determine whether there would be any limitation to the amount of net operating losses and general business tax credits carryforwards that can be utilized.

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)**

A reconciliation of income tax benefit at the statutory federal income tax rate and as reflected in the consolidated financial statements is as follows:

	Year ended December 31,		
	2019	2018	2017
Rate reconciliation			
Federal tax benefit at statutory rate	(21.0)%	(21.0)%	(34.0)%
State rate, net of federal benefit	(2.9)	(4.7)	(5.2)
Permanent differences	0.4	0.5	5.5
Change in federal rate	—	—	48.0
Research and development	(0.7)	(0.8)	—
Change in valuation allowance	24.2	26.3	(15.1)
Other	—	(0.3)	0.8
Total tax provision	—%	—%	—%

The Company files income tax returns in the U.S. federal jurisdiction and various state jurisdictions. Tax years 2016 and forward remain open for examination for federal tax purposes and tax years 2016 and forward remain open for examination for the Company's more significant state tax jurisdictions. To the extent utilized in future years' tax returns net operating loss carryforwards at December 31, 2018 will remain subject to examination until the respective tax year is closed.

(11) Contingencies and Commitments**Legal Proceedings**

On November 18, 2016, the Company and LifeCell Corporation ("LifeCell") agreed to settle litigation initiated by LifeCell in March 2015 related to LifeCell's complaints alleging (i) that the Company misappropriated LifeCell's trade secrets and proprietary information and hired various former LifeCell employees allegedly in violation of their noncompetition covenants and nonsolicitation agreements and (ii) that the Company infringed U.S. Patent No. 6,143,293, (the 293 patent), which LifeCell had recently purchased from Carnegie Mellon University. Both cases have been dismissed with prejudice. As part of this settlement, LifeCell agreed not to sue the Company, either directly or through a person acting at its request or with its involvement for patent infringement, trade secret misappropriation, breach of an assignment obligation, unfair competition, unjust enrichment, tortious interference with contract and prospective economic advantage, civil conspiracy, or like causes of action with respect to OviTex. Also, as part of this settlement agreement, among other provisions, the Company agreed to pay LifeCell \$1.0 million within 30 days of the execution of the settlement agreement and up to an additional \$3.0 million based upon the Company achieving set revenue milestones for its OviTex product family. As of December 31, 2019, all amounts have been paid. The estimated present value of the future revenue milestone payments was \$1.0 million at December 31, 2018 was recorded in other current liabilities in the accompanying consolidated balance sheets, based on when the payments were expected to be made at each respective balance sheet date. Noncash interest expense of \$20,000, \$0.2 million and \$0.3 million was recorded during 2019, 2018 and 2017 respectively, for the change in estimated present value of the future revenue milestone payments.

Legal and other costs incurred in defense of the Company was charged to expense as incurred and totaled \$0.4 million for the year ended December 31, 2017 and were recorded in general and administrative expenses in the accompanying consolidated statement of operations. No legal defense costs were incurred subsequent to December 31, 2017.

On February 12, 2016, the Company filed suit against National Union Fire Insurance Company of Pittsburgh, Pennsylvania ("National Union"), the former carrier for the Company's Directors & Officers and Employment Practices Liability Insurance. The complaint charged National Union with breach of contract and failure to reimburse the

TELA BIO, INC.

Notes to Consolidated Financial Statements (continued)

Company for defense costs it incurred in the LifeCell litigation discussed above that the Company believes are covered under the insurance policy sold by National Union. The complaint sought reimbursement of \$5.0 million, the full limit of the policy, as well as reimbursement of the Company's costs pursuing the action against National Union. In 2018, the Company settled the suit and received \$2.4 million and paid its broker \$0.2 million and recognized the net amount of \$2.2 million as a gain on litigation settlement in the Company's consolidated statement of operations during the year ended December 31, 2018.

From time to time, the Company may be a party to various other lawsuits, claims, and other legal proceedings that arise in the ordinary course of its business. While the outcomes of these matters are uncertain, management does not expect that the ultimate costs to resolve these matters will have a material adverse effect on the Company's financial position, results of operations, or cash flows.

Agreements with Aroa

In August 2012, the Company entered into a License, Product Development, and Supply Umbrella Agreement ("Aroa Agreement") with Aroa. The Aroa Agreement provides the Company a license to patent rights and other intellectual property related to Aroa's products and technologies for use in certain indications and expires on the later of August 3, 2022 or expiration of the last patent covering the products (currently July 30, 2029). The Company has the right to extend the term of the agreement by an additional 10 years following the expiration of the last patent covering the products on commercially reasonable terms to be negotiated by the parties. This agreement initially limited the Company's license rights to the U.S. but was subsequently amended in March 2013 to include the European Union and certain former Union of Soviet Socialist Republic satellite nations.

The financial terms of this Aroa Agreement, as amended, include (i) the payment of \$1.0 million and the issuance of 74,316 shares of the Company's common stock valued at \$0.3 million concurrent with the closing of the December 2012 financing, (ii) the payment of \$1.0 million upon the amendment of the Aroa Agreement in March 2013, and (iii) the payment of \$1.0 million upon the approval by the U.S. Food and Drug Administration ("FDA") of the use of Aroa's product for certain indications (paid in June 2013). All amounts paid were recorded at the time within in-process research and development expense in the consolidated statements of operations as the Company believes that the technology licensed from Aroa required substantial additional development efforts and had no alternative future uses to the Company. In April 2014, the Company submitted a new 510(k) application to the FDA incorporating the licensed technologies, as well as technology licensed from a second strategic partner. The Aroa Agreement also requires future payments aggregating up to \$4.0 million upon the achievement of U.S. and European cumulative product sales targets.

In 2018, it became probable that the Company would be issued CE Mark approval to sell OviTex in Europe by the European Medical Agency, and the Company recognized a \$1.0 million liability and a corresponding developed right intangible asset related to this milestone payment owed to Aroa. Of this amount, \$0.5 million was paid in 2018 and the remaining \$0.5 million was paid in 2019.

