# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**WASHINGTON, DC 20549**

# FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2016

OR

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

For the transition period from to

Commission file number 001-36385

# BIOLASE, INC.

**(Exact Name of Registrant as Specified in Its Charter)**

| **Delaware** | **87-0442441** |
|---|---|
| (State or Other Jurisdiction of Incorporation or Organization) | (I.R.S. Employer Identification No.) |

**4 Cromwell**
**Irvine, California 92618**
***(Address of Principal Executive Offices, including zip code)***

**(949) 361-1200**
***(Registrant's Telephone Number, Including Area Code)***

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

| Title of each class | Name of each exchange on which registered |
|---|---|
| **Common Stock, par value $0.001 per share** | **The NASDAQ Stock Market LLC (NASDAQ Capital Market)** |

**Securities registered pursuant to Section 12(g) of the Act:**
**None.**

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in the definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

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

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

The aggregate market value of the Registrant's common stock held by non-affiliates was $38,006,498 based on the last sale price of common stock on June 30, 2016.

As of March 6, 2017, there were 67,570,951 shares of the registrant's common stock, par value $0.001 per share, outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive proxy statement related to its 2017 Annual Meeting of Stockholders, to be filed with the Securities and Exchange Commission pursuant to Regulation 14A within 120 days after the registrant's fiscal year ended December 31, 2016, are incorporated by reference into Part III of this Annual Report on Form 10-K.

**BIOLASE, INC.**

**ANNUAL REPORT ON FORM 10-K**
**FOR THE FISCAL YEAR ENDED DECEMBER 31, 2016**

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## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K ("Form 10-K"), particularly in Item 1, "Business," and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and the documents incorporated by reference, includes "forward-looking statements" that involve risks and uncertainties, as well as assumptions that, if they prove incorrect or do not materialize as expected, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Examples of forward-looking statements include, but are not limited to any statements, predictions, or expectations regarding our strategy, the number of hard tissue and periodontal procedures for 2017, future demand for improved dental care, regulatory requirements, earnings, revenue, sales and operations, operating expenses, sales and marketing expenses, legal expenses and professional fees, general and administrative expenses, the impact of cost-saving measures, planned investments in engineering and development, excise tax expenses, anticipated cash needs, capital requirements and capital expenditures, needs for additional financing, use of working capital, plans for future products and services and for enhancements of existing products and services, plans to explore potential collaborations, effects of engineering and development efforts, plans to expand our field sales force, intentions to implement new software, anticipated growth strategies, ability to attract customers, anticipated trends and challenges in our business and the markets in which we operate, the adequacy of our facilities, the impact of economic and industry conditions on our customers and our business, customer demand, our competitive position, the outcome of any litigation against us, intellectual property license fees and royalty revenues, pending patent applications and expiring patents, Affordable Care Act compliance, regulators related to health care information, regulatory approvals or enforcement actions, the perceived benefits of any technology acquisitions, critical accounting policies and the impact of recent accounting pronouncements, recording tax benefits or other financial items in the future, plans, strategies, expectations, or objectives of management for future operations, our financial condition or prospects, and any other statement that is not historical fact. Forward-looking statements are often identified by the use of words such as "may," "might," "will," "intend," "should," "could," "can," "would," "continue," "expect," "believe," "anticipate," "estimate," "predict," "potential," "plan," "seek" and similar expressions.

These forward-looking statements are based on the expectations, estimates, projections, beliefs and assumptions of our management based on information available to management as of the date on which this Form 10-K was filed with the Securities and Exchange Commission (the "SEC") or as of the date on which the information incorporated by reference was filed with the SEC, as applicable, all of which are subject to change. Forward-looking statements are subject to risks, uncertainties and other factors that are difficult to predict and could cause actual results to differ materially from those stated or implied by our forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to:

- global economic uncertainty and volatility in financial markets;
- inability to raise additional capital on terms acceptable to us;
- our relationships with, and the efforts of, third-party distributors;
- our inability to overcome the hesitation of dentists and patients to adopt laser technologies;
- failure in our efforts to train dental practitioners;
- inconsistencies between future data and our clinical results;
- competition from other companies, including those with greater resources;
- our inability to successfully develop and commercialize enhanced or new products that remain competitive with products or alternative technologies developed by others;
- the inability of our customers to obtain third-party reimbursement for their use of our products;
- limitations on our ability to use net operating loss carryforwards;
- problems in manufacturing our products;
- warranty obligations if our products are defective;
- adverse publicity regarding our technology or products;
- adverse events to our patients during the use of our products, regardless of whether caused by our products;
- litigation, including the failure of our insurance policies to cover certain expenses relating to litigation and our inability to reach a final settlement related to certain litigations;
- failure of our suppliers to supply us with a sufficient amount or adequate quality of materials;
- a change in suppliers, including our inability to purchase certain key components of our products from suppliers other than our current suppliers;
- rapidly changing standards and competing technologies;

- our inability to effectively manage and implement our growth strategies;
- failure of our efforts to emphasize the importance of our imaging products to translate into increased sales of the same;
- risks associated with operating in international markets, including potential liabilities under the Foreign Corrupt Practices Act ("FCPA");
- breaches of our information technology systems;
- seasonality;
- disruptions to our operations at our primary facility;
- loss of our key management personnel or our inability to attract or retain qualified personnel;
- risks and uncertainties relating to acquisitions, including difficulties integrating acquired businesses successfully into our existing operations and risks of discovering previously undisclosed liabilities;
- failure to comply with the reporting obligations of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and Section 404 of the Sarbanes-Oxley Act of 2002, as amended (the "Sarbanes-Oxley Act") or maintain adequate internal control over financial reporting;
- climate change initiatives;
- failure of our intellectual property rights to adequately protect our technologies;
- potential third-party claims that our products infringe their intellectual property rights;
- changes in government regulation or the inability to obtain or maintain necessary governmental approvals;
- our failure to comply with existing or new laws and regulations, including fraud and abuse and health information privacy and securities laws;
- changes in the regulatory requirements of the Food and Drug Administration ("FDA") applicable to laser products, dental devices, or both; and
- recall or other regulatory action concerning our products after receiving FDA clearance or approval.

Further information about factors that could materially affect the Company, including our results of operations and financial condition, is contained under "Risk Factors" in Item 1A in this Form 10-K. Except as required by law, we undertake no obligation to revise or update any forward-looking statements to reflect changed assumptions, the occurrence of anticipated or unanticipated events, new information, or changes to future results over time or otherwise.

## PART I

### Item 1. *Business*

### Overview

BIOLASE, Inc. ("BIOLASE" and, together with its consolidated subsidiaries, the "Company," "we," "our" or "us") is a medical device company that develops, manufactures, markets and sells laser systems in dentistry and medicine and also markets, sells, and distributes dental imaging equipment, including cone beam digital x-rays and CAD/CAM intra-oral scanners. Our products advance the practice of dentistry and medicine for patients and health care professionals. Our proprietary dental laser systems allow dentists, periodontists, endodontists, oral surgeons, and other dental specialists to perform a broad range of minimally invasive dental procedures, including cosmetic, restorative, and complex surgical applications. Our laser systems are designed to provide clinically superior results for many types of dental procedures compared to those achieved with drills, scalpels, and other conventional instruments. We have clearance from the FDA to market and sell our laser systems in the United States and also have the necessary registration to market and sell our laser systems in Canada, the European Union, and many other countries outside the U.S. Additionally, our in-licensed imaging equipment and related products improve diagnoses, applications, and procedures in dentistry and medicine.

We offer two categories of laser system products: Waterlase (all-tissue) systems and Diode (soft-tissue) systems. Our flagship brand, the Waterlase, uses a patented combination of water and laser energy to perform most procedures currently performed using drills, scalpels, and other traditional dental instruments for cutting soft and hard tissue. We also offer our Diode laser systems to perform soft tissue, pain therapy, and cosmetic procedures, including teeth whitening. We have approximately 230 issued and 85 pending U.S. and international patents, the majority of which are related to Waterlase technology. From 1998 through December 31, 2016, we sold approximately 33,600 laser systems in over 90 countries around the world. Contained in this total are over 11,800 Waterlase systems, including approximately 7,800 Waterlase MD and iPlus systems. We were originally formed as Societe Endo Technic, SA ("SET") in 1984 in Marseilles, France, to develop and market various endodontic and laser products. In 1987, SET merged into Pamplona Capital Corp., a public holding company incorporated in Delaware. In 1994, we changed our name to BIOLASE Technology, Inc. and in 2012, we changed our name to BIOLASE, Inc., since 1998, we have been the global leading innovator, manufacturer, and marketer of dental laser systems.

We currently operate in a single reportable business segment. We had net revenues of $51.8 million, $48.5 million, and $47.7 million in 2016, 2015, and 2014, respectively, and we had net losses of $15.4 million, $20.3 million, and $18.9 million for the same periods, respectively. We had assets of $41.9 million and $42.3 million as of December 31, 2016 and 2015, respectively.

### Recent Developments

#### *Leadership Changes*

On March 1, 2017, we announced the appointment of a new Senior Vice President and Chief Financial Officer, with significant leadership and technical experience in finance and business management from both public and private companies, who will be joining our leadership team effective March 27, 2017.

Throughout 2016 and consistent with our goal to focus our energies on strengthening our leadership, and worldwide competitiveness and increasing the amount of attention we pay to our professional customers and their patients, we have made strategic personnel additions to our senior management team, including a Vice President and Managing Director for Europe, the Middle East and Africa to lead our sales in that region, a Vice President of Clinical and Dental Affairs and Chief Dental Officer to lead our educational, dental and clinical matters, and a Vice President of Marketing to lead our marketing efforts. We have also added a new Vice President of Human Resources at our headquarters in Irvine, California to support our key initiatives. With a solid senior management team, we believe we are better suited to achieve our goals of strengthening our worldwide market presence, sales, and competitiveness.

### *Private Placement*

On August 8, 2016, we completed a private placement with several institutional and individual investors, and certain of our directors and officers, under which we sold an aggregate of 88,494 shares of our preferred stock and warrants to purchase up to an aggregate of 2,035,398 unregistered shares of our common stock at an exercise price of $2.00 per share. Each share of preferred stock was automatically upon receipt of stockholder approval convertible into 100 shares of our common stock, reflecting a conversion price equal to $1.13 per share, which was the closing price of our common stock quoted on the NASDAQ Capital Market on July 29, 2016. On September 30, 2016, we held a meeting of our stockholders and received requisite stockholder approval with respect to the issuance of 8,849,400 shares of common stock upon automatic conversion of the preferred stock and the issuance of our common stock related to exercise of the warrants by certain holders whose warrants were subject to a beneficial ownership limitation. Gross proceeds from the sale were approximately $10.0 million, and net proceeds, after offering expenses of approximately $0.5 million, were approximately $9.5 million. The warrants became exercisable on February 8, 2017, six months after the closing of the private placement, and have a term of five years from the date of issuance. We are using the proceeds of the sale for working capital and general corporate purposes. In connection with the registration rights granted to these investors, we filed a registration statement on Form S-3 with the SEC, which was declared effective on November 3, 2016.

### *New Product Offerings*

In February 2017, we launched the fifth-generation Waterlase Express all-tissue laser system. Waterlase Express represents the newest addition to the our Waterlase portfolio of Er,Cr:YSGG all-tissue lasers. Waterlase Express was exhibited at the Chicago Dental Society's Mid-Winter meeting in February 2017. Designed for easy and intuitive operation, integrated learning, and portability, Waterlase Express is our next-generation Waterlase system. Waterlase Express has regulatory clearance for commercial distribution from the FDA, and is available for sale to dentists in the U.S. as well as select international markets in Europe, the Middle East and Asia.

In January 2017, we received FDA clearance and launched Epic Pro, a powerful and innovative dental diode laser system, making it available for sale in the U.S., as well as in select countries in Europe, the Middle East and Asia. The Epic Pro, which offers more power than most diode lasers in dentistry, is the first product to be introduced resulting from our strategic development agreement with IPG Photonics Corporation's medical laser division, IPG Medical ("IPG"). The newest addition to the Epic family of dental soft-tissue lasers, Epic Pro features several new innovations, such as a new super pulse technology for more precise, enhanced laser tissue cutting; real-time automatic power control to enhance speed and consistency when performing surgery; and pre-initiated, bendable, disposable tips with new smart tip technology to ensure tip performance and quality. In January 2017, the Epic Pro laser system received clearance from the U.S. FDA for dental and surgical operations, intended for use in contact and non-contact techniques for incision, excision, vaporization, ablation, hemostasis, or coagulation of intraoral and extra-oral soft tissue (including marginal and interdental gingiva and epithelial lining of free gingiva).

In 2015, we launched several key updates to the Waterlase iPlus all-tissue laser system, including enabling the system with integrated step-by-step laser protocols for addressing periodontal and peri-implant disease. The two protocols, known as REPAIR Perio and REPAIR Implant, enable general dentists and dental specialists to address the growing trend of periodontal disease (commonly referred to as "gum disease") and peri-implantitis. These destructive inflammatory processes affect soft and hard tissues surrounding permanent teeth or expensive dental implants and can lead to significant oral healthcare complications if not addressed. Waterlase iPlus offers general dentists and dental specialists a turnkey, step-by-step approach to managing these rising disease states. In addition, the Waterlase iPlus remains one of the most versatile clinical instruments available, with pre-programmed settings for more than 50 FDA-cleared procedures in the dental office.

In 2015, we also launched the redesigned SureFire YSGG Delivery System for use with Waterlase iPlus and Waterlase MD systems. The new SureFire design ensures greater uptime through enhanced precision, performance, and reliability of the fiber optics, which were redesigned to more efficiently deliver precise laser energy. The system is further enhanced with a replaceable, disposable shield for better dependability. SureFire offers improved clinical access and comfort with its minimally invasive flagship dental laser system and exclusive contra-angle hand-piece.

## Industry Background

### *General*

Dental procedures, including medical and cosmetic treatment, are performed on hard tissue, such as bone and teeth, and soft tissue, such as gum and other oral tissue.

The American Dental Association's ("ADA") last available Survey of Dental Services Rendered (the "ADA Study"), published in 2007, estimated that more than 200 million hard tissue procedures are performed annually in the United States. Hard tissue procedures include cavity preparation, root canals, and other procedures involving bone or teeth. Moreover, iData Research, an international market research group that specializes in medical device market dynamics, estimated that approximately 400 million hard tissue procedures are performed annually outside the United States.

The ADA also estimates that 46.5 million periodontal, implant, or soft tissue surgical procedures are performed annually in the United States. Periodontal procedures are performed on the supporting structures to remove periodontal and gum disease, which leads to tooth loss. Implant procedures include dental implant placement and restoration, and the treatment of peri-mucositis and peri-implantitis to mitigate implant failure, which is estimated to affect as many as 48% of all implants placed since 2000.

Furthermore, according to the ADA Study, over 90% of hard tissue procedures and 60% of periodontal, implants, and soft tissue, procedures in the United States are performed by general dentists. The remainder are performed by dental specialists, such as periodontists, pediatric dentists, implantologists, oral surgeons, prosthodontists, and endodontists. According to "Prevalence of Periodontitis in Adults in the United States" by Ede, Dye, Wei et al., recent evidence indicates that 47% of dental patients aged 30 or older have moderate to severe periodontitis that would benefit from intervention and Waterlase therapy. The ADA Health Policy Institute reported that in 2014, several key indicators of demand for dental services showed positive growth, including per capita dental expenditures, overall dental visits, and dentist earnings. The ADA Health Policy Institute also reported promising trends in patient access to health insurance coverage and increased consumerism of oral healthcare. Overall, the demand for dental services has continued to evolve positively due to population growth, aging demographics, and increased awareness of the benefits of preventive dentistry in reducing the incidence of oral and systemic disease. Periodontitis and peri-implantitis are two rapidly growing disease states requiring therapy in a dental practice.

According to "The Oral Health Atlas, 2nd edition," untreated tooth decay was the most prevalent of 291 oral disease conditions studied by the FDI World Dental Federation in 2015, with periodontal disease and associated complications being the 6th most prevalent oral disease state.

We believe there is a growing awareness among consumers globally of the value and importance of oral health and its connections to overall systemic health and wellness. Studies indicate a link between periodontitis and other health conditions such as heart disease, diabetes, and stroke. According to the 2013 Distribution of Dentists in the U.S. by Region and State, there were 177,625 active private practitioners in the U.S. According to the World Health Organization, there were 1.8 million dentists worldwide in 2012. As many developing nations continue to experience fiscal growth, we believe those nations will also experience higher demand for improved dental care. Corresponding growth resulting from dental practices competing for patients could create further demand for clinical solutions that enable dentists to perform minimally invasive dental procedures with less trauma, less anesthesia, improved patient acceptance, and clinically superior results. We believe our product offerings align with this trend.

***Traditional Dental Instruments***

Dentists and other specialists utilize a variety of instruments depending on the tissue involved and the type of procedure. Most procedures require the use of multiple instruments to achieve desired results. Many of the instruments available today are based on decades-old practices. Examples are as follows:

*High-Speed Drills*. Most dentists use conventional high-speed drills for hard tissue procedures, such as preparing cavities for filling, gaining access for performing root canals, and shaving or contouring oral bone tissue. Potentially adverse effects associated with drills include thermal heat transfer, vibration, pressure and noise. The cutting and grinding action of high-speed drills can cause damage, such as microfractures, to the patient's teeth. The trauma can lead to longer recovery times and the need for future crowns and root canals. Additionally, this grinding action of high-speed drills may weaken the tooth's underlying structure, leading to fractures and broken cusps. Procedures involving high-speed drills typically require anesthesia and are often the source of patient anxiety and fear. Because many dentists do not recommend anesthetizing more than one or two sections of the mouth in a single appointment, patients may need to return several times to complete their treatment plan.

*Cutting Instruments*. Soft tissue procedures are typically performed by oral surgeons or periodontists using scalpels, scissors, and other surgical tools. Due to the pain, bleeding, post-operative swelling and discomfort associated with these instruments, most soft tissue procedures require the use of local anesthetic which may result in numbness and longer recovery time, and often require stitches. Bleeding can impair the practitioner's visibility during the procedure, thereby reducing efficiency and is a particular problem for patients with immune deficiencies or blood disorders and for patients taking blood-thinning medications.

*Film Radiography Equipment*. Dentists have traditionally relied on radiographic images produced by exposing photographic film to X-ray radiation as part of the examination and diagnosis of patients. These X-ray images can help reveal tooth decay, periodontal disease, bone loss, infections, hidden dental structures, abscesses or cysts, developmental abnormalities, some types of tumors, and other issues that might not be detected during a visual examination or upon probing with a handheld instrument. Due to the chemical development process required for film, however, this process is time-consuming, inefficient, costly for dental offices, and not environmentally friendly. Mistakes in the development process can require retakes which expose patients to additional radiation. Film X-rays also restrict the ability of doctors to enhance or further manipulate images for easier and more accurate analysis and treatment planning. Furthermore, one of the most critical limitations of film is that it is restricted to two-dimensional images, which can potentially lead to misdiagnosis.

***Alternative Dental Instruments***

Alternative technologies have been developed over the years to address the problems associated with traditional methods used in dentistry. However, most alternatives have addressed either hard or soft tissue applications but not both, or have other limitations.

*Electrosurge Systems.* Electrosurge systems use an electrical current to heat a shaped tip that simultaneously cuts and cauterizes soft tissue, resulting in less bleeding than occurs with scalpels. However, electrosurge systems are generally less precise than lasers and can damage surrounding tissue. Electrosurge systems are also not suitable for hard tissue procedures and due to the depth of penetration, generally require anesthesia and a lengthy healing process. Electrosurge systems generally cannot be used in areas near metal fillings and dental implants. Finally, electrosurge systems generally cannot be used to treat patients with implanted pacemakers and defibrillators.

*Traditional Laser Systems.* More recently, lasers have gained acceptance for use in general and cosmetic dentistry. Most lasers used in dentistry have been adapted from other medical applications, such as dermatology, but are not optimally designed to perform common dental procedures. Most dental lasers use thermal energy to cut tissue and are used primarily for soft tissue procedures.

**BIOLASE Products**

Combining our laser systems with 3D CAD/CAM intraoral scanning and imaging solutions can provide dental professionals with enhanced capabilities for early diagnosis and minimally invasive treatment. Our product offering consists of the following:

*Waterlase all-tissue laser systems.* Our all-tissue Waterlase dental laser systems currently consist of the Waterlase Express, our flagship Waterlase iPlus, and the Waterlase MD Turbo. Each of these systems features proprietary laser crystal technology that produces energy with specific absorption and tissue interaction characteristics specifically designed for dental procedures. It is minimally invasive and can precisely cut hard tissue, such as bone and teeth, and soft tissue, such as gums and skin, without the heat, vibration, bleeding, or pressure associated with traditional dental treatments. By combining the laser light and water, our Waterlase systems may eliminate the need for anesthesia in most cases and also result in faster healing times compared to traditional methods of treatment, both of which could lead to improved patient-reported outcomes.

The Waterlase systems incorporate an ergonomic hand-piece and a user-friendly digital interface with clinical applications to control the mix of laser energy, air, and water, as well as the pulse rate. Each system also has been designed to be easily moved from operatory to operatory within a practice. We developed the Waterlase systems using internally developed intellectual property, as well as intellectual property obtained through various acquisitions. The Waterlase systems are FDA-cleared in the United States, CE mark-approved in Europe, and approved for sale in more than 90 other countries for dental uses. In the United States, we also have regulatory clearance for dermatological, aesthetic, and other general surgery uses.

*Diode soft-tissue laser systems.* Our Diode soft tissue laser systems currently consist of the Epic Pro, Epic X, Epic 10 and iLase semiconductor diode lasers that perform soft tissue, hygiene, cosmetic procedures and teeth whitening and provide temporary pain relief. Epic X, Epic 10, and iLase systems feature our proprietary 940nm wavelength and patented pulse technology called ComfortPulse, which is designed for added patient comfort. iLase was the first "personal" laser with no wires, footswitch, or cumbersome cables to manage. Epic 10 is a portable, powerful diode laser that facilitates clinical versatility with surgical, pain therapy and whitening capabilities and provides an exceptional laser with an attractive value proposition. In December 2014 we introduced the Epic X diode laser, an enhanced soft tissue laser system featuring upgrades and improvements from our Epic 10. Epic Pro, released in 2016, is a soft-tissue diode laser with Super Thermal Pulse and Automatic Power Control features for enhanced patient comfort and clinical outcomes. The iLase, Epic X, Epic10, and Epic Pro are FDA-cleared in the United States, CE mark-approved in Europe, and approved for sale in more than 90 other countries for dental uses. In the United States, we also have regulatory clearance for dermatological, aesthetic, and other general surgery uses.

*Imaging systems*. Our dental imaging systems include state-of-the-art extra-oral and intra-oral dental digital imaging devices. Our imaging product line features 3Shape Trios intraoral scanner and digital impression systems for offering high-speed digital 3-D picture taking, and the Galaxy BioMill CAD/CAM system which enables dental practitioners to design, scan, mill and finish crowns, inlays and veneers inside the dental office during a single appointment. We also sell the award-winning line of CEFLA NewTom VGi and VG3 3-D Cone Beam Computed Tomography devices in North America. We distribute all of these products under the manufacturer's FDA 510(k) clearances.

**Related Accessories and Consumable Products**

We also manufacture and sell consumable products and accessories for our laser systems. Our Waterlase and Diode systems use disposable laser tips of differing sizes and shapes depending on the procedure being performed. We also market flexible fibers and hand pieces that dental practitioners replace at some point after initially purchasing laser systems. For our Epic systems, we sell teeth whitening gel kits.

**BIOLASE Laser Solutions**

Due to the limitations associated with traditional and alternative dental instruments, we believe there is a large market opportunity for all-tissue dental laser systems that provide superior clinical outcomes, reduce the need to use anesthesia, help reduce trauma, pain, and discomfort associated with dental procedures, and increase patient acceptance for treatment protocols. We also believe there is a large market opportunity for digital radiography systems that improve practice efficiency and accuracy of diagnosis, leading to superior treatment planning, increased practice revenue, and healthier outcomes for patients.

Our Waterlase systems precisely cut hard tissue, bone, and soft tissue with minimal or no damage to surrounding tissue and dental structures. Our Diode systems are designed to complement our Waterlase systems, and are used only in soft tissue procedures, pain therapy, hygiene, and cosmetic applications, including teeth whitening. The Diode systems, together with our Waterlase systems, offer practitioners a broad product line with a range of features and price points.