With respect to the sales milestone payments in the North American territory, a payment of \$1.0 million and \$2.0 million are due when cumulative product sales in the North American territory reach certain amounts. In 2018, it became probable that the Company would achieve the sales milestones in the North American territory, and, as such, the Company recorded a liability of \$3.0 million and a corresponding developed technology right intangible asset. The Company paid \$1.0 million to Aroa in 2018 related to one of the cumulative product sales targets and the remaining \$2.0 million in 2019. With respect to the sales milestone payments in the European territory, a payment of \$1.0 million is due when cumulative product net sales in the European territory reach certain amounts.

TELA BIO, INC.

Notes to Consolidated Financial Statements (continued)

Other key terms of the amended Aroa agreement in addition to those disclosed above are as follows:

- The transfer price for product produced by Aroa was increased from 150% of Aroa's cost of goods sold to 200% of the cost of goods sold, with the quarterly true-up amount continuing to equal 27% of the Company's net sales of the licensed product reduced by transfer price payments previously made for the respective quarter. The purchase commitments aggregate to \$11.0 million for the North American territory over a five-year period, consisting of \$2.0 million in total in years one and two, \$2.0 million in year three, \$3.0 million in year four, and \$4.0 million in year five. The purchase commitments aggregate to \$2.8 million for the European territory over a five-year period, consisting of \$0.5 million in total in years one and two, \$0.5 million in year three, \$0.8 million in year four, and \$1.0 million in year five. In addition, the Company continues to be required to pay a make whole payment if the required minimum purchase commitments for each territory for the corresponding contract years are not made. As of December 31, 2019, the Company has met its purchase commitments and no make whole payments are required for those periods. The period for the purchase commitments for the North American territory for years four and five end in June 2020 and June 2021, respectively. Upon a change in control of the Company (as defined in the amended agreement), the annual minimum amounts will be extended for a sixth year with a \$5.0 million minimum amount for the North American territory and \$1.0 million minimum amount for the European territory. If a change in control of the Company occurs prior to the first product launch in the applicable territory, then the annual minimum requirements shall commence upon such change in control. If the make whole payments, if any, are not made by the Company after a notice and cure period, then the license will convert to a nonexclusive basis in the territory for which the payment was required but not made.
- Separate product development/launch goals and extension rights exist for a breast reconstruction product, as well as other products in specified indications for use. With respect to the breast reconstruction product, the goal was to file an investigational device exemption with the FDA for the North American territory by December 28, 2017, 18 months after the commercial launch of OviTex in the North American territory. The Company met this deadline with the filing of an investigational device exemption (IDE) application with the FDA on November 22, 2017. The Company extended the European deadline and paid \$0.5 million. Concurrent with the extension payment, the Company agreed to assume responsibility in obtaining regulatory approval in Europe with a new regulatory filing deadline of June 30, 2020. The Company expects to meet the filing deadline and that no further extension payments will be required.
- Provisions exist for the Company to step in and operate Aroa's plant if a supply failure occurs and is not cured within a set timeframe. Under the amended agreement, the criteria for a supply failure was modified to mean a failure by Aroa to timely supply, during any consecutive 60-day period, at least 75% of the products ordered by the Company under binding purchase orders. During the period that the Company steps in and assumes manufacturing responsibility, it shall not be required to purchase product from or pay transfer prices to Aroa, the annual minimums shall be proportionately reduced to reflect the lack of supply responsibility by Aroa and the Company shall pay a royalty of 6% of net sales in lieu of 27% of net sales of the licensed products.
- The Company is responsible for the payment of 50% of the capital costs of any manufacturing expansion plan agreed upon by the parties, provided that any such payments made by the Company will be offset against future revenue sharing amounts payable (revenue share of 27% of the Company's net sales of the licensed product).

The Company expects to enter into similar milestone-based agreements with its strategic partner for both product territories and new products in order to expand and extend its product portfolio.

As of December 31, 2019, the Company had \$8.3 million in purchase commitments with Aroa.

TELA BIO, INC.**Notes to Consolidated Financial Statements (continued)****Employment Agreements**

The Company entered into employment agreements with key personnel providing for compensation and severance in certain circumstances, as defined in the respective employment agreements.

Operating Leases

The Company leases office and laboratory space in Malvern, Pennsylvania under a noncancelable lease, which expires in May 2021. The facility lease agreement has annual scheduled payment increases. The Company is recognizing the rent expense on a straight-line basis over the lease term. The Company recognized rent expense of \$0.3 million for each of the years ended December 31, 2019, 2018 and 2017.

The future minimum lease payments under the facility operating lease agreement as of December 31, 2019 are as follows (in thousands):

2020	\$	217
2021		92
	\$	<u>309</u>

(12) Related-Party Transactions

On November 16, 2018, the Company entered into a senior secured term loan facility with OrbiMed, an entity affiliated with an owner of a material amount of the Company's outstanding voting securities. The terms of the debt and related components are further described in more detail in Note 6.

Item 6. Exhibits.

The following exhibits are being filed herewith:

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Exhibit</u>
3.2	Fourth Amended and Restated Certificate of Incorporation (incorporated by reference to exhibit 3.1 of the Company's Current Report on Form 8-K filed on November 19, 2019).
3.3	Second Amended and Restated Bylaws (incorporated by reference to exhibit 3.2 of the Company's Current Report on Form 8-K filed on November 19, 2019).
4.1	Specimen Common Stock Certificate of the Company (incorporated by reference to exhibit 4.1 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
4.2	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (filed herewith).
10.1	Form of Indemnification Agreement by and between the Company and its individual directors and officers (incorporated by reference to exhibit 10.1 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.2	TELA Bio, Inc. 2012 Stock Incentive Plan (incorporated by reference to exhibit 10.2 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.3	Amendment to the TELA Bio, Inc. 2012 Stock Incentive Plan (incorporated by reference to exhibit 10.3 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.4	Second Amendment to the TELA Bio, Inc. 2012 Stock Incentive Plan (incorporated by reference to exhibit 10.4 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.5	Third Amendment to the TELA Bio, Inc. 2012 Stock Incentive Plan (incorporated by reference to exhibit 10.5 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.6	Fourth Amendment to the TELA Bio, Inc. 2012 Stock Incentive Plan (incorporated by reference to exhibit 10.6 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.7	Fifth Amendment to the TELA Bio, Inc. 2012 Stock Incentive Plan (incorporated by reference to exhibit 10.7 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.8	Form of Incentive Stock Option Agreement pursuant to the 2012 Stock Incentive Plan (incorporated by reference to exhibit 10.8 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.9	Form of Nonstatutory Stock Option Agreement pursuant to 2012 Stock Incentive Plan (incorporated by reference to exhibit 10.9 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.10	TELA Bio, Inc. 2019 Equity Incentive Plan (incorporated by reference to exhibit 10.10 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.11	Form of TELA Bio, Inc. 2019 Equity Incentive Plan Stock Option Grant Notice and Stock Option Agreement (incorporated by reference to exhibit 10.11 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.12	TELA Bio, Inc. 2019 Employee Stock Purchase Plan (incorporated by reference to exhibit 10.12 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.13	TELA Bio, Inc. Non-Employee Director Compensation Policy (incorporated by reference to exhibit 10.13 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.14	Amended and Restated Employment Agreement, dated October 25, 2019, by and between the Company and Antony Koblish (incorporated by reference to exhibit 10.16 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.15	Amended and Restated Employment Agreement, dated October 25, 2019, by and between the Company and Maarten Persenaire, M.D. (incorporated by reference to exhibit 10.19 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.16	Amended and Restated Employment Agreement, dated October 25, 2019, by and between the Company and Skott Greenhalgh (incorporated by reference to exhibit 10.21 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).
10.17	Amended and Restated Employment Agreement, dated October 25, 2019, by and between the Company and Nora Brennan (incorporated by reference to exhibit 10.31 to the Company's Registration Statement on Form S-1 (File No. 333-234217), dated November 7, 2019).

- 10.18 [Credit Agreement, dated November 16, 2018, by and between the Company and OrbiMed Royalty Opportunities II, LP \(incorporated by reference to exhibit 10.22 to the Company's Registration Statement on Form S-1 \(File No. 333-234217\), dated November 7, 2019\)](#)
- 10.19* [Second Amended and Restated License, Product Development and Supply Umbrella Agreement, dated July 16, 2015, by and between the Company and Aroa Biosurgery Ltd. \(incorporated by reference to exhibit 10.23 to the Company's Registration Statement on Form S-1 \(File No. 333-234217\), dated November 7, 2019\)](#)
- 10.20* [Amendment to Second Amended and Restated License, Product Development and Supply Umbrella Agreement, dated November 26, 2015, by and between the Company and Aroa Biosurgery Ltd. \(incorporated by reference to exhibit 10.24 to the Company's Registration Statement on Form S-1 \(File No. 333-234217\), dated November 7, 2019\)](#)
- 10.21* [Amendment to Second Amended and Restated License, Product Development and Supply Umbrella Agreement, dated January 3, 2019, by and between the Company and Aroa Biosurgery Ltd. \(incorporated by reference to exhibit 10.25 to the Company's Registration Statement on Form S-1 \(File No. 333-234217\), dated November 7, 2019\)](#)
- 10.22* [Addendum to the Second Amended and Restated License, Product Development and Supply Umbrella Agreement, dated August 27, 2019, by and between the Company and Aroa Biosurgery Ltd. \(filed herewith\)](#)
- 10.23 [Lease between the Company and Liberty Property Limited Partnership, dated January 31, 2013 \(incorporated by reference to exhibit 10.26 to the Company's Registration Statement on Form S-1 \(File No. 333-234217\), dated November 7, 2019\)](#)
- 10.24 [First Amendment to Lease between the Company and Liberty Property Partnership, dated June 19, 2014 \(incorporated by reference to exhibit 10.27 to the Company's Registration Statement on Form S-1 \(File No. 333-234217\), dated November 7, 2019\)](#)
- 10.25 [Second Amendment to Lease between the Company and WPT Land 2 LP \(as successor in interest to Liberty Property Limited Partnership\), dated January 17, 2018 \(incorporated by reference to exhibit 10.28 to the Company's Registration Statement on Form S-1 \(File No. 333-234217\), dated November 7, 2019\)](#)
- 10.26 [Employment Agreement, dated January 17, 2020, by and between the Company and Peter Murphy \(filed herewith\)](#)
- 23.1 [Consent of KPMG LLP \(filed herewith\)](#)
- 31.1 [Certification of Chief Executive Officer pursuant to Rules 13a-14\(a\) or 15d-14\(a\) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 \(filed herewith\)](#)
- 31.2 [Certification of Chief Financial Officer pursuant to Rules 13a-14\(a\) or 15d-14\(a\) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 \(filed herewith\)](#)
- 32.1 [Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 \(furnished herewith\)](#)
- 32.2 [Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 \(furnished herewith\)](#)
- 101 INS XBRL Instance Document (filed herewith).
- 101 SCH XBRL Taxonomy Extension Schema Document (filed herewith).
- 101 CAL XBRL Taxonomy Extension Calculation Linkbase Document (filed herewith).
- 101 DEF XBRL Taxonomy Extension Definition Linkbase Document (filed herewith).
- 101 LAB XBRL Taxonomy Extension Label Linkbase Document (filed herewith).
- 101 PRE XBRL Taxonomy Extension Presentation Linkbase Document (filed herewith).

* Certain confidential portions (indicated by brackets and asterisks) have been omitted from this exhibit.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the Borough of Malvern, Commonwealth of Pennsylvania, on the 30th day of March, 2020.

TELA BIO, INC.

By: /s/ ANTONY KOBLISH

Name: Antony Koblisch

Title: President, Chief Executive Officer
and Director

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ ANTONY KOBLISH</u> Antony Koblisch	President, Chief Executive Officer and Director (Principal Executive Officer)	March 30, 2020
<u>/s/ NORA BRENNAN</u> Nora Brennan	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 30, 2020
<u>/s/ KURT AZARBARZAN</u> Kurt Azarbarzin	Chairman, Board of Directors	March 30, 2020
<u>/s/ VINCE BURGESS</u> Vince Burgess	Director	March 30, 2020
<u>/s/ RONALD ELLIS</u> Ronald Ellis	Director	March 30, 2020
<u>/s/ ASHLEY FRIEDMAN</u> Ashley Friedman	Director	March 30, 2020
<u>/s/ FEDERICA O'BRIEN</u> Federica O'Brien	Director	March 30, 2020
<u>/s/ ADELE OLIVA</u> Adele Oliva	Director	March 30, 2020
<u>/s/ MATT ZUGA</u> Matt Zuga	Director	March 30, 2020

DESCRIPTION OF CAPITAL STOCK

TELA Bio, Inc. (the "Company") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The Company's common stock, \$0.001 par value per share ("Common Stock") is registered under Section 12(b) of the Exchange Act. The following description of our Common Stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our fourth amended and restated certificate of incorporation and our second amended and restated bylaws, each of which is incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.2 is a part. We encourage you to read our fourth amended and restated certificate of incorporation and our second amended and restated bylaws and the applicable provisions of the Delaware General Corporation Law ("DGCL"), for additional information.