***Benefits to Dental Professionals***

- *Expanded range of procedures and revenue opportunities*. Our laser systems allow general dentists to perform surgical and cosmetic procedures that they are unable or unwilling to perform using conventional methods, and that would typically be referred to a specialist. Our laser systems allow dentists to perform these procedures easily and efficiently, increasing their range of skills, professional and patient satisfaction levels, patient retention rates, new patient attraction rates, and revenues.
- *Additional procedures through increased information and efficiency*. Our digital imaging systems allow dentists to diagnose and discover cases that they might not be able to detect with film images or other two-dimensional images, thereby giving them the ability to offer more treatment options for patients. Our laser systems can shorten and reduce the number of patient visits, providing dental professionals with the ability to service more patients. For hard tissue procedures, our Waterlase systems can reduce the need for anesthesia, which enables the dental practitioner to perform multiple procedures in one visit. The Waterlase and Diode systems cut soft tissue more precisely and with minimal bleeding when compared to traditional tools such as scalpels and electrosurge systems. We have FDA clearance for treatment indications for use that comprise our REPAIR Perio and REPAIR Implant, our proprietary periodontal protocols for subgingival calculus removal and debridement of root surfaces and implant surfaces using the Waterlase system and patented Radial Firing Perio Tips. This is a minimally invasive treatment for moderate to advanced gum and peri-implant diseases, which are among the leading causes of dental health conditions for adults over age 35 and conditions that impact more than half of Americans over the age of 55. In addition, our Epic system can be used to quickly perform in-office teeth whitening with our proprietary whitening gel and to provide temporary pain relief. The 3Shape Trios and Galaxy BioMill System allow for same-day crowns.
- *Increased loyalty and expanded patient base*. We believe the improved patient comfort and convenience offered by our laser systems, the reduction in chair time and radiation exposure of our digital imaging systems, and the benefits of in-office, chair-side milling helps improve patient retention rates, attract new patients, and increase revenue per patient, demand for elective procedures, acceptance of treatment plans, and word-of-mouth referrals.
- *Improved clinical outcomes*. Our laser systems can be used for dozens of clinical indications with reduced trauma, swelling, and general discomfort of the patient, resulting in improved clinical outcomes and less follow-up treatment. In parallel, our digital imaging systems provide greater clarity and information, making it possible for the doctor to determine the optimal diagnosis and treatment plan. The Galaxy BioMill System further expands treatment options available to patients and allows for same-day crowns. Our products collectively improve clinical outcomes, making it possible for practitioners to devote time to new cases, rather than managing or treating complications.

***Benefits to Patients***

- *Comfort*. Our Waterlase systems allow dentists to perform minimally invasive dental procedures without anesthesia in many cases, and patients recover more comfortably, faster, and with less pain than when treated with conventional instruments. The heat, vibration, microfractures, trauma, or pressure associated with traditional dental methods are largely avoided.
- *Convenience and efficiency*. Procedures utilizing our Waterlase systems do not require anesthesia in many cases, which allows dental practitioners to perform multiple procedures in one appointment, which saves patients time. Digital images are available almost immediately, so patients do not have to spend extra time in the dental chair waiting for film to be developed.
- *Reduced trauma*. Waterlase systems allow for a faster and more pleasant patient recovery with less swelling, bleeding, and general discomfort than when treated with conventional instruments.
- *Broader range of available procedures*. Due to the comfort and convenience of procedures utilizing our Waterlase system, patients may be more likely to consider cosmetic and other elective procedures resulting in better smiles and oral health. Our Waterlase system received expanded clearance from the FDA for dermatological, aesthetic, and general surgery uses, as well as dental procedures. Since digital images are displayed on computer monitors, doctors can make treatment planning a more personal experience for patients. Further, the Galaxy BioMill System offers patients the convenience of same-day crowns. We believe that these factors will lead to greater patient case acceptance.

**Business Strategy**

Our business strategy includes the following key elements:

- *Increasing awareness of and demand for our products among dental practitioners*. We intend to increase demand for our products by educating dental practitioners and patients about the clinical benefits of our product suite. We plan to continue participation in key industry trade shows, the World Clinical Laser Institute® ("WCLI®") (which we founded in 2002), dental schools, and other educational forums. Our products are also used for clinical research, which often leads to published articles that can garner attention from dental practitioners.
- *Increasing awareness of and demand for our laser systems among patients.* We also intend to increase demand for our products by educating patients about the clinical benefits of the Waterlase and Diode systems. We believe that patients will understand the clinical benefits and seek out dental practitioners that offer the Waterlase and Diode systems, which, in turn, will result in increased demand for our systems from dental practitioners.
- *Strengthening customer training and clinical education.* We provide introductory, advanced, and specialized training for dental practitioners to increase their proficiency and to certify them. Our goal is to provide our customers world class training that is accessible and can be executed with a practical technique.
- *Strengthening sales and distribution capabilities.* In the U.S. and Canada, we primarily distribute our products directly to dental practitioners via our field sales force. During 2016, we augmented our field sales force efforts with outbound, phone-based sales support initiatives. These initiatives are driven from our corporate headquarters and are comprised of sales representatives and lead generators working in partnership with the field sales team to maximize effectiveness in engaging and servicing customers. In addition to our field sales force in North America, we also use various independent distributors to sell and support our products throughout Europe, the Middle East, Latin America, and Asia-Pacific regions. We plan to continue to build out the infrastructure to support our customers and to drive revenue and profit growth, both domestically and internationally. This includes expanding our sales presence with respect to the rapidly growing group practices, group purchasing organizations, and government channels.
- *Improving product quality*. We plan to achieve the industry's highest rate of defect-free delivery of products, maintain high quality standards, and address and timely resolve customer complaints. In the U.S., we provide maintenance and support services to customers through our support hotline and dedicated staff of in-house and field service personnel. Outside the U.S., we maintain a network of factory-certified service technicians to provide maintenance and support services to customers.
- *Strengthening and defending technology leadership*. We plan to continue protecting our intellectual property rights by expanding our existing patent portfolio in the United States and internationally. We strategically enforce our intellectual property rights worldwide.
- *Expanding our product portfolio to dental practitioners.* By combining our Waterlase and Epic laser systems with select, in-line digital imaging, intra-oral scanners, CAD/CAM design, and chairside milling products, dental offices can accurately and timely address unmet patient needs with convenience. We plan to continue to evaluate how to optimize the manner in which we market and sell additional products to supplement our core Waterlase and Epic franchises.

- *Creating value through innovation and leveraging existing technologies into adjacent medical applications.* We plan to expand our product line and clinical applications by developing enhancements and transformational innovations, including new clinical solutions for dental applications and for other adjacent medical applications. In particular, we believe that our existing technologies can provide significant improvements over existing standards of care in fields, including ophthalmology, otolaryngology, orthopedics, podiatry, pain management, aesthetics/dermatology, veterinary, and consumer products. We plan to continue to explore potential collaborations to bring our proprietary laser technologies with expanded FDA-cleared indications for other medical applications in the future. In addition, we may acquire complementary products and technologies. We also aim to increase our consumables revenue by selling more single-use accessories used by dental practitioners when performing procedures using our dental laser systems.

**Warranties**

Our Waterlase laser systems and Diode systems sold domestically are covered by a warranty against defects in material and workmanship for a period of up to two years from the date of sale to the end-user by us or a distributor. Waterlase systems and Diode systems sold internationally are covered by a warranty against defects in material and workmanship for a period of up to 28 months from date of sale to the international distributor. Our laser systems warranty covers parts and service for sales in our North American territories and parts only for international distributor sales. In North America and select international locations, we sell service contracts to our laser systems end users that cover the period after the expiration of our standard warranty coverage for our laser systems. Extended warranty coverage provided under our service contracts varies by the type of system and the level of service desired by the customer. Products or accessories remanufactured, refurbished, or sold by unauthorized parties, voids all warranties in place for such products and exempts us from liability issues relating to the use of such products. We offer extended warranties on certain imaging products that we distribute, including our digital radiography products. However, all imaging products that we distribute are initially covered by manufacturer's warranties.

**Insurance**

We maintain product liability insurance on a claims-made-and-reported basis with a limit of $10 million per occurrence and $10 million in the aggregate for all occurrences. The insurance is subject to various standard coverage exclusions, including damage to the product itself, losses from the recall of our product, and losses covered by other forms of insurance such as workers compensation. We cannot be certain that we will be able to successfully defend any claims against us, nor can we be certain that our insurance will cover all liabilities resulting from such claims. In addition, we cannot provide assurance that we will be able to obtain such insurance in the future on terms acceptable to us, or at all.

**Manufacturing**

Our strategy is to manufacture products in-house when it is efficient for us to do so. We currently manufacture, assemble, and test all of our laser systems at our corporate headquarters facility in Irvine, California. The 57,000 square foot facility has approximately 20,000 square feet dedicated to manufacturing and warehousing. The facility is ISO 13485 certified. ISO 13485 certification provides guidelines for our quality management system associated with the design, manufacture, installation, and servicing of our products. In addition, our U.S. facility is registered with the FDA and complies in all material respects with the FDA's Quality System Regulation.

We use an integrated approach to manufacturing, including the assembly of tips, laser hand pieces, fiber assemblies, laser heads, electro-mechanical subassembly, final assembly, and testing. We obtain components and subassemblies for our products from third-party suppliers, the majority of which are located in the United States. We generally purchase components and subassemblies from a limited group of suppliers through purchase orders. In general, we rely on these purchase orders and do not have written supply contracts with many of our key suppliers. Three key components used in our Waterlase system (power suppliers, laser crystals, and fiber components) are each supplied by separate single-source suppliers. In recent years, we have not experienced material delays from the suppliers of these three key components. However, in the event that we experience an unexpected interruption from a single-source supplier, manufacturing delays, re-engineering, significant costs, and sales disruptions could occur, any of which could have a material adverse effect on our operations. As of the date on which this Form 10-K was filed with the SEC, we were in the process of identifying and qualifying alternate source suppliers for our key components, including but not limited to those noted above. There can be no assurance, however, that we will successfully identify and qualify an alternate source supplier for any of our key components or that we could enter into an agreement with any such alternate source supplier on terms acceptable to us.

As discussed below, we are subject to periodic inspections by the FDA as a manufacturer of medical devices. Such inspections can cover manufacturing, design, production, reporting, recordkeeping, and other processes and can lead to FDA observations requiring corrective action, which can disrupt normal processes.

## Marketing and Sales

### *Marketing*

We market our laser systems worldwide. Our marketing efforts are focused on increasing brand awareness and demand for BIOLASE laser solutions among dental practitioners. We also continue to test methods to increase awareness of our brands' benefits by marketing directly to patients.

*Dental Practitioners.* We market our laser systems to dental practitioners through regional, national, and international educational events, seminars, industry tradeshows, trade publications, the internet, field sales forces (in North America and Canada), and agents and distributors. We also use brochures, direct mail, public relations, social media, and other promotional tools and materials.

Our primary marketing message to dental practitioners focuses on the ability of BIOLASE lasers to resolve dental challenges and deliver improved cash flow and return on investment ("ROI"), which can be realized with improved patient-reported outcomes. In 2015, we revamped our clinical and practical educational events for prospective laser dentists to include practice management and ROI information. In 2014, we introduced the *Journal of Laser-Assisted Dentistry* as a platform to provide education and research to users. In 2010, we introduced the BIOLASE Store for online purchase of laser systems, consumables, accessories, and service contracts in North America. In 2002, we founded the World Clinical Laser Institute (the "WCLI") to formalize our efforts to educate and train dental practitioners in laser dentistry. We believe that, as the community of BIOLASE dental practitioners expands, the WCLI will continue to deliver fresh, exciting laser educational opportunities utilizing the latest in learning methodologies and platforms. The WCLI conducts and sponsors educational programs domestically and internationally for dental practitioners, researchers, and academicians, including one, two, and three-day seminars and training sessions involving in-depth presentations on the use of lasers in dentistry. In addition, we have developed relationships with research institutions, dental schools, and dental laboratories that use our products for clinical research and in-clinical training. We believe these relationships will increase awareness of and demand for our products.

*Patients.* We plan to continue to test ways to effectively market the benefits of our laser systems directly to patients through marketing and advertising programs, including the internet, search engine optimization, social media, print and broadcast media, and point-of-sale materials in dental practitioners' offices. We believe that making patients aware of our laser systems and their benefits will motivate them to request from dental practitioners laser procedures and their outcomes thereby increasing demand for our brands. We can be found online at biolase.com, and on Facebook, Twitter, LinkedIn, Instagram, and YouTube. Unless specifically stated otherwise, none of the information contained on any of these sites online is incorporated in this Form 10-K by reference.

### *Sales*

We sell our products primarily to dentists in general practice through our field sales force and our distributor network. We expect our laser systems to continue to gain acceptance among periodontists, endodontists, oral surgeons, pediatric dentists, and other dental specialists as they become aware of the clinical benefits and minimally invasive treatment options available by using our laser systems.

The following table summarizes our net revenues by category for the years ended December 31, 2016, 2015, and 2014 (dollars in thousands):

| | Years Ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | 2014 | |
| Laser systems | $ 35,150 | 67.9% | $ 32,691 | 67.5% | $ 29,490 | 61.9% |
| Imaging systems | 3,066 | 5.9% | 2,237 | 4.6% | 4,286 | 9.0% |
| Consumables and other | 6,906 | 13.3% | 6,877 | 14.2% | 6,524 | 13.7% |
| Services revenue | 6,539 | 12.6% | 6,465 | 13.3% | 7,211 | 15.1% |
| Products and services revenue | 51,661 | 99.7% | 48,270 | 99.6% | 47,511 | 99.7% |
| License fees and royalties | 149 | 0.3% | 205 | 0.4% | 145 | 0.3% |
| Net revenue | $ 51,810 | 100.0% | $ 48,475 | 100.0% | $ 47,656 | 100.0% |

Net revenue by geographic location based on the location of customers was as follows (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| United States | $ 33,385 | $ 29,433 | $ 29,848 |
| International | 18,425 | 19,042 | 17,808 |
| | $ 51,810 | $ 48,475 | $ 47,656 |

International revenue accounts for a significant portion of our total revenue and accounted for approximately 36%, 39%, and 37% of our net revenue in 2016, 2015, and 2014, respectively. No individual country outside the United States represented more than 10% of our net revenue during the years ended December 31, 2016, 2015, and 2014.

For financial information about our long-lived assets, see Note 2 and Note 9 to the *Notes to the Consolidated Financial Statements — Summary of Significant Accounting Policies* and *— Segment Information*.

*North American Sales.* In the United States and Canada, we primarily sell our products directly to dental practitioners utilizing a field sales force consisting of laser sales representatives and regional managers. We also have an in-house sales force, which is located at our corporate headquarters and is comprised of sales representatives and lead generators who work in partnership with the field sales team to maximize sales by leveraging the existing installed customer base.

*International Sales*. Our distributors purchase laser systems and disposables from us at wholesale dealer prices and resell them to dentists in their sales territories. All sales to distributors are final and we can terminate our arrangements with dealers, agents, and distributors for cause or non-performance. We have granted certain distributors the right to be our exclusive distributor in select territories. These distributors are generally required to satisfy certain minimum purchase requirements to maintain their exclusivity. We have sold our products directly to end users in Germany since 2011 and directly to end users in India and neighboring countries since 2012.

*Customer Concentration*. We sell our products through our field sales force, agents, and distributors. For the years ended December 31, 2016, 2015, and 2014, sales to our largest distributor worldwide accounted for approximately 4%, 3%, and 6%, respectively, of our net revenue.

*Customer Service.* We provide high quality maintenance and support services in the United States through our support hotline and dedicated staff of in-house and field service personnel. Outside the United States, we maintain a network of factory-certified service technicians to provide maintenance and support services to customers. Our international distributors are responsible for providing maintenance and support services for products sold by them. We provide parts to distributors at no additional charge for products covered under warranty.

*Financing Options.* Most customers (other than distributors) finance their purchases through several third-party financial institutions with which we have established good relationships. In the United States and Canada, third-party customers enter into a financing agreement with one of the financial institutions that purchases the product from us or one of our distributors. We are not party to these financing agreements. Thus if the customer agrees to pay the financial institution in installments, we do not bear the credit risk. The financial institutions do not have recourse to us for a customer's failure to make payments, nor do we have any obligation to take back the product.

*Seasonality*. Typically, we experience fluctuations in revenue from quarter to quarter due to seasonality. Revenue in the first quarter typically is lower than average and revenue in the fourth quarter typically is stronger than average due to the buying patterns of dental practitioners. We believe that this trend exists because a significant number of dentists purchase their capital equipment towards the end of the calendar year in order to maximize their practice earnings while seeking to minimize their taxes. They often use certain tax incentives, such as accelerated depreciation methods for purchasing capital equipment, as part of their year-end tax planning. In addition, revenue in the third quarter may be affected by vacation patterns which can cause revenue to be flat or lower than in the second quarter of the year. Our historical seasonal fluctuations may also be impacted by sales promotions used by large dental distributors that encourage end-of-quarter and end-of-year buying in our industry. Because of these seasonal fluctuations, historically we have often used less cash in operations for the six months ended December 31 as compared to the six months ended June 30.

**Engineering and Product Development**

Engineering and product development activities are essential to maintaining and enhancing our business. We believe our engineering and product development team has demonstrated its ability to develop innovative products that meet evolving market needs. Our engineering and product development group consists of 20 individuals with medical device and laser development experience, including two Ph.Ds. During the years ended December 31, 2016, 2015, and 2014, our engineering and product development expenses totaled approximately $7.8 million, $7.3 million, and $4.6 million, respectively. Our current engineering and product development activities are focused on developing new product platforms, improving our existing products and technology and extending our product range in order to provide dental practitioners and patients with new and improved protocols or procedures that are less painful and have clinically superior results. Some examples of the improvements we are pursuing for our laser systems include faster cutting speed, improved ease of use, less need for anesthesia, interconnectivity, and an expanded portfolio of consumable products for use with our laser systems. Our engineering and product development activities encompass both fundamental and applied fields. We seek to improve methods to perform clinical procedures through the use of new laser wavelengths, laser operation modes and accessories.

We also devote engineering and product development resources toward markets outside of dentistry in which we might exploit our technology platform and capabilities. We believe our laser technology and development capabilities could address unmet needs in several other medical applications, including ophthalmology, otolaryngology, orthopedics, podiatry, pain management, aesthetics/dermatology, veterinary, and consumer products. We have already started to enter the otolaryngology, pain management, and veterinary markets to varying degrees.

To further our development efforts, we have entered into a development and distribution agreement with IPG. The development and distribution agreement between the Company and IPG covers several projects in various stages of development, with the expectation that these projects will culminate in commercialized joint dental laser products, accessories, or integral system components. The parties will collaborate in the design and development of these new products and applications, with each party contributing its technological expertise, know-how, and development resources. We will be responsible for U.S. and international registrations of all dental products resulting from the agreement, and we will have exclusive worldwide commercial distribution rights for certain products over a multi-year initial term after completion of development.

**Intellectual Property and Proprietary Rights**

We believe that in order to maintain a competitive advantage in the marketplace, we must develop and maintain protection of the proprietary aspects of our technology. We rely on a combination of patents, trademarks, trade secrets, copyrights and other intellectual property rights to protect our intellectual property. We have developed a patent portfolio internally, and to a lesser extent through acquisitions and licensing, that covers many aspects of our product offerings. As of December 31, 2016, we had approximately 230 issued patents and 85 pending patent applications in the United States, Europe and other countries. While we hold a variety of patents that cover a broad range of technologies and methods, the majority of these patents provide market protection for our core technologies incorporated in our laser systems and related accessories. Existing patents related to our core technology, which are at various stages of being incorporated into our products, are scheduled to expire as follows: 4 in 2017, 21 in 2018, and 3 in 2019, with the majority having expiration dates ranging from 2025 to 2038. With approximately 85 patent applications pending, we expect the number of new grants to exceed the number of patents expiring. We do not expect the expiration of the expired or soon-to-expire patents to have a material adverse effect on our business, financial condition, or results of operations.

There are risks related to our intellectual property rights. For further details on these risks, see Item 1A — "Risk Factors."

**Competition**

We operate under relatively competitive market conditions. We believe that the principal competitive factors for companies that market technologies in dental and other medical applications include acceptance by leading dental and medical practitioners, product performance, product pricing, intellectual property protection, customer education and support, timing of new product research, and development of successful national and international distribution channels.

Our competitors vary by product and location. There are companies that market some, but not all, of the same types of products as ours. Our laser systems compete with other lasers, mostly with other wavelengths, patient outcomes, and benefit profiles, as well as with drills, scalpels, scissors, air abrasion systems, and a variety of other tools that are used to perform dental and medical procedures. We believe our products have key differentiating performance features. For example, we market diode lasers which also have FDA clearance for use in both pain management therapy and teeth whitening and our Waterlase systems have been FDA-cleared for a wide range of uses beyond dentistry, including dermatological, aesthetics, and other general surgery uses. Our teeth whitening technology competes with other in-office whitening products and high intensity lights used by dentists, as well as teeth whitening strips, and other over-the-counter products. Our pain management technology competes with a variety of traditional, advanced, and pharmaceutical pain management products and services. The dental imaging equipment and in-office milling machines that we offer compete with traditional dental laboratories, imaging centers and products and services.

Traditional tools are generally less expensive than our laser systems for performing similar procedures. For example, a high-speed drill or an electrosurge device can be purchased for less than $2,500 each. In addition, though our systems are superior to traditional tools in many ways, they are not intended to replace all of the applications of traditional tools, such as removing metal fillings and certain polishing and grinding functions.

Some of our competitors have significantly greater financial, marketing, and/or technical resources than we do. In addition, some competitors have developed, and others may attempt to develop, products with applications similar to those performed by our products. Because of the large size of the potential market for our products, we anticipate that new or existing competitors may develop competing products, procedures, or clinical solutions that could prove to be more effective, safer, or less costly than procedures using our laser systems. The introduction of new products, procedures, or clinical solutions by competitors may result in price reductions, reduced margins, or loss of market share, or may render our products obsolete.

**Government Regulations**

***FDA and Related Regulatory Requirements***

Our products are subject to extensive regulation particularly as to safety, efficacy and adherence to FDA Quality System Regulation, and related manufacturing standards. Medical device products are subject to rigorous FDA and other governmental agency regulations in the United States and similar regulations of foreign agencies abroad. The FDA regulates the design, development, research, preclinical and clinical testing, introduction, manufacture, advertising, labeling, packaging, marketing, distribution, import and export, and record keeping for such products, in order to ensure that medical products distributed in the United States are safe and effective for their intended use. In addition, the FDA is authorized to establish special controls to provide reasonable assurance of the safety and effectiveness of most devices. Non-compliance with applicable requirements can result in import detentions, fines, civil and administrative penalties, injunctions, suspensions or losses of regulatory approvals, recall or seizure of products, operating restrictions, refusal of the government to approve product export applications or allow us to enter into supply contracts, and criminal prosecution.

Unless an exemption applies, the FDA requires that a manufacturer introducing a new medical device or a new indication for use of an existing medical device obtain either a Section 510(k) premarket notification clearance or a premarket approval, or PMA, before introducing it into the U.S. market. The type of marketing authorization is generally linked to the classification of the device. The FDA classifies medical devices into one of three classes (Class I, II, or III) based on the degree of risk the FDA determines to be associated with a device and the level of regulatory control deemed necessary to ensure the device's safety and effectiveness.

Our products currently marketed in the United States are marketed pursuant to 510(k) pre-marketing clearances and are either Class I, Class II, or Class III devices. The process of obtaining a Section 510(k) clearance generally requires the submission of performance data and often clinical data, which in some cases can be extensive, to demonstrate that the device is "substantially equivalent" to a device that was on the market before 1976 or to a device that has been found by the FDA to be "substantially equivalent" to such a pre-1976 device (referred to as "predicate device"). As a result, FDA clearance requirements may extend the development process for a considerable length of time. In addition, in some cases, the FDA may require additional review by an advisory panel, which can further lengthen the process. The PMA process, which is reserved for new devices that are not substantially equivalent to any predicate device and for high-risk devices or those that are used to support or sustain human life, may take several years and requires the submission of extensive performance and clinical information.