General

Our authorized capital stock consists of 200,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share. All of our outstanding shares of common stock are fully paid and nonassessable.

Common Stock*Voting Rights*

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our stockholders do not have cumulative voting rights in the election of directors. Accordingly, holders of a majority of the voting shares are able to elect all of the directors. In addition, the affirmative vote of holders of 66²/3% of the voting power of all of the then outstanding voting stock is required to take certain actions, including amending certain provisions of our fourth amended and restated certificate of incorporation, such as the provisions relating to amending our second amended and restated bylaws, procedures for our stockholder meetings, the classified board, director liability, and exclusive forum for proceedings.

Dividends

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate in the future.

Preferred Stock

Our board of directors is authorized to direct us to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third-party to acquire, or could discourage a third-party from seeking to acquire, a majority of our outstanding voting stock.

We have no present plans to issue any shares of preferred stock.

Warrants

We have warrants to purchase an aggregate of 88,556 shares of our Common Stock outstanding with an exercise price of \$28.65 per share. These warrants may be exercised at any time and from time to time, in whole or in part.

Anti-Takeover Provisions of Delaware Law and Our Charter Documents

Our fourth amended and restated certificate of incorporation and our second amended and restated bylaws contain provisions that could make the following transactions more difficult: acquisition of us by means of a tender offer; acquisition of us by means of a proxy contest or otherwise; or removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions that might result in a premium over the market price for our shares.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the DGCL, which prohibits persons deemed "interested stockholders" from engaging in a "business combination" with a publicly-held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, such as discouraging takeover attempts that might result in a premium over the market price of our common stock.

Elimination of Stockholder Action by Written Consent

Our fourth amended and restated certificate of incorporation provides that all stockholder actions must be effected at a duly called meeting of stockholders and not by consent in writing. A special meeting of stockholders may be called only by a majority of our board of directors, the chair of our board of directors, or our chief executive officer.

Undesignated Preferred Stock

The ability to authorize undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

Amendment of Charter Provisions

Our fourth amended and restated certificate of incorporation provides that the affirmative vote of holders of at least 66²/3% of the voting power of all of the then outstanding shares of voting stock, voting as a single class, are required to amend certain provisions of our fourth amended and restated certificate of incorporation, including provisions relating to the size of the board, removal of directors, special meetings, actions by written consent and cumulative voting. The affirmative vote of holders of at least 66²/3% of the voting power of all of the then outstanding shares of voting stock, voting as a single class, are required to amend or repeal our second amended and restated bylaws, although our second amended and restated bylaws may be amended by a simple majority vote of our board of directors.

Classified Board; Election and Removal of Directors

Our fourth amended and restated certificate of incorporation provides that our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered terms, and gives our board of directors the exclusive right to expand the size of our board of directors and to elect directors to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director.

Choice of Forum

Our fourth amended and restated certificate of incorporation provides that, unless our board of directors consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the United States District Court for the District of Delaware) is the sole and exclusive forum for: (i) any derivative action or proceeding brought on behalf of us; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees or agents to us or our stockholders; (iii) any action asserting a claim against us arising pursuant to any provision of the DGCL or our fourth amended and restated certificate of incorporation and our second amended and restated bylaws; or (iv) any action asserting a claim against us governed by the internal affairs doctrine, except, in each case, (A) any claim as to which such court determines that there is an indispensable party not subject to the jurisdiction of such court (and the indispensable party does not consent to the personal jurisdiction of such court within 10 days following such determination), (B) which is vested in the exclusive jurisdiction of a court or forum other than such court, or (C) for which such court does not have subject matter jurisdiction.

[***] Certain information in this document has been excluded pursuant to Regulation S-K, Item 601(b)(10). Such excluded information is not material and would likely cause competitive harm to the registrant if publicly disclosed.

ADDENDUM TO THE SECOND AMENDED AND RESTATED LICENSE, PRODUCT DEVELOPMENT AND SUPPLY UMBRELLA AGREEMENT

TELA Bio, Inc. ("TELA Bio") and Aroa Biosurgery Limited ("Aroa¹") entered into the Second Amended and Restated License, Product Development and Supply Umbrella Agreement (the "Umbrella Agreement") on 16 July 2015.

This addendum to the Umbrella Agreement ("Addendum"), is made as of the 27th day of August, 2019, and sets out the terms of the parties' agreements with respect to the OviTex LPR Low Profile Robotic Product ("LPR Product").

1. TELA Bio and Aroa will, effective as of the date of this Addendum, enter into Product Exhibits 7 and 8 for the LPR Product ("LPR Product Exhibits"), for the purposes of the Umbrella Agreement.
2. Section 8.5(b) of the Umbrella Agreement shall be amended by adding the following paragraph at the end of that Section as follows:

[***]

3. [***]
-

4. For the avoidance of doubt, the Revenue Sharing Amount with respect to Net Sales of all of the LPR Product (including the 12x18 LPR Product) shall be calculated using the 27% Revenue Sharing Percentage and no provisions of this Addendum shall be deemed to amend such calculation.

Capitalised terms used but not defined in this Addendum have the meanings given to those terms in the Umbrella Agreement.

Except as agreed herein, the provisions of the Umbrella Agreement are not amended and continue to be in full force and effect.

This Addendum shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to any conflict of law provisions.

This Addendum may be executed in separate counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement.

Executed signature pages to this Addendum may be delivered by facsimile or electronic mail and any signature page so delivered shall be deemed to be an original.

IN WITNESS WHEREOF, each of the parties has caused this Addendum to be executed by its duly authorized representative as of the date first above written.

TELA BIO, INC.