Medical devices can be marketed only for the indications for which they are cleared or approved. After a device has received 510(k) clearance for a specific intended use, any change or modification that significantly affects its safety or effectiveness, such as a significant change in the design, materials, method of manufacture, or intended use, may require a new 510(k) clearance or PMA approval and payment of an FDA user fee. The determination as to whether or not a modification could significantly affect the device's safety or effectiveness is initially left to the manufacturer using available FDA guidance; however, the FDA may review this determination to evaluate the regulatory status of the modified product at any time and may require the manufacturer to cease marketing and recall the modified device until 510(k) clearance or PMA approval is obtained. The manufacturer may also be subject to significant regulatory fines or penalties. The FDA is currently reviewing its guidance describing when it believes a manufacturer is obligated to submit a new 510(k) submission for modifications or changes to a previously cleared device. The FDA is expected to issue revised guidance to assist device manufacturers in making this determination. It is unclear whether the FDA's approach in this new guidance will result in substantive changes to existing policy and practice regarding the assessment of whether a new 510(k) clearance is required for changes or modifications to existing devices.

Any devices we manufacture and distribute pursuant to clearance or approval by the FDA are subject to pervasive and continuing regulation by the FDA and certain state agencies. These include product listing and establishment registration requirements, which help facilitate FDA inspections and other regulatory actions. As a medical device manufacturer, all of our manufacturing facilities are subject to inspection on a routine basis by the FDA. We are required to adhere to applicable regulations setting forth detailed current good manufacturing practice (or cGMP) requirements, as set forth in the QSR, which require, manufacturers, including third-party manufacturers, to follow stringent design, testing, control, documentation and other quality assurance procedures during all phases of the design and manufacturing process. Noncompliance with these standards can result in, among other things, fines, injunctions, civil penalties, recalls or seizures of products, total or partial suspension of production, refusal of the government to grant 510(k) clearance or PMA approval of devices, withdrawal of marketing approvals, and criminal prosecutions. We believe that our design, manufacturing, and quality control procedures are in compliance with the FDA's regulatory requirements.

We must also comply with post-market surveillance regulations, including medical device reporting requirements which require that we review and report to the FDA any incident in which our products may have caused or contributed to a death or serious injury. We must also report any incident in which any of our products has malfunctioned if that malfunction would likely cause or contribute to a death or serious injury if it were to recur.

Labeling and promotional activities are subject to scrutiny by the FDA and, in certain circumstances, by the Federal Trade Commission ("FTC") and by state regulatory and enforcement authorities. Medical devices approved or cleared by the FDA may not be promoted for unapproved or uncleared uses, otherwise known as "off-label" promotion. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability, including substantial monetary penalties and criminal prosecution.

Promotional activities for FDA-regulated products of other companies have also been the subject of enforcement actions brought under health care reimbursement laws and consumer protection statutes. In addition, under the federal Lanham Act and similar state laws, competitors and others can initiate litigation relating to advertising claims. If the FDA determines that our promotional materials or training constitutes promotion of an uncleared or unapproved use, the FDA could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions, including the issuance of an untitled letter, a notice of violation, a warning letter, an injunction, a seizure, a civil fine, or criminal penalties. In that event, our reputation could be damaged and adoption of the products could be impaired.

We have registered with the FDA as a medical device manufacturer and we have obtained a manufacturing license from the California Department of Health Services. As a manufacturer, we are subject to announced and unannounced facility inspections by the FDA and the California Department of Health Services to determine our compliance with various regulations. Our subcontractors' manufacturing facilities are also subject to inspection.

***Foreign Regulation***

Sales of medical devices outside the United States are subject to regulatory requirements that vary widely from country to country. Approval for sale of our medical devices in Europe is through the CE mark process. Where appropriate, our products are CE marked to the European Union's Medical Device Directive. Under the CE marketing scheme, our products are classified as either Class I, Class II or Class III.

Medical devices marketed in the EU must meet all proper regulatory requirements and bear the “CE Mark” (“CE”). Existing in its present form since 1985, the CE marking indicates that the manufacturer or importer claims compliance with the relevant EU legislation applicable to a product, regardless of where manufactured. By affixing the CE marking on a product, a manufacturer is declaring, at its sole responsibility, conformity with all of the legal requirements to achieve CE marking which allows free movement and sale of the product throughout the European Economic Area (the “EEA”).

For example, most electrical products must comply with the Low Voltage Directive and the EMC Directive. The marking does not indicate EEA manufacture or that a product has been approved as safe by the EU or by another authority. The EU requirements may include safety, health, and environmental protection, and, if stipulated in any EU product legislation, assessment by a Notified Body or manufacture according to a certified production quality system. The CE marking also indicates that the product complies with directives in relation to Electro Magnetic Compatibility, meaning the device will work as intended, without interfering with the use or function of any other device.

Not all products need CE marking to be traded in the EEA; only product categories subject to relevant directives or regulations are required (and allowed) to bear CE marking. Most CE-marked products can be placed on the market subject to an internal production control by the manufacturer with no independent check of the conformity of the product with EU legislation; ANEC has cautioned that, amongst other things, CE marking cannot be considered a “safety mark” for consumers.

In addition, CE marking is a self-certification scheme. Retailers sometimes refer to products as “CE approved”, but the mark does not actually signify approval. Certain categories of products require type-testing by an independent body to ensure conformity with relevant technical standards, but CE marking in itself does not certify that this has been done.

We are ISO 13485 (Medical devices - Quality management systems - Requirements for regulatory purposes) Certified. We have received and are authorized for CE Marking for our Waterlase and Diode laser systems. In addition, hawse have attained the proper licensing for Waterlase and Diode laser systems for sale in Canada, meeting the CMDR (Canadian Medical Device Regulation) as part of the ISO certification process

***Other U.S. Regulation***

We and our subcontractors also must comply with numerous federal, state and local laws relating to matters such as safe working conditions, manufacturing practices, environmental protection, fire hazard control, and hazardous substance disposal. Furthermore, we are subject to various reporting requirements including those prescribed by the Affordable Care Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act. We cannot be sure that we will not be required to incur significant costs to comply with these laws and regulations in the future or that these laws or regulations will not adversely affect our business, financial condition, and results of operations. Unanticipated changes in existing regulatory requirements or the adoption of new requirements could adversely affect our business, financial condition, and results of operations.

***Environmental***

Our manufacturing processes involve the use, generation, and disposal of hazardous materials and wastes, including alcohol, adhesives, and cleaning materials. As such, we are subject to stringent federal, state, and local laws relating to the protection of the environment, including those governing the use, handling, and disposal of hazardous materials and wastes. Future environmental laws may require us to alter our manufacturing processes, thereby increasing our manufacturing costs. We believe that our products and manufacturing processes at our facilities comply in all material respects with applicable environmental laws and worker health and safety laws. However, the risk of environmental liabilities cannot be completely eliminated.

### *Health Care Fraud and Abuse*

As a medical device manufacturer, our operations and interactions with health care providers, including dentists, are subject to extensive laws and regulations imposed at the federal, state, and local level in the U.S., including, but not limited to, those discussed in this Form 10-K. In the U.S., there are federal and state anti-kickback statutes that generally prohibit the payment or receipt of kickbacks, bribes, or other remuneration in exchange for the referral of patients or other health-related business. For example, the federal Anti-Kickback Statute is a criminal statute that prohibits anyone from, among other things, knowingly and willfully offering, paying, soliciting, or receiving any bribe, kickback, or other remuneration intended to induce a referral for the furnishing of, or the purchase, order, or recommendation of, any item or service reimbursable under the Federal health care programs ("FHCPs"), including Medicare, Medicaid, and TRICARE. Recognizing that the federal Anti-Kickback Statute is broad and potentially applicable to many commonplace arrangements, the U.S. Congress and the Office of Inspector General ("OIG") within the Department of Health and Human Services ("HHS") have created statutory "exceptions" and regulatory "safe harbors" to the federal Anti-Kickback Statute. Exceptions and safe harbors exist for a number of arrangements relevant to our business, including, among other things, certain payments to bona fide employees, certain discount and rebate arrangements, and certain payment arrangements with health care providers, assuming all elements of the relevant exception/safe harbor have been satisfied. Although an arrangement that fits squarely into one or more of these exceptions or safe harbors generally will not be subject to prosecution, OIG has also cautioned in various contexts that even where each component of an arrangement has been structured to satisfy a safe harbor, the components, as part of an overall arrangement, may still violate the federal Anti-Kickback Statute. However, arrangements that do not fit squarely within an exception or safe harbor do not necessarily violate the federal Anti-Kickback Statute. Rather, OIG and/or other government enforcement authorities will examine the facts and circumstances relevant to the specific arrangement to determine whether it involves the sorts of abuses that the statute was designed to combat. Violations of this federal law constitute a felony offense punishable by imprisonment, criminal fines of up to $25,000, civil fines of up to $73,588 per violation (as adjusted for annual inflation) and three times the amount of the unlawful remuneration, and exclusion from Medicare, Medicaid, and other FHCPs. Exclusion of a manufacturer, like us, would preclude any FHCP from paying for the manufacturer's products. In addition, pursuant to the changes made by the Affordable Care Act, a claim resulting from a violation of the federal Anti-Kickback Statute may serve as the basis for a false claim under the federal Civil False Claims Act. Many states also have their own laws that parallel and implicate anti-kickback restrictions, but may apply regardless of whether any FHCP business is involved. Federal and state anti-kickback laws may affect our sales, marketing and promotional activities, educational programs, pricing and discount practices and policies, and relationships with dental and medical providers by limiting the kinds of arrangements we may have with hospitals, alternate care market providers, physicians, dentists, and others in a position to purchase or recommend our products.

Federal and state false claims laws prohibit anyone from presenting, or causing to be presented, claims for payment to third-party payers that are false or fraudulent. For example, the federal Civil False Claims Act imposes liability on any person or entity that knowingly presents, or causes to be presented, a false or fraudulent claim for payment to the government, including FHCPs. Some suits filed under the Civil False Claims Act can be brought by a "whistleblower" or a "relator" on behalf of the government, and such individuals may share in any amounts paid by the entity to the government in fines or settlement. Manufacturers, like us, can be held liable under false claims laws, even if they do not submit claims to the government, where they are found to have caused submission of false claims by, among other things, providing incorrect coding or billing advice about their products to customers that file claims, or by engaging in kickback arrangements with customers that file claims. A violation of the Civil False Claims Act could result in fines of up to $21,653 (as adjusted for annual inflation) for each false claim, plus up to three times the amount of damages sustained by the government. A Civil False Claims Act violation may also provide the basis for the imposition of administrative penalties and exclusion from participation in FHCPs. In addition to the Civil False Claims Act, the federal government also can use several criminal statutes to prosecute persons who are alleged to have submitted false or fraudulent claims for payment to the federal government, or improperly retained funds received which were not due. Moreover, a number of states also have false claims laws, and some of these laws may apply to claims for items or services reimbursed under Medicaid and/or commercial insurance.

In addition to the general fraud statutes mentioned above, there are a variety of other fraud and abuse laws specific to health care. For example, the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") created several new federal crimes, including health care fraud and false statements related to health care matters. The health care fraud statute prohibits, among other things, knowingly and willfully executing a scheme to defraud any health care benefit program, including private payers. A violation of this statute is a felony and may result in fines, up to ten years imprisonment (assuming no serious bodily injury or death results), or exclusion from FHCPs. The false statements statute prohibits, among other things, knowingly and willfully falsifying, concealing or covering up a material fact, or making any materially false, fictitious, or fraudulent statement in connection with the delivery of or payment for items or services under a health care benefit program. A violation of this statute is a felony and may result in fines and imprisonment and could potentially result in the government's pursuit of exclusion from FHCPs. Additionally, a person who offers or transfers to a Medicare or Medicaid beneficiary any remuneration that the person knows or should know is likely to influence the beneficiary's selection of a particular provider, practitioner, or supplier of items or services payable by Medicare or Medicaid may be liable for civil money penalties of up to $10,000 for each item or service and potential exclusion from FHCPs.

The Physician Payments Sunshine Act requires us to report annually to the Centers for Medicare and Medicaid Services ("CMS") certain payments and other transfers of value we make to U.S.-licensed physicians, dentists, and teaching hospitals. These annual reports are publicly available, which could impact the number of health care providers who are willing to work with us on the research and development of our products. In addition, several states have implemented similar transparency and disclosure laws applicable to medical device manufacturers, some of which require reporting of transfers of value made to a wider variety of health care professionals and institutions.

The federal physician self-referral prohibition ("Stark Law") is a strict liability statute, which, in the absence of a statutory or regulatory exception, prohibits: (i) the referral of Medicare and Medicaid patients by a physician to an entity for the provision of designated health care services if the physician or a member of the physician's immediate family has a direct or indirect financial relationship, including an ownership interest in, or a compensation arrangement with, the entity and (ii) the submission of a bill to Medicare or Medicaid for services rendered pursuant to a prohibited referral. Penalties for violations of the Stark Law include denial of payment for the service, required refund of payments received pursuant to the prohibited referral, and civil monetary penalties for knowing violations of up to $23,863 per claim (as adjusted for annual inflation), up to $159,089 for circumvention schemes, and up to $10,874 per day for failing to report information concerning the entity's ownership, investment, and compensation arrangements upon HHS' request. Stark Law violations also may lead to False Claims Act liability and possible exclusion from FHCPs.

The FCPA generally prohibits companies and their intermediaries from offering to pay, promising to pay, or authorizing the payment of money or anything of value to non-U.S. officials for the purpose of influencing any act or decision of the foreign official in his/her capacity or to secure any other improper advantage to obtain or retain business. Violation of the anti-bribery provisions of the FCPA can result in criminal fines of up to $2 million and civil penalties of up to $16,000 for each violation. Individuals, including officers, directors, stockholders, and agents of companies, can be subject to a criminal fine of up to $250,000 and imprisonment, in addition to civil penalties of up to $16,000, per violation.

Due to the breadth of some of these laws, it is possible that some of our current or future practices might be challenged under one or more of these laws. In addition, there can be no assurance that we would not be required to alter one or more of our practices to be in compliance with these laws. Evolving interpretations of current laws or the adoption of new federal or state laws or regulations could adversely affect some of the arrangements we have with customers, physicians, and dentists. If our past or present operations are found to be in violation of any of these laws, we could be subject to civil and criminal penalties, which could hurt our business, financial condition, and results of operations.

***Privacy and Security of Health Information***

Numerous federal, state, and international laws and regulations govern the collection, use, and disclosure of patient-identifiable health information, including HIPAA. HIPAA applies to covered entities, which include, among other entities, a "health care provider" that transmits health information in electronic form in connection with certain transactions regulated under HIPAA. HIPAA also applies to "business associates," meaning persons or entities that create, receive, maintain, or transmit protected health information ("PHI") to perform a function on behalf of, or provide a service to, a covered entity. Although we are not a covered entity, most health care (including dental) facilities that purchase our products are covered entities under HIPAA. Due to activities that we perform for or on behalf of covered entities, we may sometimes act as a business associate, or our customers may ask us to enter Business Associate Agreements and assume business associate responsibilities.

Various implementing regulations have been promulgated under HIPAA. The HIPAA Security Rule requires implementation of certain administrative, physical, and technical safeguards to ensure the confidentiality, integrity, and availability of electronic PHI. The HIPAA Privacy Rule governs the use and disclosure of PHI and provides certain rights to individuals with respect to that information. For example, for most uses and disclosures of PHI, other than for treatment, payment, health care operations, and certain public policy purposes, the HIPAA Privacy Rule generally requires obtaining valid written authorization from the individual, including in the research context. With certain limited exceptions, the covered entity performing the research must obtain valid authorization from the research subject (or an appropriate waiver) before providing that subject's PHI to sponsors like us. Furthermore, in most cases, the HIPAA Privacy Rule requires that use or disclosure of PHI be limited to the minimum necessary to achieve the purpose of the use or disclosure.

The HIPAA Privacy and Security Rules require covered entities to contractually bind us, where we are acting as a business associate, to protect the privacy and security of individually identifiable health information that we may use, access, or disclose for purposes of services we may provide. Moreover, the Health Information Technology for Economic and Clinical Health Act ("HITECH") enacted in February 2009, made certain provisions of the HIPAA Privacy and Security Rules directly applicable to business associates.

HITECH also established new breach notification requirements, increased civil penalty amounts for HIPAA violations, and requires HHS to conduct periodic audits of covered entities and business associates to confirm compliance. In addition, HITECH authorizes state attorneys general to bring civil actions in response to HIPAA violations committed against residents of their respective states.

On January 17, 2013, the Office for Civil Rights ("OCR") of HHS released an omnibus final rule ("Final Rule"), implementing HITECH. Among other provisions, the Final Rule made certain changes to the breach notification regulations, including requiring business associates to notify covered entities if a breach occurs at or by the business associate. Following a breach of unsecured PHI, covered entities must provide notification of the breach to affected individuals, the HHS Secretary, and, for breaches affecting more than 500 residents of a state or jurisdiction, prominent media outlets serving that state/jurisdiction. Breaches of health information can also give rise to class actions by affected individuals and result in significant reputational damage to the covered entity and/or business associates or other parties involved in the breach.

The Final Rule also provides for heightened governmental investigations of potential non-compliance. However, the Final Rule did not address accounting of disclosures, although such regulations are forthcoming. The proposed rule addressing accounting of disclosures, if finalized, could impose a significant burden on us, as it would require covered entities and their business associates to develop systems to monitor (1) which employees access an individual's electronic PHI contained in a designated record set, (2) the time and date such access occurs, and (3) the action taken during the access session (e.g., modification, deletion, viewing).

Failure to comply with HIPAA may result in civil and criminal penalties. Civil penalties for a single violation of the regulations occurring on or after February 18, 2009 range from $110 to more than $55,000 per violation, with a maximum penalty of $1,650,300 per year for violations of an identical provision of the regulations. Criminal penalties of up to $250,000 and imprisonment may also be imposed for certain knowing violations of HIPAA. We may be required to make costly system modifications, which may restrict our business operations, to comply with HIPAA, to the extent we act as a business associate. Our failure to comply may result in liability and adversely affect our business, financial condition, and results of operations.

Numerous other federal and state laws protect the confidentiality of patient information, including state medical privacy laws and federal and state consumer protection laws. These state laws may be similar to or possibly more stringent than the federal provisions. These laws in many cases are not preempted by the HIPAA rules and may be subject to varying interpretations by the courts and government agencies, creating complex compliance issues for us and our customers and potentially exposing us to additional expense, adverse publicity, and liability. Other countries also have, or are developing, laws governing the collection, use, and transmission of personal or patient information, which could create liability for us or increase our cost of doing business.

New health information standards, whether implemented pursuant to HIPAA, future Congressional action, or otherwise, could have a significant effect on the manner in which we handle health information, and the cost of complying with these standards could be significant. If we do not properly comply with existing or new laws and regulations related to patient health information, we could be subject to criminal or civil sanctions.

**Third-Party Reimbursement**

Dentists and other health care providers that purchase our products may rely on third-party payers, including the Medicare, Medicaid, and private payers to cover and reimburse all or part of the cost of the clinical procedures performed using our products. As a result, demand for our products is dependent in part on the coverage and reimbursement policies of these payers. We believe that most of the procedures being performed with our current products generally are reimbursable, with the exception of cosmetic applications, such as teeth whitening.

No uniform coverage or reimbursement policy for dental and medical treatment exists among third-party payers, and coverage and reimbursement can differ significantly from payer to payer. Under Medicaid, for example, states are required to cover basic dental services for children, but retain discretion as to whether to provide coverage for dental services for adults. Under the Early Periodic Screening, Diagnostic, and Treatment benefit available to children, dental services determined to be "medically necessary" and provided at intervals that meet reasonable standards of dental practice (or at such other intervals, as indicated by medical necessity) are generally covered by Medicaid. Although not required to cover dental services for adults, most state Medicaid programs still provide a degree of coverage for at least emergency dental services.

Medicare covers dental services only in certain limited circumstances. For instance, Medicare will pay for certain dental services when provided in the inpatient hospital setting if the dental procedure itself made hospitalization necessary. Medicare will also pay for certain dental services that are an integral part of a covered procedure (e.g., jaw reconstruction following accidental injury), extractions done in preparation for certain radiation treatments, and oral examinations preceding kidney transplantation or heart valve replacement, under certain circumstances.

Future legislation, regulation or coverage and reimbursement policies of third-party payers may adversely affect the demand for our products. For example, the Affordable Care Act included various reforms impacting Medicare reimbursement and coverage, including revision to prospective payment systems, any of which may adversely impact any Medicare reimbursements received by our end-user customers. Moreover, the Budget Control Act of 2011, enacted on August 2, 2011, established a process to reduce federal budget deficits through an automatic "sequestration" process if deficit reductions targets are not otherwise reached. Under the terms of the Budget Control Act, sequestration imposes cuts to a wide range of federal programs, including Medicare, which is subject to a 2% cut. The Bipartisan Budget Act of 2015 extended the 2% sequestration cut for Medicare through fiscal year 2025 and realigned the fiscal year 2025 Medicare sequestration amounts so that there will be a 4% sequester for the first six months and a 0% sequester for the second six months, instead of a 2% sequester for the full 12-month period.

In addition, private payers and employer-sponsored health care plans became subject to various rules and potential penalties under the Affordable Care Act. For example, health plans in the individual and small group markets were required to begin providing a core package of health care services, known as "essential health benefits." Essential health benefits include ten general categories of care, including pediatric services, which requires coverage of dental and vision care, among other medical services, for children. The Affordable Care Act also required employers with 50 or more employees to offer health insurance coverage to full-time workers or pay a penalty, which could potentially increase the availability of third-party reimbursement for some medical procedures using our products, although we continue to assess the impact of the Affordable Care Act on our business.

We cannot be sure that government or private third-party payers will cover and reimburse the procedures using our products in whole or in part in the future or that payment rates will be adequate.

Because third-party payments may be less than a provider's actual costs in furnishing care, providers have incentives to lower their operating costs by utilizing products that will decrease labor or otherwise lower their costs. However, we cannot be certain that dental and medical service providers will purchase our products, despite the clinical benefits and opportunity for cost savings that we believe can be derived from their use. If providers cannot obtain adequate coverage and reimbursement for our products, or the procedures in which they are used, our business, financial condition, and results of operations could suffer.

**Employees**

At December 31, 2016, the Company employed approximately 225 people. Our employees are not represented by any collective bargaining agreement and we believe our employee relations are good.

**Executive Officers of the Registrant**

The executive officers of the Company are elected each year at the meeting of our board of directors (our "Board"), which follows the annual meeting of stockholders, and at other Board meetings, as appropriate.

At March 10, 2017, the executive officers of the Company were as follows:

| Name | Age | Position |
|---|---|---|
| Harold C. Flynn, Jr. | 51 | President and Chief Executive Officer |
| Brendan H. O'Connell | 40 | Vice President of Finance and Corporate Controller |
| Dmitri Boutoussov, Ph.D. | 53 | Vice President of Research and Development |
| Michael Roux | 49 | Vice President of Marketing |
| Richard R. Whipp | 64 | Vice President of Operations |
| Joseph Rotino | 64 | Vice President of Quality and Regulatory Affairs |

*Harold C. Flynn* was named President and Chief Executive Officer of BIOLASE in July 2015. Prior to joining BIOLASE, Mr. Flynn was the President of Zimmer Dental, a division of Zimmer Holdings Inc. and a leading manufacturer and provider of medical devices for the dental market, including implants, prosthetics, and a range of other oral rehabilitation products from 2007 to 2015. From 2004 to 2007, Mr. Flynn was Divisional Vice President and General Manager at Abbott Hematology, a division of Abbott Laboratories. Prior to joining Abbott Hematology, Mr. Flynn spent 14 years in a variety of positions of increasing responsibility at IDEXX Laboratories, a global leader in veterinary, food, and environmental diagnostics. Mr. Flynn has a Bachelor of Science degree in Electrical Engineering from the University of Maine at Orono. He holds patents in laser-based hematology and implantable devices for dentistry.

*Brendan O'Connell* was promoted from Corporate Controller to Vice President of Finance and Corporate Controller in January 2015. Mr. O'Connell began his career with BIOLASE as our Assistant Controller in May 2007 and was promoted to serve as our Corporate Controller effective February 2009. Mr. O'Connell earned a Bachelor of Science degree in Accounting and a Masters of Business Administration degree from the University of California, Riverside.

*Dmitri Boutoussov, Ph.D.* joined BIOLASE in 2000 as the Director of Engineering and advanced to Vice President of Engineering in 2005, Chief Technology Officer in 2010, and his current role as Vice President of Research and Development in July 2013. Mr. Boutoussov holds a Doctorate degree in Philosophy and a Master of Science degree in Physics from Polytechnic University in St. Petersburg, Russia.