AROA BIOSURGERY LIMITED

By: /s/ Antony Koblisch

By: /s/ Brian Ward

Name: Antony Koblisch

Name: Brian Ward

Title: President & CEO

Title: Chief Executive Officer

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (the "Agreement"), dated as of January 17, 2020 is made and entered into by and between TELA Bio, Inc., a Delaware corporation ("Company"), and Peter C. Murphy (the "Executive").

WHEREAS, the Company desires to employ Executive and Executive desires to be employed by the Company as the Chief Commercial Officer on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements contained herein and intending to be bound hereby, the parties agree as follows:

I. Duration of Agreement. The Executive's term of employment by the Company under this Agreement shall commence on January 27, 2020 (the "Effective Date"). Unless terminated or amended in writing by the parties, this Agreement will govern the Executive's continued employment by the Company until that employment ceases in accordance with Section 5 hereof.

2. Position; Duties. The Executive will be employed as the Company's Chief Commercial Officer, reporting directly to the Company's President and Chief Executive Officer. In such position, the Executive shall perform such duties and shall have such authority consistent with such position as may be assigned to him from time to time by the Company's President and Chief Executive Officer. The Executive shall devote his best efforts and all of his business time and services to the Company and its Affiliates. The Executive shall not, in any capacity, engage in other business activities or perform services for any other Person without the prior written consent of the Board; *provided, however*, that without such consent, the Executive may engage in charitable or public service, so long as such activities do not interfere with the Executive's performance of his duties and obligations hereunder.

3. Place of Performance. The Executive may perform his services hereunder at, among other locations, the principal executive offices of the Company, the Executive's home office and/or during business related travel.

4. Compensation.

4.1. Base Salary. The Executive's annual salary will be \$350,000 (the "Base Salary"). The Company shall pay the Base Salary, less such withholdings and deductions as required by applicable law, to the Executive in accordance with the Company's usual payroll practices as in effect from time to time. The Base Salary shall be reviewed on an annual basis by the Board and may adjusted from time to time by the Board; *provided, however*, that any decrease in the Base Salary shall be made only if the Company contemporaneously decreases the salaries of all senior executives and vice presidents of the Company and the Executive's Base Salary is decreased by a percentage that is not greater than the average percentage by which the salaries of such other senior executives and vice presidents are decreased.

4.2. Annual Bonus. Executive will be eligible to participate in an annual incentive program established by the Board. Executive's annual incentive compensation under

such incentive program (the "Annual Bonus") shall be targeted at 50% of Executive's Base Salary (the "Target Bonus"). The Annual Bonus payable under the incentive program shall be based on the achievement of performance goals to be determined by the Board. Any Annual Bonus earned will be paid at the same time annual bonuses are paid to other executives of the Company generally, subject to Executive's continuous employment through the date of payment, except as otherwise provided in Section 5.

4.3. Sign-On Equity Grant. On or following the Effective Date, subject to approval by the Compensation Committee of the Board (the "Compensation Committee"), the Company will grant to Executive a stock option intended to constitute an incentive stock option (to the maximum extent permitted by applicable law) to purchase 60,000 common shares of the Company's common stock at a price per share equal to the fair market value on the date of grant, as determined by the Compensation Committee, subject to Executive's continued employment through the date of grant (the "Stock Option"). The Stock Option will be subject to the terms of the Company's 2019 Equity Incentive Plan and an applicable award agreement providing for 25% of the shares subject to the Stock Option being eligible to vest and become exercisable on the first anniversary of the date of grant and the remaining 75% of the shares subject to the Stock Option being eligible to vest and become exercisable in equal monthly installments on the last day of each of the 36 calendar months immediately following the first anniversary of the grant date, subject in each case to Executive's continued employment with the Company through the applicable vesting date.

4.4. Employee Benefits. The Executive will be eligible to participate in the employee benefit plans, policies or arrangements maintained by the Company for its senior executive employees generally, subject to the terms and conditions of such plans, policies or arrangements; *provided, however*, that this Agreement will not limit the Company's ability to amend, modify or terminate such plans, policies or arrangements at any time for any reason.

4.5. Paid Time Off Subject to the terms and conditions of the Company's policy, as may be amended from time to time, the Executive will be eligible for four weeks of paid time off each calendar year.

4.6. Reimbursement of Expense. The Company will pay or reimburse the Executive for all reasonable business expenses incurred or paid by the Executive in the performance of his duties and responsibilities for the Company in accordance with the business expense reimbursement policies of the Company, as may be amended from time to time.

5. Termination; Severance. The Executive's employment hereunder shall terminate (i) on the date specified in a written notice from the Company that Executive's employment with the Company will be terminated, (ii) on the date not less than 30 days following written notice from the Executive that he is resigning from the Company, (iii) on the date of his death or (iv) on the date of his Disability, as reasonably determined by the Company. Upon cessation of his employment for any reason, unless otherwise consented to in writing by the Board, the Executive shall resign immediately from any and all officer, director and other positions he then holds with the Company and/or its Affiliates. Upon any cessation of his employment with the Company, the Executive shall be entitled only to such compensation and benefits as described in this Section 5.

5.1. Termination without Cause or upon Good Reason. If the Executive's employment by the Company ceases due to a termination by the Company without Cause (as defined below) or a termination by the Executive for Good Reason (as defined below), the Company shall:

5.1.1. pay to the Executive all accrued and unpaid Base Salary through the termination date at the time such Base Salary would otherwise be paid according to the Company's usual payroll practices;

5.1.2. pay to the Executive any accrued and unpaid Annual Bonus for the year preceding the year in which the termination date occurs at the time such Annual Bonus would otherwise be paid in accordance with Section 4.2, but in no event later than March 15 of the year immediately following the year in which the termination date occurs;

5.1.3. make severance payments to the Executive in the form of continuation of the Executive's then current Base Salary for a period of nine (9) months following the termination date (or, if the termination occurs within the Change of Control Period, for a period of twelve (12) months following the termination date), in accordance with the Company's normal payroll practices (such 9- or 12-month period, as applicable, the "Severance Period");

5.1.4. provide to the Executive a continuation of health, dental and vision insurance during the Severance Period and, to the extent that the continuation of such insurance coverage is not permitted under the Company's insurance policies, pay to the Executive a cash amount equal to the monthly cost of continued coverage under the Consolidated Omnibus Budget Reconciliation Act (" COBRA"); and

5.1.5. in the event that the termination occurs on or within the Change of Control Period, (i) pay to the Executive an amount equal to 100% of the Executive's then current Target Bonus, payable in the form of cash payments in regular installments over the Severance Period in accordance with the Company's normal payroll practices, (ii) pay to the Executive a pro-rated portion (based on the number of days Executive was employed by the Company during the calendar year in which the termination date occurs) of the Annual Bonus that Executive would have earned for the year of termination had Executive remained employed, as determined by the Board in good faith; *provided* that such pro-rated Annual Bonus shall be paid out at the same time annual bonuses are paid generally to other executives of the Company for the relevant year, but in no event later than March 15th of the year immediately following that in which the termination date occurs, and (iii) the vesting and, if applicable, exercisability shall be accelerated (and, if applicable, all restrictions and rights of repurchase on such awards shall lapse) effective as of immediately prior to the termination date with respect to 100% of the shares subject to Executive's then outstanding equity awards; provided, however, that for any awards that vest in whole or in part based on the attainment of performance-vesting conditions, only the service vesting conditions (if any) of such award shall be deemed satisfied, while the performance vesting conditions of such award shall remain eligible to be achieved based upon actual performance over the remainder of the applicable performance period.

5.1.6. Except as otherwise provided in this Section 5.1, all compensation and benefits will cease at the time of the Executive's cessation of employment and the Company will have no further liability or obligation by reason of such cessation of employment. The payments and benefits described in this Section 5.1 are in lieu of, and not in addition to, any other severance arrangement maintained by the Company. Notwithstanding any provision of this Agreement, the payments described in Section 5.1 (other than Section 5.1.1) are conditioned on:

(a) the Executive's execution and delivery to the Company of a general release of claims against the Company and its Affiliates substantially in form and substance satisfactory to the Company (the "Release") and on such Release becoming irrevocable by the 60th day following the effective date of the Executive's cessation of employment; and (b) the Executive's continued compliance with the provisions of the Restrictive Covenant Agreement (as defined below). Subject to Section 5.3 below, to the extent that any payments under this Section 5.1 (other than Section 5.1.1) are delayed pending the Release becoming irrevocable, the delayed amounts will be paid in a lump sum as soon as administratively practicable after the Release becomes irrevocable, provided that if the 60 day period described above begins in one taxable year and ends in a second taxable year, the payment of the delayed amounts and the commencement of the remaining payments shall not occur until the second taxable year.

5.2. Other Terminations. If the Executive's employment with the Company ceases for any reason other than as described in Section 5.1 above (including but not limited to

(a) termination by the Company for Cause, (b) resignation by the Executive without Good Reason, (c) termination as a result of the Executive's Disability, or (d) the Executive's death), then the Company's obligation to the Executive will be limited solely to the payment of accrued and unpaid Base Salary as described in Section 5.1.1 through the date of such cessation of employment and, in the case of Executive's death or Disability, any Annual Bonus as described in Section 5.1.2. All compensation and benefits will cease at the time of such cessation of employment and, except as otherwise provided by COBRA, the Company will have no further liability or obligation by reason of such termination. The foregoing will not be construed to limit the Executive's right to payment or reimbursement for claims incurred prior to the date of such termination under any insurance contract funding an employee benefit plan, policy or arrangement of the Company in accordance with the terms of such insurance contract.

5.3. Compliance with Section 409A. Notwithstanding anything to the contrary in this Agreement, no portion of the benefits or payments to be made under Section 5.1 will be payable until the Executive has a "separation from service" from the Company within the meaning of Section 409A of the Code. In addition, to the extent compliance with the requirements of Treas. Reg. § 1.409A-3(i)(2) (or any successor provision) is necessary to avoid the application of an additional tax under Section 409A of the Code to payments due to the Executive upon or following his "separation from service", then notwithstanding any other provision of this Agreement (or any otherwise applicable plan, policy, agreement or arrangement), any such payments that are otherwise due within six months following the Executive's "separation from service" (taking into account the preceding sentence of this paragraph) will be deferred without interest and paid to the Executive in a lump sum on the earlier of (i) the expiration of such six month period and (ii) the date of Executive's death. This paragraph should not be construed to prevent the application of Treas. Reg. § 1.409A-1(b)(9)(iii) (or any successor provision) to amounts payable hereunder. For purposes of the

application of Section 409A of the Code, each payment in a series of payments will be deemed a separate payment.

6. Restrictive Covenants. As a condition to the effectiveness of this Agreement, the Executive will execute and deliver to the Company contemporaneously herewith a Confidential Information, Non-Competition and Assignment Agreement in the form attached hereto as Exhibit A (the "Restrictive Covenant Agreement"). The Executive agrees to abide by the terms of the Restrictive Covenant Agreement, which are hereby incorporated by reference into this Agreement. The Executive acknowledges that the terms of the Restrictive Covenant Agreement shall continue to remain in full force and effect following the cessation of the Executive's employment with the Company for any reason.

7. Certain Definitions. For purposes of this Agreement:

7.1. "Affiliate" means, with respect to any specified Person, any other Person that directly or indirectly, through one or more intermediaries, Controls, is Controlled by, or is under common Control with, such specified Person, provided that, in any event, any business in which the Company has any direct ownership interest shall be treated as an Affiliate of the Company.

7.2. "Cause" means (i) indictment, commission of, or the entry of a plea of guilty or no contest to, (A) a felony or (B) any crime (other than a felony) that causes the Company or its Affiliates public disgrace or disrepute, or adversely affects the Company's or its Affiliates' operations or financial performance or the relationship the Company has with its Affiliates, customers and suppliers; (ii) commission of an act of gross negligence, willful misconduct, fraud, embezzlement, theft or material dishonesty with respect to the Company or any of its Affiliates; (iii) a breach of the Executive's fiduciary duty of loyalty to the Company or any of its Affiliates; (iv) alcohol abuse or use of controlled substances (other than prescription drugs taken in accordance with a physician's prescription); (v) material breach of any agreement with the Company or any of its Affiliates, including this Agreement and the Restrictive Covenant Agreement; (vi) a material breach of any Company policy regarding employment practices; or (vii) refusal to perform the lawful directives of the Board, if not cured within 30 days following receipt by the Executive from the Company of written notice thereof.