*Michael Roux* joined BIOLASE in April 2016 as the Vice President of Marketing. Before joining BIOLASE, Mr. Roux served as Vice President of Product Management with Patient Safety Technologies (acquired by Stryker Corporation in 2014), a manufacturer of the SurgiCount Safety-Sponge system, where Mr. Roux oversaw Stryker's SurgiCount product offerings for retained surgical sponge prevention, as well as expansion into additional patient safety product and software solutions, from March 2013 to April 2016. From 2009 to 2013, Mr. Roux was Global Product Director for the respiratory care division for Hill-Rom Holdings, Inc., a global medical technology company. Prior to Hill-Rom Holdings, Inc., Mr. Roux was with 3M Company for 19 years, holding positions of increasing responsibility within product engineering, six-sigma, global product marketing leadership and business development. Mr. Roux earned his Master of Business Administration degree from the University of St. Thomas in Saint Paul, Minnesota and holds a Bachelor of Science degree in Industrial Engineering from the University of Minnesota.

*Richard R. Whipp* joined BIOLASE in July 2011 as Director of Operations and was promoted to Vice President of Operations in October 2011. Prior to joining BIOLASE, Mr. Whipp served as Senior Director of Operations at Discus Dental, which became a division of Philips Electronics, from 1998 to 2011. From 1992 to 1998, Mr. Whipp was Director of Operations at Leica Geosystems, Inc. Mr. Whipp previously held operations management positions at Gulton Industries, Inc., Conrac Industries, Inc., and Hydril. Mr. Whipp holds a Bachelor of Science degree in Industrial Engineering from the Newark College of Engineering.

*Joseph Rotino* joined BIOLASE in January 2015 as Vice President of Quality and Regulatory Affairs. Prior to joining BIOLASE, Mr. Rotino was Director of Quality Assurance for Johnson & Johnson's Advanced Sterilization Products division, leading quality efforts in both new product development and life-cycle management, as well as playing a lead role in the Terminal Sterilization Strategic Business Unit. Prior to Johnson & Johnson, Mr. Rotino served as Vice President of Quality and Regulatory for Pro-Dex, Inc. which developed and manufactured powered surgical devices, and Vice President of Quality Assurance for Sybron Dental Specialties (a Danaher Company), a leader in orthodontic, endodontic, dental composites, and implants. Mr. Rotino holds a Masters of Science degree in Quality Assurance from California State University – Dominguez Hills and a Bachelor of Science degree in Mathematics from William Paterson University of New Jersey.

**Available Information**

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Exchange Act, are available free of charge on our website at http://www.biolase.com, as soon as reasonably practicable after the Company electronically files such reports with, or furnishes those reports to, the SEC. We are providing our internet site solely for the information of investors. We do not intend the address to be an active link or to otherwise incorporate the contents of the website into this report.

**Additional Information**

BIOLASE®, ZipTip®, ezlase®, eztips®, MD Flow®, ComfortPulse®, Waterlase®, iLase®, iPlus®, WCLI®, World Clinical Laser Institute®, Waterlase MD®, Waterlase Dentistry®, Proprietary MD®, and EZLase It's So Easy® are registered trademarks of BIOLASE, and Diolase™, HydroPhotonics™, LaserPal™, HydroBeam™, Occulase™, Diolase 10™, Body Contour™, Radial Firing Perio Tips™, Deep Pocket Therapy with New Attachment™, 2R™ , Comfortprep™ , Rapidprep™ , Bondprep™ , Occulase iPlus™, Flavorflow™, Occulase MD™, Epic Laser™, Epic™, Epic Pro™, Dermalase™, Deltalaser™, Delta™, iStarlaser™, iStar™, Biolase DaVinci Imaging™, Oculase™, Waterlase MDX™, Total Technology Solution™, Geyserlaser™, Geyser™, eplus™, elase™, and Galaxy BioMill™ are trademarks of BIOLASE. All other product and company names are registered trademarks or trademarks of their respective owners.

**Item 1A.** ***Risk Factors***

*Investing in our securities involves a high degree of risk. You should carefully consider the following risk factors together with all of the other information included in this Form 10-K. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we presently consider to be immaterial could also adversely affect us. If any of the following risks come to fruition, our business, financial condition, results of operations, cash flows, and future growth prospects could be materially and adversely affected. In these circumstances, the market price of our stock could decline, and you could lose all or part of your investment.*

**Risks Related to Our Business and Operations**

***Although our financial statements have been prepared on a going concern basis, our management and independent auditors in their report accompanying our consolidated financial statements for the year ended December 31, 2016, believe that our recurring losses from operations and other factors have raised substantial doubt about our ability to continue as a going concern as of December 31, 2016.***

Our audited financial statements for the fiscal year ended December 31, 2016 were prepared on a going concern basis in accordance with U.S. GAAP. The going concern basis assumes that we will continue in operation for the next 12 months and will be able to realize our assets and discharge our liabilities and commitments in the normal course of business, thus our financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern. Our recurring losses, negative cash flow, potential need for additional capital and the uncertainties surrounding our ability to raise such funding, raises substantial doubt about our ability to continue as a going concern. In order for us to continue operations beyond the next 12 months and be able to discharge our liabilities and commitments in the normal course of business, we must sell our products directly to end-users and through distributors, establish profitable operations through increased sales, decrease expenses, generate cash from operation or raise additional funds when needed. We intend to improve our financial condition and ultimately improve our financial results by increasing revenues through expansion of our product offerings, continuing to expand and develop our field sales force and distributor relationships both domestically and internationally, forming strategic arrangements within the dental and medical industries, educating dental and medical patients as to the benefits of our advanced medical technologies, and reducing expenses. If we are unable to increase sales, reduce expenses or raise sufficient additional capital we may be unable to continue to fund our operations, develop our products, realize value from our assets, or discharge our liabilities in the normal course of business. If we become unable to continue as a going concern, we could have to liquidate our assets, and potentially realize significantly less than the values at which they are carried on our financial statements, and stockholders could lose all or part of their investment in our common stock.

***We have experienced net losses for each of the past three years and we could experience additional losses and have difficulty achieving profitability in the future.***

We had an accumulated deficit of approximately $178.3 million at December 31, 2016. We recorded net losses of approximately $15.4 million, $20.3 million, and $18.9 million for the years ended December 31, 2016, 2015, and 2014, respectively. In order to achieve profitability, we must control our costs and increase net revenue through new sales. Failure to increase our net revenue and decrease our costs could cause our stock price to decline and could have a material adverse effect on our business, financial condition, and results of operations.

***We are vulnerable to continued global economic uncertainty and volatility in financial markets.***

Our business is highly sensitive to changes in general economic conditions as a seller of capital equipment to end users in dental professional practices. Financial markets inside the United States and internationally have experienced extreme disruption in recent times, including, among other things, extreme volatility in security prices, severely diminished liquidity and credit availability, and declining valuations of investments. These disruptions are likely to have an ongoing adverse effect on the world economy. A continuing economic downturn and financial market disruptions could have a material adverse effect on our business, financial condition, and results of operations, including by:

- reducing demand for our products and services, increasing order cancellations and resulting in longer sales cycles and slower adoption of new technologies;
- increasing the difficulty of collecting accounts receivable and the risk of excess and obsolete inventories;
- increasing price competition in our served markets; and
- resulting in supply interruptions, which could disrupt our ability to produce our products.

***We could need to raise additional capital in the future, and if we are unable to secure adequate funds on terms acceptable to us, we could be unable to execute our business plan.***

To remain competitive, we must continue to make significant investments in the development of our products, the expansion of our sales and marketing activities, and the expansion of our operating and management infrastructure as we increase sales domestically and internationally. If cash generated from our operations is insufficient to fund such growth, we could be required to raise additional funds through the issuance of equity or debt securities in the public or private markets, or through a collaborative arrangement or sale of assets. Additional financing opportunities may not be available to us, or if available, may not be on favorable terms. The availability of financing opportunities will depend, in part, on market conditions, and the outlook for our business. Any future issuance of equity securities or securities convertible into equity securities could result in substantial dilution to our stockholders, and the securities issued in such a financing could have rights, preferences or privileges senior to those of our common stock. In addition, if we raise additional funds through debt financing, we could be subject to debt covenants that place limitations on our operations. We could not be able to raise additional capital on reasonable terms, or at all, or we could use capital more rapidly than anticipated. If we cannot raise the required capital when needed, we may not be able to satisfy the demands of existing and prospective customers, we could lose revenue and market share and we may have to curtail our capital expenditures. The following factors, among others, could affect our ability to obtain additional financing on favorable terms, or at all:

- our results of operations;
- general economic conditions and conditions in the dental or medical device industries;
- the perception of our business in the capital markets;
- our ratio of debt to equity;
- our financial condition;
- our business prospects; and
- interest rates.

If we are unable to obtain sufficient capital in the future, we could have to curtail our capital expenditures. Any curtailment of our capital expenditures could result in a reduction in net revenue, reduced quality of our products, increased manufacturing costs for our products, harm to our reputation, or reduced manufacturing efficiencies and could have a material adverse effect on our business, financial condition, and results of operations.

***Our success depends, in part, on our relationships with, and the efforts of, third-party distributors.***

We rely on exclusive and non-exclusive third-party distributors for a portion of our sales in North America and a majority of our sales in countries outside of the U.S. and Canada. For the fiscal years ended December 31, 2016, 2015, and 2014, revenue from distributors accounted for approximately 30%, 34%, and 30% of our total net revenue, respectively. Our distributors have significant discretion in determining the efforts and resources they apply to the sale of our products, and we face significant challenges and risks in expanding, training, and managing our third-party distributors, particularly given that their geographically dispersed operations. Our distributors may not commit the necessary resources to market and sell our products to the level of our expectations, and, regardless of the resources they commit, they may not be successful. From time to time, we may face competition or pricing pressure from one or more of our non-exclusive distributors in certain geographic areas where those distributors are selling inventory to the same customer base as us. Additionally, most of our distributor agreements can be terminated with limited notice, and we may not be able to replace any terminating distributor in a timely manner or on terms agreeable to us, if at all. If we are not able to maintain our distribution network, if our distribution network is not successful in marketing and selling our products, or if we experience a significant reduction in, cancellation, or change in the size and timing of orders from our distributors, our revenues could decline significantly and could have a material adverse effect on our business, financial condition, and results of operations.

***Dentists and patients have been hesitant in adopting laser technologies and our inability to overcome this hesitation could limit the market acceptance of our products and our market share.***

Our dental laser systems represent relatively new technologies in the dental market. Only a small percentage of dentists use lasers to perform dental procedures. Our future success will depend on our ability to increase demand for our products by demonstrating to a broad spectrum of dentists and patients the potential performance advantages of our laser systems over traditional methods of treatment and over competitive laser systems, and our inability to do so could have a material adverse effect on our business, financial condition, and results of operations. Historically, we have experienced long sales cycles because dentists have been, and could continue to be, slow to adopt new technologies on a widespread basis. As a result, we generally are required to invest a significant amount of time and resources to educate dentists about the benefits of our products in comparison to competing products and technologies before completing a sale, if any.

Factors that could inhibit adoption of laser technologies by dentists include cost and concerns about the safety, efficacy and reliability of lasers. In order to invest in a Waterlase system, a dentist generally needs to invest time to understand the technology, consider how patients may respond to the new technology, assess the financial impact the investment could have on the dentist's practice and become comfortable performing procedures with our products. Absent an immediate competitive motivation, a dentist may not feel compelled to invest the time required to learn about the potential benefits of using a laser system. Dentists may not accept or adopt our products until they see additional clinical evidence supporting the safety and efficiency of our products or recommendations supporting our laser systems by influential dental practitioners. In addition, economic pressure, caused, for example, by an economic slowdown, changes in health care reimbursement or by competitive factors in a specific market, could make dentists reluctant to purchase substantial capital equipment or invest in new technologies. Patient acceptance will depend on the recommendations of dentists and specialists, as well as other factors, including the relative effectiveness, safety, reliability and comfort of our systems as compared to other instruments and methods for performing dental procedures.

***Any failure in our efforts to train dental practitioners could result in the misuse of our products, reduce the market acceptance of our products and have a material adverse effect on our business, financial condition, and results of operations.***

There is a learning process involved for dental practitioners to become proficient users of our laser systems. It is critical to the success of our sales efforts to adequately train a sufficient number of dental practitioners. Following completion of training, we rely on the trained dental practitioners to advocate the benefits of our products in the broader marketplace. Convincing dental practitioners to dedicate the time and energy necessary for adequate training is challenging, and we cannot provide assurance that we will be successful in these efforts. If dental practitioners are not properly trained, they could misuse or ineffectively use our products, or could be less likely to appreciate our laser systems. This could also result in unsatisfactory patient outcomes, patient injury, negative publicity, FDA regulatory action, or lawsuits against us, any of which could negatively affect our reputation and sales of our laser systems.

***If future data proves to be inconsistent with our clinical results or if competitors' products present more favorable results our revenues could decline and our business, financial condition, and results of operations could be materially and adversely affected.***

If new studies or comparative studies generate results that are not as favorable as our clinical results, our revenues could decline. Additionally, if future studies indicate that our competitors' products are more effective or safer than ours, our revenues could decline. Furthermore, dental practitioners could choose not to purchase our laser systems until they receive additional published long-term clinical evidence and recommendations from prominent dental practitioners that indicate our laser systems are effective for dental applications.

***We face competition from other companies, many of which have substantially greater resources than we do. If we do not successfully develop and commercialize enhanced or new products that remain competitive with products or alternative technologies developed by others, we could lose revenue opportunities and customers and our ability to grow our business would be impaired.***

A number of competitors have substantially greater capital resources, larger customer bases, larger technical, sales and marketing forces and stronger reputations with target customers than ours. We compete with a number of domestic and foreign companies that market traditional dental products, such as dental drills, as well as companies that market laser technologies in the dental and medical markets. The marketplace is highly fragmented and very competitive. We expect that the rapid technological changes occurring in the health care industry could lead to the entry of new competitors, particularly if dental and medical lasers gain increasing market acceptance. If we do not compete successfully, our revenue and market share could decline and our business, financial condition, and results of operations could be adversely affected.

Our long-term success depends upon our ability to (i) distinguish our products through improving our product performance and pricing, protecting our intellectual property, improving our customer support, accurately timing the introduction of new products, and developing sustainable distribution channels worldwide; and (ii) develop and successfully commercialize new products, new or improved technologies, and additional applications for our laser systems. There is no assurance that we will be able to distinguish our products and commercialize any new products, new or improved technologies, or additional applications for our laser systems.

***If our customers cannot obtain third-party reimbursement for their use of our products, they could be less inclined to purchase our products and our business, financial condition, and results of operations could be adversely affected.***

Our products are generally purchased by dental or medical professionals who have various billing practices and patient mixes. Such practices range from primarily private pay to those who rely heavily on third-party payers, such as private insurance or government programs. In the United States, third-party payers review and frequently challenge the prices charged for medical products and/or services. In many foreign countries, the prices for dental services are predetermined through government regulation. Payers could deny coverage and reimbursement on various grounds, including if they determine that the procedure was not medically necessary or that the device used in the procedure was investigational. Accordingly, both coverage and reimbursement can vary significantly from payer to payer. For the portion of dentists who rely heavily on third-party reimbursement, the inability to obtain reimbursement for services using our products could deter them from purchasing or using our products. We cannot predict the effect that future health care reforms or changes in financing for health and dental plans could have on our business. Any such changes could have an adverse effect on the ability of a dental or medical professional to generate a profit using our current or future products. In addition, such changes could act as disincentives for capital investments by dental and medical professionals.

***Our ability to use net operating loss carryforwards could be limited.***

Section 382 of the Internal Revenue Code of 1986 ("IRC") generally imposes an annual limitation on the amount of net operating loss carryforwards that may be used to offset taxable income when a corporation has undergone significant changes in its stock ownership. In 2006, we completed an analysis to determine the applicability of the annual limitations imposed by IRC Section 382 caused by previous changes in our stock ownership and determined that such limitations should not be significant. Given our continued generation of losses since the completion of 2006 study, we have not updated the study. However, we plan to update the study if we expect to utilize net operating loss carryforwards in any future year. If we experience an ownership change as defined in IRC Section 382, utilization of the net operating loss carryforwards, research and development credit carryforwards, and other tax attributes, would be subject to an annual limitation under Section 382 of the Code. Any limitation may result in the expiration of a portion of the net operating loss or research and development credit carryforwards before utilization. If we lose our ability to use net operating loss carryforwards, any income we generate will be subject to tax earlier than it would be if we were able to use net operating loss carryforwards, resulting in lower profits which could have a material adverse effect on our business, financial condition, and results of operations.

***We could incur problems in manufacturing our products.***

In order to grow our business, we must expand our manufacturing capabilities to produce the systems and accessories necessary to meet any demand we may experience. We could encounter difficulties in increasing the production of our products, including problems involving production capacity and yields, quality control and assurance, component supply, and shortages of qualified personnel. In addition, before we can begin commercial manufacture of our products, we must ensure our manufacturing facilities, processes, and quality systems, and the manufacture of our laser systems, comply with FDA regulations governing facility compliance, quality control, and documentation policies and procedures. In addition, our manufacturing facilities are subject to periodic inspections by the FDA, as well as various state agencies and foreign regulatory agencies. From time to time, we could expend significant resources in obtaining, maintaining, and addressing our compliance with these requirements. Our success will depend in part upon our ability to manufacture our products in compliance with the FDA's QSR and other regulatory requirements. We have experienced quality issues with components of our products supplied by third parties, and we could continue to do so. Our future success depends on our ability to manufacture our products on a timely basis with acceptable manufacturing costs, while at the same time maintaining good quality control and complying with applicable regulatory requirements, and an inability to do so could have a material adverse effect on our business, financial condition, and results of operations

***We could be subject to significant warranty obligations if our products are defective, which could have a material adverse effect on our business, financial condition, and results of operations.***

In manufacturing our products, we depend upon third parties for the supply of various components. Many of these components require a significant degree of technical expertise to design and produce. If we fail to adequately design, or if our suppliers fail to produce components to specification, or if the suppliers, or we, use defective materials or workmanship in the manufacturing process, the reliability and performance of our products will be compromised. We have experienced such non-compliance with manufacturing specifications in the past and could continue to experience such non-compliance in the future, which could lead to higher costs and reduced margins.

Our products could contain defects that cannot be repaired easily and inexpensively, and we have experienced in the past and could experience in the future some or all of the following:

- loss of customer orders and delay in order fulfillment;
- damage to our brand reputation;
- increased cost of our warranty program due to product repair or replacement;
- inability to attract new customers;
- diversion of resources from our manufacturing and engineering and development departments into our service department; and
- legal action.

***Adverse publicity regarding our technology or products could negatively impact us.***

Adverse publicity regarding any of our products or similar products marketed or sold by others could negatively affect us. If any studies raise or substantiate concerns regarding the efficacy or safety of our products or other concerns, our reputation could be harmed and demand for our products could diminish, which could have a material adverse effect on our business, financial condition, and results of operations.

Our products are used in minimally invasive surgical procedures, usually, though not always, without anesthesia. All surgical procedures carry some risk. Patients could experience adverse events or outcomes following a surgical procedure due to a multitude of different factors alone or in combination, including deficits in the skill, experience, and preparedness of the surgeon, the existence of underlying conditions or overall poor health of the patient, and defects, age, and misuse of medical products used in the procedure. Should an adverse patient event occur during the use of a BIOLASE product, there could be adverse publicity, increased scrutiny from regulatory agencies, and a loss of good will, even if it is ultimately shown to be caused by factors other than a BIOLASE product.

***Product liability claims against us could be costly and could harm our reputation.***

The sale of dental and medical devices involves the risk of product liability claims against us. Claims could exceed our product liability insurance coverage limits. Our insurance policies are subject to various standard coverage exclusions, including damage to the product itself, losses from recall of our product, and losses covered by other forms of insurance such as workers compensation. We cannot be certain that we will be able to successfully defend any claims against us, nor can we be certain that our insurance will cover all liabilities resulting from such claims. In addition, we cannot provide assurance that we will be able to obtain such insurance in the future on terms acceptable to us, or at all. Regardless of merit or eventual outcome, any product liability claim brought against us could result in harm to our reputation, decreased demand for our products, costs related to litigation, product recalls, loss of revenue, an increase in our product liability insurance rates, or the inability to secure coverage in the future, and could have a material adverse effect on our business, financial condition, and results of operations.

***Our suppliers may not supply us with a sufficient amount or adequate quality of materials, which could have a material adverse effect on our business, financial condition, and results of operations.***

Our business depends on our ability to obtain timely deliveries of materials, components, and subassemblies of acceptable quality and in acceptable quantities from third-party suppliers. We generally purchase components and subassemblies from a limited group of suppliers through purchase orders, rather than written supply contracts. Consequently, many of our suppliers have no obligation to continue to supply us on a long-term basis. In addition, our suppliers manufacture products for a range of customers, and fluctuations in demand for the products those suppliers manufacture for others could affect their ability to deliver components for us in a timely manner. Moreover, our suppliers could encounter financial hardships, be acquired, or experience other business events unrelated to our demand for components, which could inhibit or prevent their ability to fulfill our orders and satisfy our requirements.

Certain components of our products, particularly specialized components used in our laser systems, are currently available only from a single source or limited sources. For example, the crystal, fiber, and hand pieces used in our Waterlase systems are each supplied by a separate single supplier. Our dependence on single-source suppliers involves several risks, including limited control over pricing, availability, quality, and delivery schedules.

If any of our suppliers ceases to provide us with sufficient quantities of our components in a timely manner or on terms acceptable to us, or ceases to manufacture components of acceptable quality, we could incur manufacturing delays and sales disruptions while we locate and engage alternative qualified suppliers, and we might be unable to engage acceptable alternative suppliers on favorable terms. In addition, we could need to reengineer our components, which could require product redesign and submission to the FDA of a 510(k) application, which could significantly delay production. Any interruption or delay in the supply of components or materials, or our inability to obtain components or materials from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our customers and cause them to cancel orders or switch to competitive procedures. As of the date on which this Form 10-K was filed with the SEC, we were in the process of identifying and qualifying alternate source suppliers for our key components. There can be no assurance, however, that we will successfully identify and qualify an alternate source supplier for any of our key components or that we could enter into an agreement with any such alternate source supplier on terms acceptable to us, or at all.

***Rapidly changing standards and competing technologies could harm demand for our products, result in significant additional costs, and have a material adverse effect on our business, financial condition, and results of operations.***

The markets in which our products compete are subject to rapid technological change, evolving industry standards, changes in the regulatory environment, and frequent introductions of new devices and evolving dental and surgical techniques. Competing products could emerge that render our products uncompetitive or obsolete. The process of developing new medical devices is inherently complex and requires regulatory approvals or clearances that can be expensive, time-consuming, and uncertain. We cannot guarantee that we will successfully identify new product opportunities, identify new and innovative applications of our technology, or be financially or otherwise capable of completing the research and development required to bring new products to market in a timely manner. An inability to expand our product offerings or the application of our technology could limit our growth. In addition, we could incur higher manufacturing costs if manufacturing processes or standards change, and we could need to replace, modify, design, or build and install equipment, all of which would require additional capital expenditures.

***We could be unable to effectively manage and implement our growth strategies, which could have a material adverse effect on our business, financial condition, and results of operations***

Our growth strategy includes expanding our product line and clinical applications by developing enhancements and transformational innovations, including new clinical solutions for dental applications and for other adjacent medical applications. Expansion of our existing product line and entry into new medical applications divert the use of our resources and systems, require additional resources that might not be available (or available on acceptable terms), require additional country-specific regulatory approvals, result in new or increasing competition, could require longer implementation times or greater start-up expenditures than anticipated, and could otherwise fail to achieve the desired results in a timely fashion, if at all. These efforts could also require that we successfully commercialize new technologies in a timely manner, price them competitively and cost-effectively, and manufacture and deliver sufficient volumes of new products of appropriate quality on time. We could be unable to increase our sales and earnings by expanding our product offerings in a cost-effective manner, and we could fail to accurately predict future customer needs and preferences or to produce viable technologies. In addition, we could invest heavily in research and development of products that do not lead to significant revenue. Even if we successfully innovate and develop new products and product enhancements, we could incur substantial costs in doing so. In addition, promising new products could fail to reach the market or realize only limited commercial success because of efficacy or safety concerns, failure to achieve positive clinical outcomes, or uncertainty over third-party reimbursement.

***We have significant international sales and are subject to risks associated with operating in international markets.***

International sales comprise a significant portion of our net revenue and we intend to continue to pursue and expand our international business activities. For the fiscal years ended December 31, 2016, 2015, and 2014, international sales accounted for approximately 36%, 39%, and 37% of our net revenue, respectively. Political and economic conditions outside the United States could make it difficult for us to increase our international revenue or to operate abroad. International operations are subject to many inherent risks which could have a material adverse effect on our business, financial condition, and results of operations, including among others:

- adverse changes in tariffs and trade restrictions;
- political, social, and economic instability and increased security concerns;
- fluctuations in foreign currency exchange rates;
- longer collection periods and difficulties in collecting receivables from foreign entities;
- exposure to different legal standards;
- transportation delays and difficulties of managing international distribution channels;

- reduced protection for our intellectual property in some countries;
- difficulties in obtaining domestic and foreign export, import, and other governmental approvals, permits, and licenses, and compliance with foreign laws;
- the imposition of governmental controls;
- unexpected changes in regulatory or certification requirements;
- difficulties in staffing and managing foreign operations; and
- potentially adverse tax consequences and the complexities of foreign value-added tax systems.

We believe that international sales will continue to represent a significant portion of our net revenue, and we intend to expand our international operations further. In international markets where our sales are denominated in U.S. dollars, an increase in the relative value of the dollar against the currency in such markets could indirectly increase the price of our products in those markets and result in a decrease in sales. We do not currently engage in any transactions as a hedge against risks of loss due to foreign currency fluctuations. However, we could do so in the future.

***We could be subject to breaches of our information technology systems, which could damage our reputation and customer relationships. Such breaches could subject us to significant reputational, financial, legal, and operational consequences.***

We rely on information systems ("IS") in our business to obtain, rapidly process, analyze and manage data to, among other things:

- facilitate the purchase and distribution of thousands of inventory items through numerous distributors;
- receive, process and ship orders on a timely basis;
- accurately bill and collect from thousands of customers;
- process payments to suppliers; and
- provide technical support to our customers.

A cyber-attack that bypasses our IS security, or employee error, malfeasance or other disruptions that cause an IS security breach could lead to a material disruption of our IS and/or the loss of business information. Such an attack could result in, among other things:

- the theft, destruction, loss, misappropriation or release of confidential data and intellectual property;
- operational or business delays;
- liability for a breach of personal financial and health information belonging to our customers and their patients or to our employees; and
- damage to our reputation

any of which could have a material adverse effect on our business, financial condition, and results of operations. In the event of an attack, we would be exposed to a risk of loss or litigation and possible liability, including under laws that protect the privacy of personal information.

***Our revenue and operating results fluctuate due to seasonality and other factors, so you should not rely on quarter-to-quarter comparisons of our operating results as an indication of our future performance.***

Our revenue typically fluctuates from quarter to quarter due to a number of factors, many of which are beyond our control. Revenue in the first quarter typically is lower than average, and revenue in the fourth quarter typically is stronger than average due to the buying patterns of dental practitioners. We believe that this trend exists because a significant number of dentists purchase their capital equipment towards the end of the calendar year in order to maximize their practice earnings while seeking to minimize their taxes. They often use certain tax incentives, such as accelerated depreciation methods for purchasing capital equipment, as part of their year-end tax planning. In addition, revenue in the third quarter could be affected by vacation patterns, which can cause revenue to be flat or lower than in the second quarter of the year. Our historical seasonal fluctuations could also be impacted by sales promotions used by large dental distributors that encourage end-of-quarter and end-of-year buying in our industry. Other factors that might cause quarterly fluctuations in our revenue and operating results include the following:

- variation in demand for our products;
- our ability to research, develop, market, and sell new products and product enhancements in a timely manner;
- our ability to control costs;
- our ability to control quality issues with our products;
- regulatory actions that impact our manufacturing processes;
- the size, timing, rescheduling, or cancellation of orders from distributors;
- the introduction of new products by competitors;
- the length of and fluctuations in sales cycles;
- the availability and reliability of components used to manufacture our products;
- changes in our pricing policies or those of our suppliers and competitors, as well as increased price competition in general;
- legal expenses, particularly related to litigation matters;
- general economic conditions including the availability of credit for our existing and potential customer base to finance purchases;
- the mix of our domestic and international sales and the risks and uncertainties associated with international business;
- costs associated with any future acquisitions of technologies and businesses;
- limitations on our ability to use net operating loss carryforwards under the provisions of IRC Section 382 and similar state laws;
- developments concerning the protection of our intellectual property rights;
- catastrophic events such as hurricanes, floods, and earthquakes, which can affect our ability to advertise, sell, and distribute our products, including through national conferences held in regions in which these disasters strike; and
- global economic, political, and social events, including international conflicts and acts of terrorism.

The expenses we incur are based, in large part, on our expectations regarding future net revenue. Since many of our costs are fixed in the short term, we could be unable to reduce expenses quickly enough to avoid losses if we experience a decrease in expected net revenue. Accordingly, you should not rely on quarter-to-quarter comparisons of our operating results as an indication of our future performance.

***Litigation against us could be costly and time-consuming to defend and could materially and adversely affect our business, financial condition, and results of operations.***

We are from time to time involved in various claims, litigation matters and regulatory proceedings incidental to our business, including claims for damages arising out of the use of our products or services and claims relating to intellectual property matters, employment matters, commercial disputes, competition, sales and trading practices, environmental matters, personal injury, and insurance coverage. Some of these lawsuits include claims for punitive as well as compensatory damages. The defense of these lawsuits could divert our management's attention, and we could incur significant expenses in defending these lawsuits. In addition, we could be required to pay damage awards or settlements or become subject to unfavorable equitable remedies. Moreover, any insurance or indemnification rights that we could have may be insufficient or unavailable to protect us against potential loss exposures.

***Our operations are consolidated primarily in one facility. A disruption at this facility could result in a prolonged interruption of our business and have a material adverse effect on our business, financial condition, and results of operations.***

Substantially all of our administrative operations and our manufacturing operations are located at our facility in Irvine, California, which is near known earthquake fault zones. Although we have taken precautions to safeguard our facilities including disaster recovery planning and off-site backup of computer data, a natural disaster such as an earthquake, fire, or flood, could seriously harm our facility and significantly disrupt our operations. Additionally, labor disputes, maintenance requirements, power outages, equipment failures, civil unrest, or terrorist attacks affecting our Irvine, California facility could significantly disrupt our operations. Our business interruption insurance coverage may not cover all or any of our losses from natural disasters or other disruptions.

***If we lose our key management personnel, or are unable to attract or retain qualified personnel, it could adversely affect our ability to execute our growth strategy.***

Our success is dependent, in part, upon our ability to hire and retain management, engineers, marketing and sales personnel, technical, research and other personnel who are in high demand and are often subject to competing employment opportunities. Our success will depend on our ability to retain our current management, engineers, marketing and sales, technical, research and other personnel and to attract and retain qualified like personnel in the future. Competition for senior management, engineers, marketing and sales personnel, and other specialized technicians is intense and we may not be able to retain our personnel. If we lose the services of any executive officers or key employees, our ability to achieve our business objectives could be harmed and our business, financial condition, and results of operations could be materially and adversely affected. In general, our officers could terminate their employment at any time without notice for any reason.

***Acquisitions involve risks and uncertainties, including difficulties integrating acquired businesses successfully into our existing operations and risks of discovering previously undisclosed liabilities.***

Successful acquisitions depend upon our ability to identify, negotiate, complete, and integrate suitable acquisitions and to obtain any necessary financing. We expect to continue to consider opportunities to acquire or make investments in other technologies, products and businesses that could enhance our capabilities, complement our current products, or expand the breadth of our markets or customer base. We have limited experience in acquiring other businesses and technologies. Even if we complete acquisitions, we could experience:

- difficulties in integrating any acquired companies, personnel, products, and other assets into our existing business;
- delays in realizing the benefits of the acquired company, product, or other assets;
- diversion of our management's time and attention from other business concerns;
- limited or no direct prior experience in new markets or countries we could enter;
- higher costs of integration than we anticipated; and
- difficulties in retaining key employees of the acquired business.

In addition, an acquisition could cause us to incur debt or issue shares, resulting in dilution to existing stockholders. We could also discover deficiencies in internal controls, data adequacy and integrity, product quality, regulatory compliance, and product liabilities that we did not uncover prior to our acquisition of such businesses, which could result in us becoming subject to penalties or other liabilities. Any difficulties in the integration of acquired businesses or unexpected penalties or liabilities in connection with such businesses could have a material adverse effect on our business, financial condition, and results of operations.

***If we fail to comply with the reporting obligations of the Exchange Act and Section 404 of the Sarbanes-Oxley Act, or if we fail to maintain adequate internal control over financial reporting, our business, financial condition, and results of operations, and investors' confidence in us, could be materially and adversely affected.***

As a public company, we are required to comply with the periodic reporting obligations of the Exchange Act, including preparing annual reports, quarterly reports, and current reports. Our failure to prepare and disclose this information in a timely manner and meet our reporting obligations in their entirety could subject us to penalties under federal securities laws and regulations of The Nasdaq Stock Market LLC ("NASDAQ"), expose us to lawsuits, and restrict our ability to access financing on favorable terms, or at all.

In addition, pursuant to Section 404 of the Sarbanes-Oxley Act, we are required to evaluate and provide a management report of our systems of internal control over financial reporting. During the course of the evaluation of our internal control over financial reporting, we could identify areas requiring improvement and could be required to design enhanced processes and controls to address issues identified through this review. This could result in significant delays and costs to us and require us to divert substantial resources, including management time, from other activities. In addition, if we fail to maintain the adequacy of our internal control over financial reporting, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with the Sarbanes-Oxley Act. Moreover, effective internal controls are necessary for us to produce reliable financial reports and are important to help prevent fraud. Any failure to maintain compliance with the requirements of Section 404 on a timely basis could result in the loss of investor confidence in the reliability of our financial statements, which in turn could, negatively impact the trading price of our stock, and adversely affect investors' confidence in the Company and our ability to access capital markets for financing.

***Climate change initiatives could materially and adversely affect our business, financial condition, and results of operations.***

Our manufacturing processes require that we purchase significant quantities of energy from third parties, which results in the generation of greenhouse gases, either directly on-site or indirectly at electric utilities. Both domestic and international legislation to address climate change by reducing greenhouse gas emissions and establishing a price on carbon could create increases in energy costs and price volatility. Considerable international attention is now focused on development of an international policy framework to address climate change. Proposed and existing legislative efforts to control or limit greenhouse gas emissions could affect our energy source and supply choices as well as increase the cost of energy and raw materials derived from sources that generate greenhouse gas emissions. If our suppliers are unable to obtain energy at a reasonable cost in the future, the cost of our raw materials could be negatively impacted which could result in increased manufacturing costs.

## Risks Related to Our Intellectual Property

***If the patents that we own or license, or our other intellectual property rights, do not adequately protect our technologies, we could lose market share to our competitors and be unable to operate our business profitably.***

Our future success depends, in part, on our ability to obtain and maintain patent protection for our products and technology, to preserve our trade secrets and to operate without infringing the intellectual property of others. We rely on patents to establish and maintain proprietary rights in our technology and products. We currently possess a number of issued patents and patent applications with respect to our products and technology. However, we cannot ensure that any additional patents will be issued, that the scope of any patent protection will be effective in helping us address our competition, or that any of our patents will be held valid if subsequently challenged. It is also possible that our competitors could independently develop similar or more desirable products, duplicate our products, or design products that circumvent our patents. The laws of foreign countries may not protect our products or intellectual property rights to the same extent as the laws of the United States. In addition, there have been recent changes in the patent laws and rules of the U.S. Patent and Trademark Office (the "USPTO"), and there could be future proposed changes that, if enacted, have a significant impact on our ability to protect our technology and enforce our intellectual property rights. If we fail to protect our intellectual property rights adequately, our competitive position could be adversely affected, and there could be a material adverse effect on our business, financial condition, and results of operations.

***If third parties claim that we infringe their intellectual property rights, we could incur liabilities and costs and have to redesign or discontinue selling certain products, which could have a material adverse effect on our business, financial condition, and results of operations.***

We face substantial uncertainty regarding the impact that other parties' intellectual property positions will have on dental and other medical laser applications. The medical technology industry has in the past been characterized by a substantial amount of litigation and related administrative proceedings regarding patents and intellectual property rights. From time to time, we have received, and we expect to continue to receive, notices of claims of infringement, misappropriation, or misuse of other parties' proprietary rights. Some of these claims could lead to litigation. We may not prevail in any future intellectual property infringement litigation given the complex technical issues and inherent uncertainties in litigation. Any claims, with or without merit, could be time-consuming and distracting to management, result in costly litigation, or cause product shipment delays. Adverse determinations in litigation could subject us to significant liability and could result in the loss of proprietary rights. A successful lawsuit against us could also force us to cease selling or redesign products that incorporate the infringed intellectual property. Additionally, we could be required to seek a license from the holder of the intellectual property to use the infringed technology, and it is possible that we may not be able to obtain a license on acceptable terms, or at all.

## Risks Related to Our Regulatory Environment

***Changes in government regulation or the inability to obtain or maintain necessary government approvals could have a material adverse effect on our business, financial condition, and results of operations.***

Our products are subject to extensive government regulation, both in the United States and in other countries. Too clinically test, manufacture, and market products for human use, we must comply with regulations and safety standards set by the FDA and comparable state and foreign agencies. Regulations adopted by the FDA are wide-ranging and govern, among other things, product design, development, manufacture and control testing, labeling control, storage, advertising, and sales. Generally, products must meet regulatory standards as safe and effective for their intended use before being marketed for human applications. The clearance process is expensive, time-consuming, and uncertain. Failure to comply with applicable regulatory requirements of the FDA can result in an enforcement action which could include a variety of sanctions, including fines, injunctions, civil penalties, recall or seizure of our products, operating restrictions, partial suspension, or total shutdown of production and criminal prosecution. The failure to receive or maintain requisite approvals for the use of our products or processes, or significant delays in obtaining such approvals, could prevent us from developing, manufacturing, and marketing products and services necessary for us to remain competitive.

If we develop new products and applications or make any significant modifications to our existing products or labeling, we will need to obtain additional regulatory clearances or approvals. Any modification that could significantly affect a product's safety or effectiveness, or that would constitute a change in its intended use, will require a new FDA 510(k) clearance, or could require a PMA application. The FDA requires each manufacturer to make this determination initially, but the FDA can review any such decision and can disagree with a manufacturer's determination. If the FDA disagrees with a manufacturer's determination, the FDA can require the manufacturer to cease marketing and/or recall the modified device until 510(k) clearance or PMA is obtained. If 510(k) clearance is denied and a PMA application is required, we could be required to submit substantially more data and conduct human clinical testing and would very likely be subject to a significantly longer review period.

Products sold in international markets are also subject to the regulatory requirements of each respective country or region. The regulations of the European Union require that a device have a CE Mark, indicating conformance with European Union laws and regulations before it can be sold in the European Union. The regulatory international review process varies from country to country. We rely on our distributors and sales representatives in the foreign countries in which we market our products to comply with the regulatory laws of such countries. Failure to comply with the laws of such countries could prevent us from continuing to sell products in such countries. In addition, unanticipated changes in existing regulatory requirements or the adoption of new requirements could impose significant costs and burdens on us, which could increase our operating expenses.

Changes in health care regulations in the U.S. and elsewhere could adversely affect the demand for our products as well as the way in which we conduct our business. For example, in 2010, President Obama signed the Affordable Care Act into law, which included various reforms impacting Medicare coverage and reimbursement, including revision to prospective payment systems, any of which could adversely impact any Medicare reimbursements received by our end-user customers. New legislation may be enacted as President Trump and Congress consider further reform. In addition, as a result of the focus on health care reform, there is risk that Congress could implement changes in laws and regulations governing health care service providers, including measures to control costs, and reductions in reimbursement levels. We cannot be sure that government or private third-party payers will cover and reimburse the procedures using our products, in whole or in part, in the future, or that payment rates will be adequate. If providers cannot obtain adequate coverage and reimbursement for our products, or the procedures in which they are used, our business, results of operations, and financial condition could suffer.

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

We are directly or indirectly, through our customers, subject to extensive regulation by both the federal government and the states and foreign countries in which we conduct our business. The laws that directly or indirectly affect our ability to operate our business include, but are not limited to, the following:

- the Federal Food, Drug, and Cosmetic Act, which regulates the design, testing, manufacture, labeling, marketing, distribution, and sale of prescription drugs and medical devices and which includes the RCHSA, under which the FDA has established reporting, recordkeeping, and performance requirements for laser products;
- state food and drug laws;

- the federal Anti-Kickback Statute, which prohibits persons from knowingly and willfully soliciting, offering, receiving, or providing remuneration, directly or indirectly, to induce the referral for the furnishing of, or the purchase, order, or recommendation of, a good or service, for which payment could be made under FHCPs such as Medicare, Medicaid, and TRICARE;
- state law equivalents to the federal Anti-Kickback Statute, which may not be limited to government reimbursed items;
- state laws that prohibit fee-splitting arrangements;
- the federal Civil False Claims Act, which imposes liability on any person or entity that knowingly presents, or causes to be presented, a false or fraudulent claim for payment to the government, including FHCPs;
- state false claims laws that prohibit anyone from presenting, or causing to be presented, claims for payment to third-party payers that are false or fraudulent;
- federal crimes for knowingly and willfully executing a scheme to defraud any health care benefit program or making false statements in connection with the delivery of or payment for items or services under a health care benefit program;
- federal law prohibiting offering remuneration to a Medicare or Medicaid beneficiary to influence the beneficiary's selection of a particular provider, practitioner, or supplier;
- the federal Stark Law, which, in the absence of a statutory or regulatory exception, prohibits: (i) the referral of Medicare or Medicaid patients by a physician to an entity for the provision of designated health care services, if the physician or a member of the physician's immediate family has a direct or indirect financial relationship, including an ownership interest in, or a compensation arrangement with, the entity and (ii) submitting a bill to Medicare or Medicaid for services rendered pursuant to a prohibited referral;
- state law equivalents to the Stark Law, which may not be limited to government reimbursed items;
- the Physician Payments Sunshine Act, which requires us to report annually to CMS certain payments and other transfers of value we make to U.S.-licensed physicians, dentists, and teaching hospitals;
- the FCPA, which generally prohibits companies and their intermediaries from paying anything of value to foreign officials to influence any decision of the foreign official in his/her official capacity or to secure any other improper advantage to obtain or retain business;
- HIPAA and HITECH and their implementing regulations, which govern the use, disclosure, and safeguarding of PHI;
- state privacy laws that protect the confidentiality of patient information;
- Medicare and Medicaid laws and regulations that prescribe the requirements for coverage and payment, including the amount of such payment; state laws that prohibit the practice of medicine by non-physicians; and
- the Federal Trade Commission Act and similar laws regulating advertising and consumer protection.

If our past or present operations are found to be in violation of any of the laws described above or the other governmental laws or regulations to which we or our customers are subject, we could be subject to the applicable penalty associated with the violation, which could include civil and criminal penalties, damages, fines, exclusion from FHCPs, and the curtailment or restructuring of our operations. If we are required to obtain permits or licensure under these laws that we do not already possess, we could become subject to substantial additional regulation or incur significant expense. Any penalties, damages, fines, or curtailment or restructuring of our operations could be significant. The risk of potential non-compliance is increased by the fact that many of these laws have not been fully interpreted by applicable regulatory authorities or the courts, and their provisions are open to a variety of interpretations and additional legal or regulatory change. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses, divert our management's attention from the operation of our business, damage our reputation, and cause a material adverse effect on our business, financial condition, and results of operations.

***We could be exposed to liabilities under the FCPA, and any determination that we violated the FCPA could have a material adverse effect on our business, financial condition, and results of operations.***

In light of our operations outside the United States, we are subject to the FCPA, which generally prohibits companies and their intermediaries from offering to pay, promising to pay, or authorizing the payment of money or anything of value to non-U.S. officials for the purpose of influencing any act or decision of the foreign official in his/her capacity or to secure any other improper advantage to obtain or retain business. Violation of the anti-bribery provisions of the FCPA can result in criminal fines of up to $2 million and civil penalties of up to $16,000 for each violation. Individuals, including officers, directors, stockholders, and agents of companies, can be subject to a criminal fine of up to $250,000 and imprisonment, in addition to civil penalties of up to $16,000, per violation. We could be held liable for actions taken by our distributors in violation of the FCPA, even though such partners are foreign companies that may not be subject to the FCPA. Any determination that we violated the FCPA could result in sanctions that could have a material adverse effect on our business, financial condition, and results of operations.

***Product sales or introductions could be delayed or canceled as a result of the FDA regulatory requirements applicable to laser products, dental devices, or both, which could cause our sales or profitability to decline and have a material adverse effect on our business, financial condition, and results of operations.***

The process of obtaining and maintaining regulatory approvals and clearances to market a medical device from the FDA and similar regulatory authorities abroad can be costly and time-consuming, and we cannot provide assurance that such approvals and clearances will be granted. Pursuant to FDA regulations, unless exempt, the FDA permits commercial distribution of a new medical device only after the device has received 510(k) clearance or is the subject of an approved PMA. The FDA will clear marketing of a medical device through the 510(k) process if it is demonstrated that the new product is substantially equivalent to other 510(k)-cleared products. The pre market approval process is more costly, lengthy and uncertain than the 510(k) process, and must be supported by extensive data, including data from preclinical studies, and human clinical trials. Because we cannot provide assurance that any new products, or any product enhancements, that we develop will be subject to the shorter 510(k) clearance process, significant delays in the introduction of any new products or product enhancement could occur. We cannot provide assurance that the FDA will not require a new product or product enhancement to go through the lengthy and expensive PMA process. Delays in obtaining regulatory clearances and approvals could:

- delay or eliminate commercialization of products we develop;
- require us to perform costly procedures;
- diminish any competitive advantages that we may attain; and
- reduce our ability to collect revenues or royalties.

Although we have obtained 510(k) clearance from the FDA to market our dental laser systems, we cannot provide assurance that the clearance of these systems will not be withdrawn or that we will not be required to obtain new clearances or approvals for modifications or improvements to our products.

***Our products are subject to recalls and other regulatory actions after receiving FDA clearance or approval.***

The FDA and similar governmental bodies in other countries have the authority to require the recall of our products in the event of material deficiencies or defects in design or manufacture. A government mandated or voluntary recall by us could occur as a result of component failures, manufacturing errors, or design defects, including defects in labeling. Any recall would divert management's attention and financial resources and harm our reputation with customers. Any recall involving our laser systems would be particularly harmful to us, because our laser systems comprise such an important part of our portfolio of products. However, any recall could have a material adverse effect on our business, financial condition, and results of operations.

## Risks Related to Our Stock

***The liquidity and trading volume of our common stock could be low, and our ownership is concentrated.***

The liquidity and trading volume of our common stock has at times been low in the past and could again be low in the future. If the liquidity and trading volume of our common stock is low, this could adversely impact the trading price of our shares, our ability to issue stock and our stockholders' ability to obtain liquidity in their shares. The issuance of common stock by us in 2013, 2014 and 2016 involved a significant issuance of stock to a limited number of investors, significantly increasing the concentration of our share ownership in a few holders.

Three of our stockholders beneficially own approximately 53% of our outstanding common stock, in the aggregate, as of January 31, 2017, as determined based on a review of their reports on Schedule 13D/A and Schedule 13G/A. As a result, these stockholders will be able to affect the outcome of, or exert significant influence over, all matters requiring stockholder approval, including the election and removal of directors and any change in control. In particular, this concentration of ownership of our common stock could have the effect of delaying or preventing a change in control of us or otherwise discouraging or preventing a potential acquirer from attempting to obtain control of us. This, in turn, could have a negative effect on the market price of our common stock. It could also prevent our stockholders from realizing a premium over the market prices for their shares of common stock. Moreover, the interests of this concentration of ownership may not always coincide with our interests or the interests of other stockholders. The concentration of ownership also contributes to the low trading volume and volatility of our common stock.