7.3. "Change of Control" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events: (A) any sale, lease, exclusive license or other transfer of all or substantially all of the assets of the Company and its Subsidiaries taken as a whole by means of a single transaction or series of related transactions, except where such sale, lease, exclusive license or other transfer is to a wholly owned Subsidiary of the Company; or (B) any transaction or series of transactions involving the Company, or its securities, whether by consolidation, merger, purchase of shares of capital stock or other reorganization or combination or otherwise, in which the holders of the Company's outstanding shares of capital stock immediately prior to such transaction or series of related transactions own, immediately after such transaction or series of related transactions, securities representing fifty percent (50%) or less of the voting power of the entity surviving such transaction or series of related transactions or the entity whose securities are issued pursuant to such transaction or series of related transactions.

7.4. "Change of Control Period" means the period beginning on the date of the consummation of a Change in Control and ending on the first anniversary of such date.

7.5. "Code" means the Internal Revenue Code of 1986, as amended.

7.6. "Control" (including, with correlative meanings, the terms "Controlled by" and "under common Control with"), as used with respect to any Person, means the direct or indirect possession of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by contract or otherwise.

7.7. "Disability" means a condition entitling the Executive to benefits under the Company's long term disability plan, policy or arrangement; provided, however, that if no such plan, policy or arrangement is then maintained by the Company and applicable to the Executive, "Disability" will mean the Executive's inability to perform the essential duties of his position due to a mental or physical condition (other than alcohol or substance abuse), with or without a reasonable accommodation. Termination as a result of a Disability will not be construed as a termination by the Company "without Cause."

7.8. "Good Reason" means one or more of the following: (i) a material reduction in the Executive's title, duties, authority or responsibilities, provided that a material reduction of the Executive's title, duties, authority or responsibilities hereunder shall be deemed not to have occurred if, following a Change of Control, (A) if the Company remains a separate entity, Executive is the most senior executive directly responsible for the Commercial functions of the Company, or (B) if the Company does not remain a separate entity, Executive is the most senior executive directly responsible for the Commercial functions of the acquiring entity that are comprised of the former business of the Company; (ii) a material breach of this Agreement by the Company; (iii) a material reduction in Base Salary or Target Bonus opportunity by the Company to the Executive that is not in accordance with Section 4.1 and to which the Executive has not provided written consent; or (iv) any requirement following a Change of Control that the Executive be based 50 or more miles from the facility where the Executive is based immediately prior to the Change of Control. The notice by the Executive of the condition constituting Good Reason under this Agreement shall be provided to the Company in writing within ninety (90) days of the initial existence of the condition constituting Good Reason, the Company shall then have thirty (30) days after receipt of such written notice to remedy the condition, and in the event the Company fails to remedy the condition, the Executive's resignation based on such Good Reason must be effective within thirty (30) days after the expiration of such remedy period.

7.9. "Person" means any individual, firm, corporation, partnership, limited liability company, trust, joint venture, association, governmental entity, unincorporated entity or other entity.

7.10. "Subsidiary" means any corporation, limited liability company, partnership or other entity of which a majority of the outstanding voting stock or voting power is beneficially owned directly or indirectly by the Company.

8. Miscellaneous.

8.1. Cooperation. The Executive further agrees that, subject to reimbursement of his reasonable expenses, he will cooperate fully with the Company and its counsel with respect to any matter (including litigation, investigations, or governmental proceedings) in which the Executive was in any way involved during his employment with the Company. The Executive shall render such cooperation in a timely manner on reasonable notice from the Company, so long as the Company exercises commercially reasonable efforts to schedule and limit its need for the Executive's cooperation under this paragraph so as not to interfere with the Executive's other personal and professional commitments.

8.2. Section 409A.

8.2.1. Notwithstanding anything herein to the contrary or otherwise, except to the extent any expense, reimbursement or in-kind benefit provided to the Executive does not constitute a "deferral of compensation" within the meaning of Section 409A of the Code, and its implementing regulations and guidance, (i) the amount of expenses eligible for reimbursement or in-kind benefits provided to the Executive during any calendar year will not affect the amount of expenses eligible for reimbursement or in-kind benefits provided to the Executive in any other calendar year, (ii) the reimbursements for expenses for which the Executive is entitled to be reimbursed shall be made on or before the last day of the calendar year following the calendar year in which the applicable expense is incurred and (iii) the right to payment or reimbursement or in-kind benefits hereunder may not be liquidated or exchanged for any other benefit.

8.2.2. Anything to the contrary herein notwithstanding, all benefits or payments provided by the Company to the Executive that would be deemed to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code are intended to comply with Section 409A of the Code. Notwithstanding anything in this Agreement to the contrary, distributions may only be made under this Agreement upon an event and in a manner permitted by Section 409A of the Code or an applicable exemption.

8.3. Section 280G. Notwithstanding any other provision of this Agreement, in the event that any payment or benefit by the Company or otherwise to or for the benefit of Executive, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise (all such payments and benefits, including the payments and benefits under Section 5 above, being hereinafter referred to as the "Total Payments"), would be subject (in whole or in part) to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then the Total Payments shall be reduced to the minimum extent necessary to avoid the imposition of the Excise Tax on the Total Payments, but only if (i) the net amount of such Total Payments, as so reduced (and after subtracting the net amount of federal, state and local income and employment taxes on such reduced Total Payments and after taking into account the phase out of itemized deductions and personal exemptions attributable to such reduced Total Payments), is greater than or equal to (ii) the net amount of such Total Payments without such reduction (but after subtracting the net amount of federal, state and local income and employment taxes on such Total Payments and the amount of the Excise Tax to which Executive would be subject in respect of such unreduced Total Payments and after taking into account the phase out of itemized deductions and personal exemptions attributable to such unreduced Total Payments). The reduction of the Total Payments contemplated in this Section 8.3 shall be

implemented by determining the Parachute Payment Ratio (as defined below), as determined in good faith by the Company (or its successor), for each Total Payment and then reducing the Total Payments in order beginning with the Total Payment with the highest Parachute Payment Ratio. For Total Payments with the same Parachute Payment Ratio, such Total Payments shall be reduced based on the time of payment of such Total Payments, with amounts having later payment dates being reduced first. For Total Payments with the same Parachute Payment Ratio and the same time of payment, such Total Payments shall be reduced on a pro rata basis (but not below zero) prior to reducing Total Payments with a lower Parachute Payment Ratio. For purposes hereof, the term "Parachute Payment Ratio" shall mean a fraction, (x) the numerator of which is the value of the applicable Total Payment (as calculated for purposes of Section 2800 of the Code), and (y) the denominator of which is the intrinsic (i.e., economic) value of such Total Payment.