***Our stock price has been, and could continue to be, volatile.***

There has been significant volatility in the market price and trading volume of equity securities, which is often unrelated to the financial performance of the companies issuing the securities. These broad market fluctuations could negatively affect the market price of our stock. The market price and volume of our common stock could fluctuate, and in the past has fluctuated, more dramatically than the stock market in general. You may not be able to resell your shares at or above the price you paid for them due to fluctuations in the market price of our stock caused by changes in our operating performance or prospects or other factors. Some factors, in addition to the other risk factors identified above, that could have a significant effect on our stock market price include but are not limited to the following:

- actual or anticipated fluctuations in our operating results or future prospects;
- our announcements or our competitors’ announcements of new products;
- the public’s reaction to our press releases, our other public announcements, and our filings with the SEC;
- strategic actions by us or our competitors, such as acquisitions or restructurings;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- changes in accounting standards, policies, guidance, interpretations, or principles;
- changes in our growth rates or our competitors’ growth rates;
- developments regarding our patents or proprietary rights or those of our competitors;
- our inability to raise additional capital as needed;
- concerns or allegations as to the safety or efficacy of our products;
- changes in financial markets or general economic conditions;
- sales of stock by us or members of our management team, our Board, our significant stockholders, or certain institutional stockholders; and
- changes in stock market analyst recommendations or earnings estimates regarding our stock, other comparable companies or our industry generally.

***You could experience substantial dilution of your investment as a result of subsequent exercises of our outstanding warrants and options, future sales of our equity, or the future grant of equity by us.***

You could experience substantial dilution of your investment as a result of subsequent exercises of outstanding warrants and outstanding options issued as compensation for services performed by employees, directors, consultants, and others, future sales of our equity, or the grant of future equity-based awards. As of December 31, 2016, an aggregate of 15,550,000 shares of common stock were reserved for future issuance under our equity incentive plan, 6,611,563 of which were subject to options outstanding as of that date at a weighted-average exercise price of $2.06 per share. In addition, as of December 31, 2016, 11,406,260 shares of our common stock were subject to warrants at a weighted-average exercise price of $3.64 per share. Of the 6,611,563 stock options outstanding at December 31, 2016, 3,352,355 stock options were vested and exercisable. To the extent that outstanding warrants or options are exercised, our existing stockholders could experience dilution. We rely heavily on equity awards to motivate current employees and to attract new employees. The grant of future equity awards by us to our employees and other service providers could further dilute our stockholders' interests in the Company. During 2016, we sold approximately 0.9 million shares of common stock in private placements with gross proceeds totaling approximately $10.0 million. We did not complete any private placements during 2015. During 2014, we sold approximately 22.4 million shares of common stock in private placements with gross proceeds totaling approximately $52.0 million. During 2013, we sold approximately 2.7 million shares of common stock in a private placement with gross proceeds totaling approximately $5.0 million, and sold 340,000 shares of common stock through for gross proceeds totaling approximately $612,000. Our Board declared a 0.5% stock dividend in the first quarter of 2014 and each of the four quarters in 2013, which resulted in the issuance of 193,032 shares and 667,342 shares in 2014 and 2013, respectively.

***Anti-takeover provisions in our charter, bylaws, other agreements, and under Delaware law could discourage, delay, or prevent a change in control of the Company.***

Provisions in our restated certificate of incorporation and amended and restated bylaws could discourage, delay, or prevent a merger or acquisition involving us that our stockholders may consider favorable. These provisions include but are not limited to the right of our Board to issue preferred stock without stockholder approval, no stockholder ability to fill director vacancies, elimination of the rights of our stockholders to act by written consent and call special stockholder meetings, super-majority vote requirements for certain amendments to our certificate of incorporation and stockholder proposals for amendments to our bylaws, prohibition against stockholders from removing directors other than "for cause" and rules regarding how stockholders may present proposals or nominate directors for election at stockholder meetings.

We are also subject to the anti-takeover provisions of the Delaware General Corporation Law. Under these provisions, if anyone becomes an "interested stockholder," we may not enter into a "business combination" with that person for three years without special approval, which could discourage a third-party from making a takeover offer and could delay or prevent a change in control of us. An "interested stockholder" generally means (subject to certain exceptions as described in the Delaware General Corporation Law) someone owning 15% or more of our outstanding voting stock or an affiliate of ours that owned 15% or more of our outstanding voting stock during the past three years.

On November 10, 2015, we entered into Standstill Agreements with certain stockholders, and on August 1, 2016, we amended the Standstill Agreements. As amended, the Standstill Agreements restrict certain stockholders from (i) purchasing or acquiring any shares of BIOLASE common stock if such a purchase would result in aggregate beneficial ownership in excess of 30% of the issued and outstanding shares of BIOLASE common stock and (ii) selling, transferring or otherwise conveying shares of BIOLASE common stock (or warrants or other rights to acquire shares of BIOLASE common stock) to anyone who would immediately thereafter beneficially own shares in excess of 20% of the issued and outstanding shares of BIOLASE common stock, as a result of such transfer and other transfers from third parties. These Standstill Agreements may discourage, delay, or prevent a change in control of the Company.

***Because we do not intend to pay dividends, our stockholders will benefit from an investment in our common stock only if it appreciates in value.***

We intend to retain our future earnings, if any, to finance the expansion of our business and do not expect to pay any cash dividends in the foreseeable future. As a result, the success of an investment in our common stock will depend entirely upon any future appreciation. There is no guarantee that our common stock will appreciate in value or even maintain the price at which our stockholders purchased their shares.

## Item 1B. *Unresolved Staff Comments*

None.

**Item 2.** ***Properties***

As of December 31, 2016, we owned or leased a total of approximately 74,000 square feet of space worldwide. We lease our corporate headquarters and manufacturing facility which consists of approximately 57,000 square feet in Irvine, California. Our lease expires on April 30, 2020. We also own a 12,000 square foot manufacturing and administrative facility in Floss, Germany. See Note 3 to the *Notes to the Consolidated Financial Statements — Supplementary Balance Sheet Information — Property, Plant, and Equipment, Net.*

We believe that our current facilities are sufficient for the current operations of our business and we believe that suitable additional space in various applicable local markets is available to accommodate any needs that may arise.

**Item 3.** ***Legal Proceedings***

From time to time, we are involved in legal proceedings and regulatory proceedings arising out of our operations. We establish reserves for specific liabilities in connection with legal actions that we deem to be probable and estimable. The ability to predict the ultimate outcome of such matters involves judgments, estimates, and inherent uncertainties. The actual outcome of such matters could differ materially from management's estimates.

*Intellectual Property Litigation*

On April 24, 2012, CAO Group, Inc. ("CAO") filed a lawsuit against the Company in the District of Utah for patent infringement of U.S. Patent No. 7,485,116 (the "116 Patent") regarding the Company's ezlase dental laser. On September 9, 2012, CAO filed its First Amended Complaint, which added claims for (1) business disparagement/injurious falsehood under common law and (2) unfair competition under 15 U.S.C. Section 1125(a). The additional claims stem from a press release that the Company issued on April 30, 2012, which CAO claims contained false statements that are disparaging to CAO and its diode product. The First Amended Complaint seeks injunctive relief, treble damages, attorneys' fees, punitive damages, and interest. On November 13, 2012, the Court stayed the lawsuit for 120 days to allow the United States Patent and Trademark Office (the "USPTO") to consider the Company's request for reexamination of the patent-in-suit. The USPTO granted the request to reexamine the asserted claims of the patent-in-suit and, on February 28, 2013, the Court stayed the lawsuit until the termination of the reexamination proceedings. On April 23, 2013, the USPTO issued an office action rejecting all of the asserted claims over the prior art, and CAO responded to the office action. On August 28, 2013, the USPTO issued an Action Closing Procedure, rejecting all of CAO's patent claims. CAO responded to the USPTO's ruling and on December 10, 2013, the USPTO issued a Right of Appeal Notice, finally rejecting some claims of the 116 Patent while finding that other claims appeared to be patentable. The Company appealed the USPTO's findings on January 9, 2014 and on January 27, 2014, the USPTO declined to reconsider the finding of certain claims as patentable and instructed the parties to proceed to appeal to the Patent Trial and Appeal Board (the "Patent Board"). On March 17, 2014, the Company filed its brief in support of its appeal of the USPTO's decision not to reject certain claims of the 116 Patent. On March 24, 2014, CAO filed its brief in support of its appeal of the USPTO's decision to reject certain claims of the 116 patent. On April 18, 2014, the Company filed a respondent brief in opposition to the CAO's appeal arguments. On May 30, 2014, both parties filed rebuttal briefs in support of their appeals. On June 30, 2014, the Company requested an oral hearing before the Patent Board. On July 1, 2014, the Patent Board noted that request and docketed the case for consideration. A hearing on reconsideration was held in November 2014. On July 1, 2015, the Patent Board issued a decision that was generally favorable to the Company. On July 31, 2015, CAO requested a rehearing of the decision. On November 27, 2015, the Patent Board issued its decision regarding CAO's request for rehearing, partially granting CAO's request. On January 27, 2016, CAO filed its Notice of Appeal to the United States Court of Appeals for the Federal Circuit for review of the Patent Board's decision dated July 1, 2015 and the Patent Board's decision regarding CAO's request for rehearing. CAO filed its opening appeal brief on June 1, 2016 and BIOLASE filed its responsive brief on July 25, 2016. CAO filed its reply brief on August 11, 2016. Oral argument before the Federal Circuit was held on January 11, 2017 and, on January 27, 2017, an order was entered by the Federal Circuit affirming all of the Patent Board's findings. On February 9, 2017, the parties jointly filed a document with the Court in the Utah litigation notifying it of the Federal Circuit's decision and requesting that the stay remain in place until a reexamination certificate issues. The reexamination certificate is expected to issue in the next few months.

*Other Litigation*

On February 24, 2016, a purported class action lawsuit entitled Dr. Charles Shulruff v. Biolase, Inc., Case No. 1:16-cv-02533, was filed in the United States District Court for the Northern District of Illinois. The case alleged that the Company violated the federal Telephone Consumer Protection Act (TCPA) and other related Illinois state statutes, by sending unsolicited marketing communications via fax machine to a Chicago dentist, Dr. Shulruff. The plaintiff and his counsel sought to certify a nation-wide class of comprised of other dentists who received the same or similar faxes from BIOLASE. BIOLASE responded to the case on April 14, 2016 and denied liability on all claims. BIOLASE also denied that class certification was appropriate. After initial document discovery and fact gathering, BIOLASE filed a petition with the Federal Communications Commission ("FCC") for "retroactive waiver" of some of the TCPA violations alleged by Shulruff. The FCC granted the petition, which significantly weakened plaintiff's case. BIOLASE then demonstrated to plaintiff's counsel the individualized nature of the fax messages at issue, arguing that class certification was highly unlikely from the data. Based on these events, BIOLASE and Dr. Shulruff entered into a nominal settlement agreement, and in December 2016 Dr. Shulruff dismissed his claims with prejudice. The potential class action claims were dismissed without prejudice, and BIOLASE is unaware of any remaining viable class allegations on these facts.

**Item 4.** ***Mine Safety Disclosures***

Not applicable.

## PART II

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

**Market Information**

Our common stock is traded on the NASDAQ Capital Market under the symbol "BIOL."

The following table sets forth the high and low closing prices for our common stock for the periods indicated:

| | 2016 | | 2015 | |
|---|---|---|---|---|
| | High | Low | High | Low |
| First Quarter | $ 1.60 | $ 0.75 | $ 2.73 | $ 1.90 |
| Second Quarter | $ 1.44 | $ 1.00 | $ 2.61 | $ 1.39 |
| Third Quarter | $ 1.93 | $ 0.93 | $ 1.76 | $ 0.89 |
| Fourth Quarter | $ 1.84 | $ 1.28 | $ 1.08 | $ 0.62 |

The above quotations reflect inter-dealer prices, without retail markup, markdown, or commission and may not necessarily represent actual transactions.

As of March 6, 2017, the closing price of our common stock on the NASDAQ Capital Market was $1.36 per share, and the number of stockholders of record was approximately 180. We believe that the number of beneficial owners is substantially greater than the number of record holders because a large portion of our stock is held of record through brokerage firms in "street name."

**Dividend Policy**

We intend to retain our available funds from earnings and other sources for future growth and, therefore, do not anticipate paying any cash dividends in the foreseeable future. Additionally, we do not anticipate paying any stock dividends in 2017. Our dividend policy may be changed at any time, and from time to time, by our Board. We did not pay or declare any dividends in 2015 or 2016.

In August 2016, we completed a private placement with several institutional and individual investors, and certain of our directors and officers. Gross proceeds from the sale were $10.0 million. In accordance with applicable accounting standards, this transaction resulted in a discount from allocation of proceeds to separable instruments of $1.1 million and a beneficial conversion to common stock with a value of $1.1 million, both of which have been reflected as a deemed distribution to preferred shareholders in the year ended December 31, 2016. Further discussion of this transaction is discussed in *Note 7 – Stockholders' Equity*.

### Equity Compensation Plan Information

The information set forth under the caption “Equity Compensation Plan Information” in the definitive proxy statement (the “Proxy Statement”) to be filed in connection with our 2017 Annual Meeting of Stockholders, is incorporated by reference herein.

### Item 6. *Selected Financial Data*

None

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

*The following information should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Form 10-K. In addition to historical information, this discussion and analysis contains forward-looking statements that involve risks, uncertainties, and assumptions, which could cause actual results to differ materially from management's expectations. Please see the "Cautionary Statement Regarding Forward-Looking Statements" section immediately preceding Part I, Item 1 of this Form 10-K and the "Risk Factors" section in Part I, Item 1A of this Form 10-K.*

**Overview**

We are a medical device company that develops, manufactures, markets and sells laser systems in dentistry and medicine and also markets, sells, and distributes dental imaging equipment, including cone beam digital x-rays and CAD/CAM intra-oral scanners. Our products advance the practice of dentistry and medicine for patients and health care professionals. Our proprietary dental laser systems allow dentists, periodontists, endodontists, oral surgeons, and other dental specialists to perform a broad range of minimally invasive dental procedures, including cosmetic, restorative, and complex surgical applications. Our laser systems are designed to provide clinically superior results for many types of dental procedures compared to those achieved with drills, scalpels, and other conventional instruments. We have clearance from the FDA to market and sell our laser systems in the United States and also have the necessary registration to market and sell our laser systems in Canada, the European Union, and many other countries outside the U.S. Additionally, our in-licensed imaging equipment and related products improve diagnoses, applications, and procedures in dentistry and medicine.

We offer two categories of laser system products: Waterlase (all-tissue) systems and Diode (soft-tissue) systems. Our flagship brand, the Waterlase, uses a patented combination of water and laser energy to perform most procedures currently performed using drills, scalpels, and other traditional dental instruments for cutting soft and hard tissue. We also offer our Diode laser systems to perform soft tissue, pain therapy, and cosmetic procedures, including teeth whitening. We have approximately 230 issued and 85 pending U.S. and international patents, the majority of which are related to Waterlase technology. From 1998 through December 31, 2016, we sold approximately 33,600 laser systems in over 90 countries around the world. Contained in this total are over 11,800 Waterlase systems, including approximately 7,800 Waterlase MD and iPlus systems.

2016 was a year of ongoing transformation at BIOLASE. Consistent with our goal to focus our energies on strengthening our leadership, and worldwide competitiveness and increasing the amount of attention we pay to our professional customers and their patients, we have made strategic personnel additions to our senior management team, including a Vice President and Managing Director for Europe, the Middle East and Africa to lead our sales in that region, a Vice President of Clinical and Dental Affairs and Chief Dental Officer to lead our educational dental and clinical matters, and a Vice President of Marketing to lead our marketing efforts. We have also added a new Vice President of Human Resources at our headquarters in Irvine, California to support our key initiatives. With a solid senior management team, we believe we are better suited to achieve our goals of strengthening our worldwide market presence, sales, and competitiveness. On March 1, 2017, we announced the appointment of a new Senior Vice President and Chief Financial Officer, with significant leadership and technical experience in finance and business management from both public and private companies, who will be joining our leadership team effective March 27, 2017.

In August 2016, we completed a private placement with several institutional and individual investors, and certain of our directors and officers. Gross proceeds from the sale were $10.0 million, and net proceeds, after offering expenses of approximately $0.5 million, were approximately $9.5 million.

In January 2017, we received FDA clearance and launched Epic Pro, a powerful and innovative dental diode laser system, making it available for sale in the U.S., as well as in select countries in Europe, the Middle East and Asia. The Epic Pro, which offers more power than most diode lasers in dentistry, is the first product to be introduced resulting from our strategic development agreement with IPG. The newest addition to the Epic family of dental soft-tissue lasers, Epic Pro features several new innovations, such as a new super pulse technology for more precise, enhanced laser tissue cutting; real-time automatic power control to enhance speed and consistency when performing surgery; and pre-initiated, bendable, disposable tips with new smart tip technology to ensure tip performance and quality. The Epic Pro laser system has FDA clearance for dental and surgical operations, intended for use in contact and non-contact techniques for incision, excision, vaporization, ablation, hemostasis, or coagulation of intraoral and extra-oral soft tissue (including marginal and interdental gingiva and epithelial lining of free gingiva).

In February 2017, we launched the fifth-generation Waterlase Express all-tissue laser system. Waterlase Express represents the newest addition to our Waterlase portfolio of Er,Cr:YSGG all-tissue lasers. Waterlase Express was exhibited at the Chicago Dental Society's Mid-Winter meeting in February 2017. Designed for easy and intuitive operation, integrated learning, and portability, Waterlase Express is our next-generation Waterlase system. Waterlase Express has regulatory clearance for commercial distribution from the FDA, and is available for sale to dentists in the U.S. as well as select international markets in Europe, the Middle East and Asia.

In summary, 2016 was a year of continued transformation for BIOLASE, positioning the Company in executing on our strategic goals of returning BIOLASE to a successful growing company that offers multiple new products each year and re-establishes itself as the clear worldwide industry leader in the dental laser segment. Although we have made improvements throughout the year, it will take time for the financial statements to reflect the changes and as such, for the three years ended December 31, 2016 we have reported recurring losses from operations and have not generated cash from operations. Our level of cash used in operations, the potential need for additional capital, and the uncertainties surrounding our ability to raise additional capital, raises substantial doubt about our ability to continue as a going concern. As a result, the opinion we have received from our independent registered public accounting firm, on our consolidated financial statements, contains an explanatory paragraph stating that there is a substantial doubt regarding our ability to continue as a going concern.

The accompanying financial statements have been prepared on a going concern basis, which assumes that we will continue in operation for the next 12 months and will be able to realize our assets and discharge our liabilities and commitments in the normal course of business. The financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

**Critical Accounting Policies**

The preparation of consolidated financial statements and related disclosures in conformity with generally accepted accounting principles in the United States ("GAAP") requires us to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. The following is a summary of those accounting policies that we believe are necessary to understand and evaluate our reported financial results.

*Revenue Recognition.* We sell our products in North America directly to customers through our field sales force and through non-exclusive distributors. We sell our products internationally through exclusive and non-exclusive distributors as well as directly to customers in certain countries. Sales are recorded upon shipment from our facility, and payment of our invoices is generally due within 90 days or less. Internationally, we primarily sell products through independent distributors. We record revenue based on four basic criteria that must be met before revenue can be recognized: (i) persuasive evidence of an arrangement exists; (ii) delivery has occurred and title and the risks and rewards of ownership have been transferred to our customer, or services have been rendered; (iii) the price is fixed or determinable; and (iv) collectability is reasonably assured. Revenue is recorded for all sales upon shipment assuming all other revenue recognition criteria are met.

Sales of our laser systems include separate deliverables consisting of the product, disposables used with the laser systems, installation, and training. For sale of deliverables that are part of a multiple-element arrangement, we apply a method which approximates the relative selling price method, which requires that arrangement consideration be allocated at the inception of an arrangement to all deliverables using the relative selling price method. This requires us to use estimated selling prices of each of the deliverables in the total arrangement. The sum of those prices is then compared to the arrangement, and any difference is applied to the separate deliverable ratably. This method also establishes a selling price hierarchy for determining the selling price of a deliverable, which includes: (i) vendor-specific objective evidence ("VSOE"), if available, (ii) third-party evidence if VSOE is not available, and (iii) estimated selling price if neither VSOE nor third-party evidence is available. VSOE is determined based on the value we sell the undelivered element to a customer as a stand-alone product. Revenue attributable to the undelivered elements is included in deferred revenue when the product is shipped and is recognized when the related service is performed. Disposables not shipped at time of sale and installation services are typically shipped or installed within 30 days. Training is included in deferred revenue when the product is shipped and is recognized when the related service is performed or upon the appropriate expiration of time offered under the agreement.

Key judgments related to our revenue recognition include the collectability of payment from the customer, the satisfaction of all elements of the arrangement having been delivered, and that no additional customer credits and discounts are needed. We evaluate a customer's credit worthiness prior to the shipment of the product. Based on our assessment of the available credit information, we may determine the credit risk is higher than normally acceptable, and we will either decline the purchase or defer the revenue until payment is reasonably assured. Future obligations required at the time of sale may also cause us to defer the revenue until the obligation is satisfied.

Although all sales are final, we accept returns of products in certain, limited circumstances and record a provision for sales returns based on historical experience concurrent with the recognition of revenue. The sales returns allowance is recorded as a reduction of accounts receivable and revenue.

Extended warranty contracts, which are sold to our laser and certain imaging customers, are recorded as revenue on a straight-line basis over the period of the contracts, which is typically one year.

For sales transactions involving used laser trade-ins, we record the purchased trade-ins as inventory at the fair value of the asset surrendered with the offset to accounts receivable. In determining the estimated fair value of used laser trade-ins, we make an assessment of usable parts and key components and consider the ultimate resale value of the certified pre-owned (or "CPO") laser with applicable margins. We sell these CPO laser trade-ins as refurbished lasers. Trade-in rights are not established or negotiated with customers during the initial sales transaction of the original lasers. Trade-in rights are promotional events used at our discretion to encourage existing laser customers to purchase new lasers. A customer is not required to trade in a laser nor are we required to accept a trade-in. However, the promotional value offered in exchange for the trade-in laser is not offered without a laser trade-in. The transaction is treated as a monetary transaction as each sale transaction involving a customer trade-in includes significant boot of greater than 25% of the fair value of the exchange. As a monetary transaction, the sale is recognized following our laser system revenue recognition policy. There have been no sales transactions in which the cash consideration was less than 25% of the total transaction value.

We recognize revenue for royalties under licensing agreements for our patented technology when the product using our technology is sold. We estimate and recognize the amount earned based on historical performance and current knowledge about the business operations of our licensees. Our estimates have been consistent with amounts historically reported by the licensees. Licensing revenue related to exclusive licensing arrangements is recognized concurrent with the related exclusivity period.

From time to time, we may offer sales incentives and promotions on our products. We record the cost of sales incentives at the date at which the related revenue is recognized as a reduction in revenue, an increase in cost of goods sold, or a selling expense, as applicable, or later, in the case of incentives offered after the initial sale has occurred.

*Accounting for Stock-Based Payments*. We recognize compensation cost related to all stock-based payments based on the grant-date fair value using the Black-Scholes option valuation model, taking into consideration the probability of vesting and estimated forfeitures.

*Valuation of Accounts Receivable.* We maintain an allowance for uncollectible accounts receivable to estimate the risk of extending credit to customers. We evaluate our allowance for doubtful accounts based upon our knowledge of customers and their compliance with credit terms. The evaluation process includes a review of customers' accounts on a regular basis, which incorporates input from sales, service, and finance personnel. The review process evaluates all account balances with amounts outstanding more than 90 days from the due date and other specific amounts for which information obtained indicates that the balance may be uncollectible. The allowance for doubtful accounts is adjusted based on such evaluation, with a corresponding provision included in general and administrative expenses. Account balances are charged off against the allowance when we believe it is probable the receivable will not be recovered. We do not have any off-balance-sheet credit exposure related to our customers.

*Valuation of Inventory.* Inventory is valued at the lower of cost or market, with cost determined using the first-in, first-out method. We periodically evaluate the carrying value of inventory and maintain an allowance for excess and obsolete inventory to adjust the carrying value as necessary to the lower of cost or market. We evaluate quantities on hand, physical condition, and technical functionality, as these characteristics may be impacted by anticipated customer demand for current products and new product introductions. Unfavorable changes in estimates of excess and obsolete inventory would result in an increase in cost of revenue and a decrease in gross profit.

*Valuation of Long-Lived Assets.* Property, plant, and equipment and certain intangibles with finite lives are amortized over their estimated useful lives. Useful lives are based on our estimate of the period that the assets will generate revenue or otherwise productively support our business goals. We monitor events and changes in circumstances that could indicate that the carrying balances of long-lived assets may exceed the undiscounted expected future cash flows from those assets. If such a condition were to exist, we would determine if an impairment loss should be recognized by comparing the carrying amount of the assets to their fair value.

*Valuation of Goodwill and Other Intangible Assets.* Goodwill and other intangible assets with indefinite lives are not subject to amortization but are evaluated for impairment annually or whenever events or changes in circumstances indicate that the asset might be impaired. We conducted our annual impairment analysis of our goodwill as of June 30, 2016 and concluded there had been no impairment in goodwill. We closely monitor our stock price and market capitalization and perform such analysis when events or circumstances indicate that there may have been a change to the carrying value of those assets.

*Warranty Cost.* We provide warranties against defects in materials and workmanship of our laser systems for specified periods of time. For the years ended December 31, 2016, 2015, and 2014 laser systems sold domestically were covered by our warranty for a period of up to two years from the date of sale by us or the distributor to the end-user. Laser systems sold internationally were covered by our warranty for a period of up to 28 months from the date of sale to the international distributor. Estimated warranty expenses are recorded as an accrued liability with a corresponding provision to cost of revenue. This estimate is recognized concurrent with the recognition of revenue on the sale to the distributor or end-user. Warranty expenses expected to be incurred after one year from the time of sale to the distributor are classified as a long-term warranty accrual. Our overall accrual is based on our historical experience and our expectation of future conditions, taking into consideration the location and type of customer and the type of laser, which directly correlate to the materials and components under warranty, the duration of the warranty period, and the logistical costs to service the warranty. Additional factors that may impact our warranty accrual include changes in the quality of materials, leadership and training of the production and services departments, knowledge of the lasers and workmanship, training of customers, and adherence to the warranty policies. Additionally, an increase in warranty claims or in the costs associated with servicing those claims would likely result in an increase in the accrual and a decrease in gross profit. We offer extended warranties on certain imaging products. However, all imaging products are initially covered by the manufacturer's warranties.

*Litigation and Other Contingencies.* We regularly evaluate our exposure to threatened or pending litigation and other business contingencies. Because of the uncertainties related to the amount of loss from litigation and other business contingencies, the recording of losses relating to such exposures requires significant judgment about the potential range of outcomes. As additional information about current or future litigation or other contingencies becomes available, we assess whether such information warrants the recording of expense relating to contingencies. To be recorded as expense, a loss contingency must be both probable and reasonably estimable. If a loss contingency is significant but is not both probable and estimable, we disclose the matter in the *Notes to the Consolidated Financial Statements*.

*Income Taxes.* Based upon our operating losses during 2016, 2015, and 2014 and the available evidence, management has determined that it is more likely than not that the deferred tax assets as of December 31, 2016 will not be realized in the near term. Consequently, we have established a valuation allowance against our net deferred tax asset totaling approximately $54.3 million and $49.5 million as of December 31, 2016 and 2015, respectively. In this determination, we considered factors such as our earnings history, future projected earnings, and tax planning strategies. If sufficient evidence of our ability to generate sufficient future taxable income tax benefits becomes apparent, we may reduce our valuation allowance, resulting in tax benefits in our statement of operations and in additional paid-in-capital. Management evaluates the potential realization of our deferred tax assets and assesses the need for reducing the valuation allowance periodically.

**Fair Value of Financial Instruments**

Our financial instruments, consisting of cash and cash equivalents, accounts receivable, accounts payable, capital lease obligation and accrued liabilities, approximate fair value because of the liquid or short-term nature of these items.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market (or, if none exists, the most advantageous market) for the specific asset or liability at the measurement date (referred to as the "exit price"). The fair value is based on assumptions that market participants would use, including a consideration of non-performance risk. Under the accounting guidance for value hierarchy, there are three levels of measurement inputs. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are observable, either directly or indirectly. Level 3 inputs are unobservable due to little or no corroborating market data.

**Convertible Preferred Stock and Warrant Transaction**

On August 8, 2016, the Company completed a private placement with several institutional and individual investors, and certain of its directors and officers, under which the Company sold an aggregate of 88,494 shares of our preferred stock and warrants to purchase up to an aggregate of 2,035,398 unregistered shares of our common stock at an exercise price of $2.00 per share. Each share of preferred stock was automatically upon receipt of stockholder approval convertible into 100 shares of common stock, reflecting a conversion price equal to $1.13 per share, which was the closing price of the common stock quoted on the NASDAQ Capital Market on July 29, 2016. On September 30, 2016, we held a meeting of our stockholders and received requisite stockholder approval with respect to the issuance of 8,849,400 shares of common stock upon automatic conversion of the preferred stock and the issuance of our common stock related to exercise of the warrants by certain holders whose warrants were subject to a beneficial ownership limitation. Gross proceeds from the sale were approximately $10.0 million, and net proceeds, after offering expenses of approximately $0.5 million, were approximately $9.5 million. The warrants became exercisable on February 8, 2017, six months after the closing of the private placement, and have a term of five years from the date of issuance. We are using the proceeds of the sale for working capital and general corporate purposes. In connection with the registration rights granted to these investors, we filed a registration statement on Form S-3 with the SEC, which was declared effective on November 3, 2016. In accordance with applicable accounting standards, the $10.0 million gross proceeds from sale were allocated to the convertible preferred stock and warrants in the amount of $8.9 million and $1.1 million, respectively. The allocation was based on the relative fair values of the underlying common stock and warrants as of the commitment date, with the fair value of the warrants determined using a Black Scholes model. This transaction resulted in a discount from allocation of proceeds to separable instruments of $1.1 million and a beneficial conversion to common stock with a value of $1.1 million, which has been reflected as a deemed distribution to preferred shareholders in the year ended December 31, 2016.

**Results of Operations**

The following table sets forth certain data from our operating results for each of the years ended December 31, 2016, 2015, and 2014, expressed as percentages of revenue:

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Products and services | 99.7 % | 99.6 % | 99.7 % |
| License fees and royalty | 0.3 | 0.4 | 0.3 |
| Net revenue | 100.0 | 100.0 | 100.0 |
| Cost of revenue | 60.8 | 67.1 | 61.9 |
| Gross profit | 39.2 | 32.9 | 38.1 |
| Operating expenses: | | | |
| Sales and marketing | 32.8 | 38.6 | 34.4 |
| General and administrative | 20.2 | 21.2 | 31.2 |
| Engineering and development | 15.1 | 15.0 | 9.6 |
| Excise tax | — | 0.7 | 0.6 |
| Patent infringement legal settlement | — | (1.5) | — |
| Total operating expenses | 68.1 | 74.0 | 75.8 |
| Loss from operations | (28.9) | (41.1) | (37.7) |
| Non-operating loss, net | (0.5) | (0.4) | (1.8) |
| Loss before income taxes | (29.4) | (41.5) | (39.5) |
| Income tax provision | 0.3 | 0.4 | 0.2 |
| Net loss | (29.7)% | (41.9)% | (39.7)% |

The following table summarizes our net revenues by category for the years ended December 31, 2016, 2015, and 2014 (dollars in thousands):

| | Years Ended December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | 2014 | |
| Laser systems | $ 35,150 | 67.9 % | $ 32,691 | 67.5 % | $ 29,490 | 61.9 % |
| Imaging systems | 3,066 | 5.9 % | 2,237 | 4.6 % | 4,286 | 9.0 % |
| Consumables and other | 6,906 | 13.3 % | 6,877 | 14.2 % | 6,524 | 13.7 % |
| Services | 6,539 | 12.6 % | 6,465 | 13.3 % | 7,211 | 15.1 % |
| Total products and services | 51,661 | 99.7 % | 48,270 | 99.6 % | 47,511 | 99.7 % |
| License fees and royalty | 149 | 0.3 % | 205 | 0.4 % | 145 | 0.3 % |
| Net revenue | $ 51,810 | 100.0 % | $ 48,475 | 100.0 % | $ 47,656 | 100.0 % |

**Non-GAAP Disclosure**

In addition to the financial information prepared in conformity with generally accepted accounting principles in the United States ("GAAP"), we provide certain historical non-GAAP financial information. Management believes that these non-GAAP financial measures assist investors in making comparisons of period-to-period operating results and that, in some respects, these non-GAAP financial measures are more indicative of the Company's ongoing core operating performance than their GAAP equivalents.

Management believes that the presentation of this non-GAAP financial information provides investors with greater transparency and facilitates comparison of operating results across a broad spectrum of companies with varying capital structures, compensation strategies, derivative instruments, and amortization methods, which provides a more complete understanding of our financial performance, competitive position, and prospects for the future. However, the non-GAAP financial measures presented in this Form 10-K have certain limitations in that they do not reflect all of the costs associated with the operations of our business as determined in accordance with GAAP. Therefore, investors should consider non-GAAP financial measures in addition to, and not as a substitute for, or as superior to, measures of financial performance prepared in accordance with GAAP. Further, the non-GAAP financial measures presented by the Company may be different from similarly named non-GAAP financial measures used by other companies.

*Non-GAAP Net Loss.* Management uses non-GAAP net loss (defined as net loss before interest, taxes, depreciation and amortization, stock-based compensation, and other non-cash compensation) in its evaluation of the Company's core results of operations and trends between fiscal periods and believes that these measures are important components of its internal performance measurement process. Management believes that this non-GAAP financial information reflects an additional way of viewing aspects of our business that, when viewed with our GAAP results, provides a more complete understanding of factors and trends affecting our business.

Non-GAAP net loss for the periods presented is as follows (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| GAAP net loss attributable to common stockholders | $ (17,555) | $ (20,278) | $ (18,926) |
| Deemed dividend on convertible preferred stock | 2,184 | — | — |
| GAAP net loss | $ (15,371) | $ (20,278) | $ (18,926) |
| Adjustments: | | | |
| Interest (income) expense, net | (74) | (74) | 458 |
| Income tax provision | 151 | 178 | 112 |
| Depreciation and amortization | 1,048 | 880 | 696 |
| Stock-based and other non-cash compensation | 3,065 | 3,350 | 1,356 |
| Non-GAAP net loss | $ (11,181) | $ (15,944) | $ (16,304) |

**Comparison of Results of Operations**

***Year Ended December 31, 2016 Compared with Year Ended December 31, 2015***

*Net Revenue.* Net revenue for the year ended December 31, 2016 ("Fiscal 2016") was $51.8 million, an increase of $3.3 million, or 7%, as compared with net revenue of $48.5 million for the year ended December 31, 2015 ("Fiscal 2015"). Domestic revenues were $33.4 million, or 64% of net revenue, for Fiscal 2016 compared to $29.5 million, or 61% of net revenue, for Fiscal 2015. International revenues for Fiscal 2016 were $18.4 million, or 36% of net revenue, compared to $19.0 million, or 39% of net revenue for Fiscal 2015. The increase in period-over-period net revenue resulted from increases in domestic laser system revenue, imaging systems revenue, consumables and other revenue, and services revenue, partially offset by decreases in international laser systems revenue, imaging systems revenue, consumables and other revenue, services revenue, and domestic license and royalties revenue. Our goal has been to refocus on strengthening our leadership position in dental markets worldwide through increased focus on our professional customers and their patients. We have strengthened our management team with new key personnel and invested in our sales resources both domestically and internationally.

Laser system net revenues increased by approximately $2.5 million, or 8%, in Fiscal 2016 compared to Fiscal 2015. As expected, we experienced an improvement in the sales of our core laser products during Fiscal 2016 as compared with the prior year. In 2016, we continued to realize some of the changes to our sales cycle that were implemented late in 2015.

Imaging system net revenue increased by approximately $0.8 million, or 37%, in Fiscal 2016 compared to Fiscal 2015. This increase was due to increased overall interest in the market in intra-oral scanning devices, and our favorable positioning as a distributor.

Consumables and other net revenue, which includes products such as disposable tips and shipping revenue, increased approximately $29,000, or 0.4%, in Fiscal 2016, as compared to Fiscal 2015. The slight increase in consumables and other net revenue was primarily a result of auxiliary sales to our growing laser customer base.

Services net revenue, which consists primarily of extended warranty service contracts and advanced training programs, increased by approximately $74,000, or 1%, in Fiscal 2016, as compared to Fiscal 2015. The slight increase in services revenue was primarily a result of our growing laser customer base.

License fees and royalty revenue decreased by approximately $56,000, or 27%, to approximately $149,000 in Fiscal 2016 compared to $205,000 in Fiscal 2015. License fees and royalty revenues are associated with intellectual property related to our laser technologies. The decrease was primarily due to the settlement of the Fotona Proizvodnja Optoelektronskih Naprav D.D. and Fotona LLC intellectual property litigation (the "Fotona Litigation") from Fiscal 2015. We anticipate license fees and royalty revenue to be consistent with Fiscal 2016 for the year ending December 31, 2017 ("Fiscal 2017").

*Cost of Revenue.* Cost of revenue in Fiscal 2016 decreased by $1.0 million, or 3%, to $31.5 million, or 61% of net revenue, compared with cost of revenue of $32.5 million, or 67% of net revenue, in Fiscal 2015. The decrease in cost of revenue was mainly attributable to the increased concentration of domestic sales that typically have higher margins than our international sales and reduced warranty expenses from quality improvements.

*Gross Profit.* Gross profit as a percentage of revenue typically fluctuates with product and regional mix, selling prices, product costs and revenue levels. Gross profit for Fiscal 2016 was $20.3 million, or 39% of net revenue, an increase of approximately $4.3 million, or 27%, as compared with gross profit of $16.0 million, or 33% of net revenue, for Fiscal 2015. Improvements in gross profit reflect a larger concentration of domestic laser sales, specifically the Waterlase iPlus, which typically have higher product margins than our international sales due to higher pricing.

*Operating Expenses.* Operating expenses for Fiscal 2016 were $35.3 million, or 68% of net revenue, a decrease of approximately $595,000, or 2%, as compared with $35.9 million, or 74% of net revenue, for Fiscal 2015. The year-over-year decrease in expense is primarily due to a $1.1 million decrease in payroll-related expenses. See the following expense categories for further explanations. We expect that operating expenses as a percentage of net revenue for Fiscal 2017 will decrease from Fiscal 2016.

*Sales and Marketing Expense.* Sales and marketing expenses for Fiscal 2016 decreased by $1.7 million, or 9%, to $17.0 million, or 33% of net revenue, as compared with $18.7 million, or 39% of net revenue, during Fiscal 2015. The decrease was primarily a result of decreased payroll and consulting-related expenses of $909,000, decreased media and advertising expenses of $643,000, decreased supplies of $214,000, and decreased commissions of $159,000. The decrease in payroll and consulting-related expenses resulted primarily from decreased salary expenses of $310,000, a decrease of $202,000 in stock-based compensation due to fewer grants to existing and new employees, a decrease of $212,000 in consulting expenses, and a decrease of $148,000 in severance-related expenses associated with our internal corporate organizational restructuring changes in the second half of 2015. The decrease in media and advertising expenses resulted primarily from decreased advertising expenses of $577,000 and decreased public relations materials expenses of $159,000, partially offset by increased product literature expenses of $87,000. As we continue efforts to transform and return to revenue growth, we expect sales and marketing expenses to decrease as a percentage of revenue in Fiscal 2017.

*General and Administrative Expense.* General and administrative expenses for Fiscal 2016 increased by $197,000, or 2%, to $10.5 million, or 20% of net revenue, as compared with $10.3 million, or 21% of net revenue, for Fiscal 2015. The overall increase to general and administrative expenses was primarily due to increased patent and legal expenses of $1.5 million, partially offset by decreased payroll and consulting-related expenses of $587,000, decreased state and local taxes, licenses and fees of $287,000, decreased investor relations expenses of $171,000, and a decrease to our provision for doubtful accounts of $311,000. The current year increase in legal expenses resulted from $1.7 million reduction in legal fees pertaining to the positive settlement outcome of the 2014 shareholder litigation matter recognized during the fourth quarter of 2015. The decrease in payroll-related and consulting-related expenses resulted primarily from a decrease in severance expenses of $268,000 related to the change in Chief Executive Officer in 2015, partially offset by an increase of $30,000 in stock-based compensation expenses due to fewer grants to existing and new employees in 2015. We expect general and administrative expenses to decrease as a percentage of revenue in Fiscal 2017.

*Engineering and Development Expense.* Engineering and development expenses for Fiscal 2016 increased by $0.5 million, or 7%, to $7.8 million, or 15% of net revenue, as compared with $7.3 million, or 15% of net revenue, in Fiscal 2015. The increase was primarily related to increased payroll, consulting and temporary labor expenses of $351,000 and increased supplies of $16,000 resulting from our development efforts relating to our new and existing products and technologies. We expect to continue our investment in engineering and development activity, although we expect engineering and development expenses to a decrease as a percentage of revenue in Fiscal 2017.

*Excise Tax Expense*. Beginning in 2013, the Affordable Care Act imposed a 2.3% medical device excise tax on certain product sales to customers located in the U.S. Excise tax expenses for Fiscal 2016 was $0, or 0% of net revenue, as compared with $361,000, or 1% of net revenue, for Fiscal 2015. The decrease of $361,000, or 100%, was directly associated with the Protecting Americans from Tax Hikes Act of 2015 (the "PATH Act"), which suspended the medical device excise tax for calendar years 2016 and 2017. Due to the PATH Act, we do not anticipate any excise tax expenses on our products during 2017.

*Non-Operating Income (Loss)*

*(Loss) Gain on Foreign Currency Transactions*. We recognized a $332,000 loss on foreign currency transactions for Fiscal 2016 compared to a $259,000 loss for Fiscal 2015 due to exchange rate fluctuations primarily between the U.S. dollar and the Euro. During Fiscal 2016, the Euro continued to fluctuate against the U.S. dollar.

*Interest Income (Expense), Net.* Interest income during Fiscal 2016 represented interest recognized from the discounted present value of the settlement in connection with the Fotona Litigation. Interest expense in Fiscal 2016 consisted of interest incurred on our capital lease obligations in connection with the lease of information technology equipment. Interest income, net totaled approximately $74,000 of interest income, or 0.1% of net revenue, for Fiscal 2016, which is consistent with interest income of $74,000, or 0.1% of net revenue for Fiscal 2015.

*Provision (benefit) for Income Taxes.* Our provision for income taxes was $151,000 for Fiscal 2016, a decrease of $27,000, or 15%, as compared with our provision of income taxes of $178,000 in Fiscal 2015. The decrease is due to a decrease in income earned in foreign jurisdictions during Fiscal 2016 and state current income tax.

*Net Loss.* For the reasons stated above, our net loss was $15.4 million for Fiscal 2016 compared to a net loss of $20.3 million for Fiscal 2015. The decrease in net loss of approximately $4.9 million, or 24%, was primarily due to increased gross profit of $4.4 million and decreased operating expenses of $0.6 million.

***Year Ended December 31, 2015 Compared with Year Ended December 31, 2014***

*Net Revenue.* Net revenue for the year ended December 31, 2015 ("Fiscal 2015") was $48.5 million, an increase of $819,000, or 2%, as compared with net revenue of $47.7 million for the year ended December 31, 2014 ("Fiscal 2014"). Domestic revenues were $29.5 million, or 61% of net revenue, for Fiscal 2015 compared to $29.8 million, or 63% of net revenue, for Fiscal 2014. International revenues for Fiscal 2015 were $19.0 million, or 39% of net revenue, compared to $17.8 million, or 37% of net revenue for Fiscal 2014. The increase in period-over-period net revenue resulted from increases in domestic and international laser system revenue, and license fees and royalty revenue, partially offset by decreases in imaging systems, consumables and other, and services revenue.

Laser system net revenues increased by approximately $3.2 million, or 11%, in Fiscal 2015 compared to Fiscal 2014. As expected, we experienced an improvement in the sales of our core laser products during Fiscal 2015 as compared with the prior year. We began to realize some of the changes to our sales cycle that were implemented late in 2015.

Imaging system net revenue decreased by approximately $2 million, or 48%, in Fiscal 2015 compared to Fiscal 2014. This decrease was due to an increased focus by our sales group on our core laser system product line.

Consumables and other net revenue, which includes products such as disposable tips and shipping revenue, increased approximately $353,000, or 5%, in Fiscal 2015, as compared to Fiscal 2014. The increase in consumables and other net revenue was primarily a result of auxiliary sales to our growing laser customer base.

Services net revenue, which consists primarily of extended warranty service contracts and advanced training programs, decreased by approximately $746,000, or 10%, in Fiscal 2015, as compared to Fiscal 2014. The decrease in revenue was mainly attributed to the impact from recognizing $708,000 in deferred training service revenues during the third quarter of 2014, which resulted from making a change in estimate in the period over which deferred training service revenue are being recognized.

License fees and royalty revenues increased by approximately $60,000, or 41%, to approximately $205,000 in Fiscal 2015 compared to $145,000 in Fiscal 2014. These license fees and royalty revenues were attributable to intellectual property related to our laser technologies. The increase was primarily due to the settlement of the Fotona Litigation.

*Cost of Revenue.* Cost of revenue in Fiscal 2015 increased by $3.0 million, or 10%, to $32.5 million, or 67% of net revenue, compared with cost of revenue of $29.5 million, or 62% of net revenue, in Fiscal 2014. The increase in cost of revenue was mainly attributable to increased bundling and other promotional arrangements related to the launch of the EPIC X and Waterlase iPlus 2.0 and an increased concentration of international sales. International sales typically have lower margins than our domestic sales.

*Gross Profit.* Gross profit for Fiscal 2015 was $16.0 million, or 33% of net revenue, a decrease of approximately $2.2 million, or 12%, as compared with gross profit of $18.2 million, or 38% of net revenue, for Fiscal 2014. The decrease was primarily due to increased bundling and other promotional arrangements related to the launch of the EPIC X and Waterlase iPlus 2.0 and an increased concentration of international sales.

*Operating Expenses.* Operating expenses for Fiscal 2015 were $35.9 million, or 74% of net revenue, a decrease of approximately $248,000, or 1%, as compared with $36.1 million, or 76% of net revenue, for Fiscal 2014. The year-over-year decrease in expense is primarily due to the $5.7 million decrease in legal expenses, partially offset by a $5.4 million increase in payroll-related expenses. See the following expense categories for further explanation.

*Sales and Marketing Expense.* Sales and marketing expenses for Fiscal 2015 increased by $2.3 million, or 14%, to $18.7 million, or 39% of net revenue, as compared with $16.4 million, or 34% of net revenue, during Fiscal 2014. The increase was primarily a result of increased payroll and consulting-related expenses of $1.8 million, increased media and advertising expenses of $442,000, increased supplies of $273,000, and increased commissions of $244,000, partially offset by decreased convention-related expenses of $267,000 and decreased travel and entertainment expenses of $247,000. The increase in payroll and consulting-related expenses resulted primarily from increased salary expenses of $745,000, an increase of $278,000 in stock-based compensation attributable to grants to existing and new employees, and an increase of $121,000 in severance-related expenses associated with our internal corporate organizational restructuring changes in the second half of 2015.

*General and Administrative Expense.* General and administrative expenses for Fiscal 2015 decreased by $4.6 million, or 31%, to $10.3 million, or 21% of net revenue, as compared with $14.9 million, or 31% of net revenue, for Fiscal 2014. The decrease to general and administrative expenses was primarily due to decreased legal expenses of $5.7 million, and a decrease to our provision for doubtful accounts of $1.1 million, partially offset by increased payroll and consulting-related expenses of $1.9 million, increased licensing fees of $205,000, and increased depreciation expenses of $195,000. The decrease in legal expenses resulted from the atypical defense of the director dispute and resulting stockholder litigation incurred during the first half of 2014, as well as a reduction of $1.7 million in legal fees in December 2015 which related to settling legal fees owed in connection with the 2014 stockholder litigation. The increase in payroll-related and consulting-related expenses resulted primarily from an increase of $1.4 million in stock-based compensation expenses attributable to grants to existing and new employees.

*Engineering and Development Expense.* Engineering and development expenses for Fiscal 2015 increased by $2.7 million, or 59%, to $7.3 million, or 15% of net revenue, as compared with $4.6 million, or 10% of net revenue, in Fiscal 2014. The increase was primarily related to increased payroll, consulting and temporary labor expenses of $1.4 million and increased supplies of $795,000 resulting from our development efforts relating to our new and existing products and technologies.