8.4. Other Agreements. The Executive represents and warrants to the Company that there are no restrictions, agreements, including but not limited to confidentiality, non-compete, invention assignment, or consulting agreements, or understandings whatsoever to which he is a party that would prevent or make unlawful his execution of this Agreement, that would be inconsistent or in conflict with this Agreement or the Executive's obligations hereunder, or that would otherwise prevent, limit or impair the performance by the Executive of his duties under this Agreement.

8.5. Successors and Assigns. The Company may assign this Agreement to any Affiliate or to any successor to its assets and business by means of liquidation, dissolution, merger, sale of assets or otherwise. Upon such assignment, the rights and obligations of the Company hereunder shall become the rights and obligations of such Affiliate or successor. For avoidance of doubt, a termination of the Executive's employment by the Company in connection with a permitted assignment of the Company's rights and obligations under this Agreement is not a termination "without Cause" so long as the assignee offers employment to the Executive substantially on the terms herein specified (without regard to whether the Executive accepts employment with the assignee). The rights and duties of the Executive hereunder are personal to Executive and may not be assigned by him.

8.6. Governing Law and Enforcement. This Agreement will be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania, without regard to the principles of conflicts of laws. Any legal proceeding arising out of or relating to this Agreement will be instituted in a state or federal court in the Commonwealth of Pennsylvania, and the Executive and the Company hereby consent to the personal and exclusive jurisdiction of such court(s) and hereby waive any objection(s) that they may have to personal jurisdiction, the laying of venue of any such proceeding and any claim or defense of inconvenient forum.

8.7. Waivers. The waiver by either party of any right hereunder or of any breach by the other party will not be deemed a waiver of any other right hereunder or of any other breach by the other party. No waiver will be deemed to have occurred unless set forth in writing. No waiver will constitute a continuing waiver unless specifically stated, and any waiver will operate only as to the specific term or condition waived.

8.8. Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law. However, if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provision, and this Agreement will be reformed, construed and enforced as though the invalid, illegal or unenforceable provision had never been herein contained.

8.9. Survival. This Agreement will survive the cessation of the Executive's employment to the extent necessary to fulfill the purposes and intent of this Agreement.

8.10. Notices. Any notice or communication required or permitted under this Agreement will be made in writing and (a) sent by reputable overnight courier, (b) mailed by overnight U.S. express mail, return receipt requested or (c) sent by telefax. Any notice or communication to the Executive will be sent to the address contained in his personnel file. Any notice or communication to the Company will be sent to the Company's principal executive offices, to the attention of the Board. Notwithstanding the foregoing, either party may change the address for notices or communications hereunder by providing written notice to the other in the manner specified in this paragraph.

8.11. Withholding. All payments (or transfers of property) to the Executive will be subject to tax withholding to the extent required by applicable law.

8.12. Section Headings. The headings of sections and paragraphs of this Agreement are inserted for convenience only and will not in any way affect the meaning or construction of any provision of this Agreement.

8.13. Counterparts: Facsimile. This Agreement may be executed in multiple counterparts (including by facsimile signature), each of which will be deemed to be an original, but all of which together will constitute but one and the same instrument.

8.14. Entire Agreement: Amendments. This Agreement contains the entire agreement and understanding of the parties hereto relating to the subject matter hereof, and supersedes all prior discussions, agreements and understandings of every nature relating to that subject matter. This Agreement may not be changed or modified, except by an agreement in writing signed by each of the parties hereto.

8.15. Policies. Executive acknowledges that Executive shall be subject to, and hereby agrees to abide by the terms of, Company policies in effect from time to time, including, without limitation, any clawback or recoupment policies, securities trading policies and stock ownership guidelines.

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized officer, and the Executive has executed this Agreement, in each case on the date first above written.

COMPANY:

TELA Bio, Inc.

By: /s/ Antony Koblisch
Name: Antony Koblisch
Title: Chief Executive Officer

EXECUTIVE:

 /s/ Peter C. Murphy
Peter C. Murphy

(Signature Page to Employment Agreement)

Consent of Independent Registered Public Accounting Firm

The Board of Directors
TELA Bio, Inc.:

We consent to the incorporation by reference in the registration statement (No. 333-235241) on Form S-8 of TELA Bio, Inc. of our report dated March 30, 2020, with respect to the consolidated balance sheets of TELA Bio, Inc. as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes, which report appears in the December 31, 2019 annual report on Form 10-K of TELA Bio, Inc.

/s/ KPMG LLP

Philadelphia, Pennsylvania
March 30, 2020

CERTIFICATION

Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934,
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Antony Koblisch, certify that:

1. I have reviewed this Form 10-K of TELA Bio, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 30, 2020

/s/ Antony Koblisch

Antony Koblisch

President and Chief Executive Officer

(Principal Executive Officer)

CERTIFICATION

Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934,
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Nora Brennan, certify that:

1. I have reviewed this Form 10-K of TELA Bio, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 30, 2020

/s/ Nora Brennan
Nora Brennan
Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION

Pursuant to 18 U.S.C. Section 1350,
as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), that: Antony Koblisch, Chief Executive Officer of TELA Bio, Inc. (the "Company"), hereby certifies that, to the best of his knowledge:

- (1) The Company's Annual Report on Form 10-K for the period ended December 31, 2019, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and
- (2) The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 30, 2020

/s/ Antony Koblisch

Antony Koblisch
President and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION

Pursuant to 18 U.S.C. Section 1350,
as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), that: Nora Brennan, Chief Financial Officer of TELA Bio, Inc. (the "Company"), hereby certifies that, to the best of her knowledge:

- (1) The Company's Annual Report on Form 10-K for the period ended December 31, 2019, to which this Certification is attached as Exhibit 32.2 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and
- (2) The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 30, 2020

/s/ Nora Brennan

Nora Brennan

Chief Financial Officer

(Principal Financial Officer)