*Excise Tax Expense*. Beginning in 2013, the Affordable Care Act imposed a 2.3% medical device excise tax on certain product sales to customers located in the U.S. Excise tax expenses for Fiscal 2015 were $361,000, or 1% of net revenue, as compared with $307,000, or 1% of net revenue, for Fiscal 2014. The increase of $54,000, or 18%, was directly associated with our increased sales in the U.S.

*Non-Operating Income (Loss)*

*(Loss) Gain on Foreign Currency Transactions*. We recognized a $259,000 loss on foreign currency transactions for Fiscal 2015 compared to a $415,000 loss for Fiscal 2014 due to exchange rate fluctuations primarily between the U.S. dollar and the Euro. During Fiscal 2015, the Euro fell approximately 10% in translation value against the U.S. dollar.

*Interest Income (Expense), Net.* Interest income during Fiscal 2015 represented interest recognized from the discounted present value of the settlement in connection with the Fotona Litigation. Interest expense in Fiscal 2015 consisted of interest incurred on our capital lease obligations in connection with the lease of information technology equipment. Interest expense for Fiscal 2014 consisted primarily of interest on our revolving credit facilities and amortization of debt issuance costs and debt discount. Interest income (expense), net totaled approximately $74,000 of interest income, or 0.1% of net revenue for Fiscal 2015, as compared to an interest expense of $458,000, or 1% of net revenue for Fiscal 2014. The decrease in interest expense was primarily a result of the Company paying in full all amounts due under the revolving lines of credit with Comerica Bank in July 2014.

*Provision (benefit) for Income Taxes.* Our provision for income taxes was $178,000 for Fiscal 2015, an increase of $66,000, or 59%, as compared with our provision of income taxes of $112,000 in Fiscal 2014. The increase is due to additional income earned in foreign jurisdictions in Fiscal 2015.

*Net Loss.* For the reasons stated above, our net loss was $20.3 million for Fiscal 2015 compared to a net loss of $18.9 million for Fiscal 2014. The increase in net loss of approximately $1.4 million, or 7%, was primarily due to decreased gross profit of $2.2 million, offset by decreased operating expenses of $248,000 and a decrease in non-operating loss of $688,000.

**Liquidity and Capital Resources**

At December 31, 2016, we had approximately $9.2 million in cash and cash equivalents, including restricted cash equivalents. Management defines cash and cash equivalents as highly liquid deposits with original maturities of 90 days or less when purchased. The decrease in our cash and cash equivalents by $2.8 million from December 31, 2015 was primarily due to cash used in operating and investing activities of $10.6 million and $1.4 million, respectively, partially offset by cash provided by financing activities of $9.4 million, and the effect of exchange rates on cash of $64,000. The $10.6 million of net cash used in operating activities was primarily driven by the Company’s net loss of $15.4 million during the year.

At December 31, 2016, we had approximately $16.0 million in working capital. Our principal sources of liquidity at December 31, 2016, consisted of approximately $9.2 million in cash, cash equivalents and restricted cash and $9.8 million of net accounts receivable.

We have reported recurring losses from operations and have not generated cash from operations for the three years ended December 31, 2016. Our level of cash used in operations, the potential need for additional capital, and the uncertainties surrounding our ability to raise additional capital, raises substantial doubt about our ability to continue as a going concern. The accompanying financial statements have been prepared on a going concern basis, which assumes that we will continue in operation for the next 12 months and will be able to realize our assets and discharge our liabilities and commitments in the normal course of business. The financial statements do not include any adjustments that might be necessary if we are unable to continue as a going concern.

In order for us to continue operations beyond the next 12 months and be able to discharge our liabilities and commitments in the normal course of business, we must sell our products directly to end users and through distributors, establish profitable operations through increased sales, decrease expenses, generate cash from operations, or obtain additional funds when needed. We intend to improve our financial condition and ultimately improve our financial results by increasing revenues through expansion of our product offerings, continuing to expand and develop our field sales force and distributor relationships both domestically and internationally, forming strategic arrangements within the dental and medical industries, educating dental and medical patients as to the benefits of our advanced medical technologies, and reducing expenses.

Additional capital requirements may depend on many factors, including, among other things, the rate at which our business grows, demands for working capital, manufacturing capacity, and any acquisitions that we may pursue. From time to time, we could be required, or may otherwise attempt, to raise capital through either equity or debt offerings. We cannot provide assurance that we will enter into any such equity or debt financings in the future or that the required capital will be available on acceptable terms, if at all, or that any such financing activity will not be dilutive to our stockholders.

***Concentration of Credit Risk***

Financial instruments which potentially expose us to a concentration of credit risk consist principally of cash and cash equivalents, restricted cash, and trade accounts receivable. We maintain our cash and cash equivalents and restricted cash with established commercial banks. At times, balances may exceed federally insured limits. To minimize the risk associated with trade accounts receivable, we perform ongoing credit evaluations of customers' financial condition and maintain relationships with our customers that allow us to monitor changes in business operations so we can respond as needed. We do not, generally, require customers to provide collateral before we sell them our products. However we have required certain distributors to make prepayments for significant purchases of our products.

***Receivables and Allowance for Doubtful Accounts***

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is our best estimate of the amount of probable credit losses in the existing accounts receivable. We determine the allowance based on a quarterly specific account review of past due balances over 90 days. All other balances are reviewed on a pooled basis by age of receivable. Account balances are charged off against the allowance when it is probable the receivable will not be recovered. We do not have any off-balance-sheet credit exposure related to our customers.

**Consolidated Cash Flows**

The following table summarizes our statements of cash flows for Fiscal 2016, Fiscal 2015, and Fiscal 2014 (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | **2016** | **2015** | **2014** |
| Net cash (used in) provided by: | | | |
| Operating activities | $ (10,647) | $ (17,772) | $ (16,201) |
| Investing activities | (1,414) | (1,778) | (197) |
| Financing activities | 9,350 | (105) | 46,752 |
| Effect of exchange rates on cash | (64) | (206) | (234) |
| Net change in cash and cash equivalents | $ (2,775) | $ (19,861) | $ 30,120 |

***Fiscal 2016 Compared to Fiscal 2015***

The $7.1 million decrease in net cash used in operating activities for Fiscal 2016 compared to Fiscal 2015 was primarily due to our decreased net loss of $4.9 million. The decreased net loss was primarily driven by a increase in gross profit of $4.4 million. Cash used in operating activities for Fiscal 2016 totaled $10.7 million and was primarily comprised of net loss of $15.4 million, adjustments to reconcile net loss to net cash and cash equivalents of $4.3 million and net changes in assets and liabilities of $469,000.

Cash used in investing activities for Fiscal 2016 totaled $1.4 million compared to $1.8 million for Fiscal 2015. The $364,000 decrease in net cash used in investing activities was primarily due to a $389,000 decrease in capital expenditures during Fiscal 2016 compared to Fiscal 2015 as a result of the 2015 buildout of our world class training facility. Fiscal 2016 cash used in investing activities relate to the continued conversion of a new enterprise resource planning software. We plan to complete the implementation in Fiscal 2017. As a result, we expect capital expenditures to total approximately $1.7 million in Fiscal 2017, and we expect depreciation and amortization to total approximately $1.3 million for Fiscal 2017.

The $9.5 million increase in net cash provided by financing activities for Fiscal 2016 compared to Fiscal 2015 was primarily due to net proceeds from our equity offering in August 2016 totaling $9.5 million. See see Note 7 to the *Notes to the Consolidated Financial Statements — Stockholders' Equity* for more information.

The $142,000 increase in effect of exchange rates on cash for Fiscal 2016 compared to Fiscal 2015 was primarily due to $332,000 loss on foreign currency transactions.

***Fiscal 2015 Compared to Fiscal 2014***

The $1.6 million increase in net cash used in operating activities for Fiscal 2015 compared to Fiscal 2014 was primarily due to our increased net loss of $1.4 million. The increased net loss was primarily driven by a decrease in gross profit of $2.2 million. Cash used in operating activities for Fiscal 2015 totaled $17.8 million and was primarily comprised of net loss of $20.3 million, adjustments to reconcile net loss to net cash and cash equivalents of $5.1 million and net changes in assets and liabilities of $2.6 million.

The $1.6 million increase in net cash used in investing activities for Fiscal 2015 compared with Fiscal 2014 was primarily due to capital expenditures of $1.8 million driven by the initial implementation of a new enterprise resource planning software and a buildout for a world class training center in our Irvine office.

The $46.9 million decrease in net cash provided by financing activities for Fiscal 2015 compared to Fiscal 2014 was primarily due to net proceeds from equity offerings in February, July, and November 2014 totaling $51.1 million, in the aggregate.

The effect of exchange rates on cash for Fiscal 2015 compared to Fiscal 2014 remained relatively unchanged.

**Contractual Obligations**

We lease our primary facility under a non-cancellable operating lease that expires in April 2020.

In February 2015, the Company entered into a 30-month capital lease agreement for information technology equipment.

The following table presents our expected cash requirements for contractual obligations outstanding as of December 31, 2016, for the years ending as indicated below (in thousands):

| | Less Than 1 Year | 1 to 3 Years | 3 to 5 Years | More Than 5 years | Total |
|---|---|---|---|---|---|
| Operating lease obligations | $ 772 | $ 1,609 | $ — | — | $ 2,381 |
| Capital lease obligations | 159 | — | — | — | 159 |
| Purchase obligations | 17,476 | 568 | — | — | 18,044 |
| Total | $ 18,407 | $ 2,177 | $ — | $ — | $ 20,584 |

Purchase obligations relate to purchase orders with suppliers that we expect to complete primarily during the year ending December 31, 2017. In conformity with GAAP, purchase obligations and operating lease obligations are not reported in the consolidated balance sheet as of December 31, 2016.

**Recent Accounting Pronouncements**

See Note 2 to the *Notes to the Consolidated Financial Statements — Summary of Significant Accounting Policies — Recent Accounting Pronouncements* to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K, which is incorporated herein by reference.

**Off-Balance Sheet Arrangements**

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

**Item 8. Financial Statements**

All financial statements required by this Item 8, including the report of the independent registered public accounting firm, are listed in Part IV, Item 15 of this Form 10-K, are set forth beginning on Page F-1 of this Form 10-K, and are hereby incorporated herein by reference.

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

None.

**Item 9A.** ***Controls and Procedures***

**Disclosure Controls and Procedures**

Our management has evaluated, with the participation of our President and Chief Executive Officer and Chief Financial Officer, the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based on that evaluation, our President and Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures were effective as of December 31, 2016.

**Management's Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework established by the Committee of Sponsoring Organizations of the Treadway Commission entitled "Internal Control — Integrated Framework (2013)" (the "COSO Framework"). Based on our evaluation under the COSO Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2016. Our internal control over financial reporting was not subject to attestation by our independent registered public accounting as we are a smaller reporting company.

**Changes in Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting that occurred during the Company's fiscal quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B.** ***Other Information***

None.

**PART III**

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

Information regarding our executive officers is included in Part I of this Form 10-K under "Item 1. Business — Executive Officers of the Registrant." In addition, the information set forth under the caption "Election of Directors" and "Security Ownership of Certain Beneficial Owners and Management — Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement is incorporated by reference herein.

The Biolase, Inc. Code of Business Conduct and Ethics applies to all of our employees, officers, and directors, including our President and Chief Executive Officer. The Code of Business Conduct can be found on our website at the following address: http://www.biolase.com/Pages/code-of-conduct.html.

**Item 11.** ***Executive Compensation***

The information set forth under the captions "Executive Compensation" and "Election of Directors — Director Compensation" in the Proxy Statement is incorporated by reference herein.

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

The information set forth under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Executive Compensation — Equity Compensation Plan Information" in the Proxy Statement is incorporated by reference herein.

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

The information set forth under the captions “Election of Directors” and “Certain Relationships and Related Transactions” in the Proxy Statement is incorporated by reference herein.

**Item 14.** ***Principal Accountant Fees and Services***

The information set forth under the caption “Principal Accountant Fees and Services” in the Proxy Statement is incorporated by reference herein.

## PART IV

**Item 15.** ***Exhibits and Financial Statement Schedules***

(a) The following documents are filed as part of this Annual Report on Form 10-K beginning on the pages referenced below:

*(1) Financial Statements:*


| | Page |
|---|---|
| Report of Independent Registered Public Accounting Firm | F-2 |
| Consolidated Balance Sheets as of December 31, 2016 and 2015 | F-3 |
| Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2016, 2015, and 2014 | F-4 |
| Consolidated Statements of Stockholders' Equity for the years ended December 31, 2016, 2015, and 2014 | F-5 |
| Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015, and 2014 | F-6 |
| Notes to Consolidated Financial Statements | F-7 |


*(2) Financial Statement Schedule:*


Schedule II — Consolidated Valuation and Qualifying Accounts and Reserves for the years ended December 31, 2016, 2015, and 2014 S-1


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

*(3) Exhibits:*

The exhibits filed as a part of this Annual Report on Form 10-K are listed in the accompanying Exhibit Index on page 59.

**Item 16.** ***Form 10-K Summary***

None

## SIGNATURES

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

**BIOLASE, INC.,**
a Delaware Corporation
(registrant)

Dated: March 10, 2017

By: /s/ HAROLD C. FLYNN, JR.
**Harold C. Flynn, Jr.**
**President and Chief Executive Officer**

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

| Signature | Title | Date |
| --- | --- | --- |
| /s/ HAROLD C. FLYNN, JR<br>**Harold C. Flynn, Jr.** | President and Chief Executive Officer (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer) and Director | March 10, 2017 |
| /s/ PAUL N. CLARK<br>**Paul N. Clark** | Director | March 10, 2017 |
| /s/ DR. JONATHAN T. LORD<br>**Dr. Jonathan T. Lord** | Director | March 10, 2017 |
| /s/ DR. FREDERIC H. MOLL<br>**Dr. Frederic H. Moll** | Director | March 10, 2017 |
| /s/ JAMES R. TALEVICH<br>**James R. Talevich** | Director | March 10, 2017 |

**BIOLASE, INC.**
**Index to Exhibits**

| | | | Incorporated by Reference | | | |
|---|---|---|---|---|---|---|
| **Exhibit** | **Description** | **Filed Herewith** | **Form** | **Period Ending/Date of Report** | **Exhibit** | **Filing Date** |
| 3.1.1 | Restated Certificate of Incorporation, including, (i) Certificate of Designations, Preferences and Rights of 6% Redeemable Cumulative Convertible Preferred Stock of the Registrant; (ii) Certificate of Designations, Preferences and Rights of Series A 6% Redeemable Cumulative Convertible Preferred Stock of the Registrant; (iii) Certificate of Correction Filed to Correct a Certain Error in the Certificate of Designation of the Registrant; and (iv) Certificate of Designations of Series B Junior Participating Cumulative Preferred Stock of the Registrant | | S-1, Amendment No. 1 | 12/23/2005 | 3.1 | 12/23/2005 |
| 3.1.2 | Amendment to Restated Certificate of Incorporation | | 8-K | 05/10/2012 | 3.1 | 05/16/2012 |
| 3.1.3 | Second Amendment to Restated Certificate of Incorporation | | 8-A/A | 11/04/2014 | 3.1.3 | 11/04/2014 |
| 3.1.4 | Certificate of Elimination of Series B Junior Participating Cumulative Preferred Stock | | 8-K | 11/10/2015 | 3.1 | 11/12/2015 |
| 3.1.5 | Certificate of Designations, Preferences and Rights of Series C Participating Convertible Preferred Stock | | 8-K | 08/08/2016 | 3.1 | 08/08/2016 |
| 3.2 | Sixth Amended and Restated Bylaws of the Registrant, adopted on June 26, 2014 | | 8-K | 06/26/2014 | 3.1 | 06/30/2014 |
| 4.1 | Form of Warrant issued on November 7, 2014 | | 8-K | 11/03/2014 | 4.1 | 11/07/2014 |
| 4.2 | Form of Warrant issued on August 8, 2016 | | 8-K | 08/01/2016 | 4.1 | 08/02/2016 |
| 4.3 | Standstill Agreement, dated November 10, 2015, by and among the Registrant and Jack W. Schuler, Renate Schuler, and the Schuler Family Foundation | | 8-K | 11/10/2015 | 99.1 | 11/12/2015 |
| 4.4 | Standstill Agreement, dated November 10, 2015, by and among the Registrant and Larry N. Feinberg, Oracle Partners, L.P., Oracle Institutional Partners, L.P., Oracle Ten Fund Master, L.P., Oracle Associates, LLC, and Oracle Investment Management, Inc. | | 8-K | 11/10/2015 | 99.2 | 11/12/2015 |
| 4.5 | Amendment to Standstill Agreement, dated August 1, 2016, by and among the Registrant and Jack W. Schuler, Renate Schuler, Shuler Family Foundation | | 8-K | 08/01/2016 | 99.2 | 08/02/2016 |
| 4.6 | Amendment to Standstill Agreement, dated August 1, 2016, by and among the Registrant and Larry N. Feinberg, Oracle Partners, L.P., Oracle Institutional Partners, L.P., Oracle Ten Fund Master, L.P., Oracle Associates, LLC, Oracle Investment Management, Inc. | | 8-K | 08/01/2016 | 99.3 | 08/02/2016 |
| 10.1* | 2002 Stock Incentive Plan, as amended | | DEF 14A | | A | 04/07/2016 |

| Exhibit | Description | Filed Herewith | Incorporated by Reference | | | |
|---|---|---|---|---|---|---|
| | | | Form | Period Ending/Date of Report | Exhibit | Filing Date |
| 10.2* | Form of Stock Option Agreement under the 2002 Stock Incentive Plan | | 10-K | 12/31/2004 | 10.26 | 07/19/2005 |
| 10.3* | Form of Option Award Notice for California Employees under the 2002 Stock Incentive Plan | | 10-Q | 09/30/2015 | 10.2 | 11/06/2015 |
| 10.4* | Form of Option Award Notice for Non-California Employees under the 2002 Stock Incentive Plan | | 10-Q | 09/30/2015 | 10.3 | 11/06/2015 |
| 10.5* | Form of Option Award Notice for Non-Employee Directors under the 2002 Stock Incentive Plan | | 10-Q | 09/30/2015 | 10.4 | 11/06/2015 |
| 10.6* | Form of Restricted Stock Unit Award Notice for Non-Employee Directors under the 2002 Stock Incentive Plan | | 10-Q | 09/30/2015 | 10.5 | 11/06/2015 |
| 10.8* | Form of Indemnification Agreement between the Registrant and its officers and directors | | 10-Q | 09/30/2005 | 10.1 | 11/09/2005 |
| 10.9 | Lease, dated January 10, 2006, by and between the Registrant and The Irvine Company LLC | | 8-K | 01/10/2006 | 10.1 | 01/17/2006 |
| 10.10 | Third Amendment to Lease, dated March 16, 2015, by and between the Registrant and The Irvine Company LLC | | 10-Q | 03/31/2015 | 10.1 | 05/01/2015 |
| 10.11† | Letter Agreement, dated June 28, 2006, by and between the Registrant and The Procter & Gamble Company | | 10-Q | 06/30/2006 | 10.1 | 08/09/2006 |
| 10.12† | License Agreement, dated January 24, 2007, by and between the Registrant and The Procter & Gamble Company | | 10-Q | 03/31/2007 | 10.1 | 05/10/2007 |
| 10.13 | Letter Agreement, dated June 28, 2011, by and between the Registrant and The Proctor & Gamble Company | | 10-Q | 06/30/2011 | 10.2 | 08/11/2011 |
| 10.14 | Securities Purchase Agreement, dated August 1, 2016, among Biolase, Inc. and the investors listed on Schedule I thereto | | 8-K | 08/01/2016 | 99.1 | 08/02/2016 |
| 10.15* | Employment Agreement, dated February 22, 2015 and entered into on February 24, 2015, by and between the Registrant and David Dreyer | | 10-K | 12/31/2015 | 10.25 | 03/06/2015 |
| 10.16* | Employment Agreement, dated May 14, 2015, by and between the Registrant and Harold C. Flynn, Jr. | | 10-Q | 06/30/2015 | 10.2 | 08/07/2015 |
| 10.17* | Inducement Restricted Stock Unit Award Agreement, dated July 14, 2015, by and between the Registrant and Harold C. Flynn, Jr. | | 8-K | 07/12/2015 | 10.2 | 07/15/2015 |
| 10.18* | Acknowledgment Letter, dated November 22, 2016, by and between the Registrant and Harold C. Flynn, Jr. | X | | | | |
| 10.19* | Transition Letter Agreement, dated December 28, 2016, by and between the Registrant and David Dreyer | X | | | | |

| Exhibit | Description | Filed Herewith | Incorporated by Reference | | | |
|---|---|---|---|---|---|---|
| | | | Form | Period Ending/Date of Report | Exhibit | Filing Date |
| 10.20* | Separation Agreement, dated January 13, 2017, by and between the Registrant and David Dreyer | X | | | | |
| 10.21* | Employment Agreement, dated February 23, 2017, by and between the Registrant and Mark Nelson | X | | | | |
| 21.1 | Subsidiaries of the Registrant | X | | | | |
| 23.1 | Consent of Independent Registered Public Accounting Firm, BDO USA, LLP | X | | | | |
| 31.1 | Certification of Chief Executive Officer pursuant to Rule 13a-14 and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended | X | | | | |
| 32.1 | Certification of Chief Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | ** | | | | |
| 101 | The following financial information from the Company's Annual Report on Form 10-K, for the year ended December 31, 2016, formatted in eXtensible Business Reporting Language:<br>(i) Consolidated Balance Sheets,<br>(ii) Consolidated Statements of Operations and Comprehensive Loss,<br>(iii) Consolidated Statements of Stockholders' Equity (Deficit),<br>(iv) Consolidated Statements of Cash Flows,<br>(v) Notes to Consolidated Financial Statements | X | | | | |

† Confidential treatment was granted for certain confidential portions of this exhibit pursuant to Rule 24b-2 under the Securities Exchange Act of 1934. In accordance with Rule 24b-2, these confidential portions were omitted from this exhibit and filed separately with the Securities and Exchange Commission.

†† Confidential treatment was requested for certain confidential portions of this exhibit pursuant to Rule 24b-2 under the Securities Exchange Act of 1934. In accordance with Rule 24b-2, these confidential portions were omitted from this exhibit and filed separately with the Securities and Exchange Commission.

* Management contract or compensatory plan or arrangement.

** Furnished herewith.

**BIOLASE, INC.**

**Index to Consolidated Financial Statements and Schedule**


| | Page |
|---|---|
| Report of Independent Registered Public Accounting Firm | F-2 |
| Consolidated Balance Sheets as of December 31, 2016, and 2015 | F-3 |
| Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2016, 2015, and 2014 | F-4 |
| Consolidated Statements of Stockholders' Equity for the years ended December 31, 2016, 2015, and 2014 | F-5 |
| Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015, and 2014 | F-6 |
| Notes to Consolidated Financial Statements | F-7 |
| SCHEDULE | |
| Schedule numbered in accordance with Rule 5.04 of Regulation S-X: | |
| II. Consolidated Valuation and Qualifying Accounts and Reserves for the years ended December 31, 2016, 2015 and 2014 | S-1 |


All Schedules, except Schedule II, have been omitted as the required information is shown in the consolidated financial statements, or notes thereto, or the amounts involved are not significant or the schedules are not applicable.

**Report of Independent Registered Public Accounting Firm**

Board of Directors and Stockholders
BIOLASE, Inc.
Irvine, California

We have audited the accompanying consolidated balance sheets of BIOLASE, Inc. (the “Company”) as of December 31, 2016 and 2015 and the related consolidated statements of operations and comprehensive loss, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2016. In connection with our audits of the consolidated financial statements, we have also audited the consolidated financial statement schedule listed in the accompanying index as of and for the years ended December 31, 2016, 2015, and 2014. These consolidated financial statements and schedule are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and schedule. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of BIOLASE, Inc. at December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

Also, in our opinion, the consolidated financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and has negative cash flows from operations for each of the three years in the period ended December 31, 2016. These factors, among others, raise substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ BDO USA, LLP
Costa Mesa, California
March 10, 2017

**BIOLASE, INC.**

**CONSOLIDATED BALANCE SHEETS**
(in thousands, except per share data)

| | December 31, | |
|---|---|---|
| | 2016 | 2015 |
| **ASSETS** | | |
| **Current assets:** | | |
| Cash and cash equivalents | $ 8,924 | $ 11,699 |
| Restricted cash | 251 | 200 |
| Accounts receivable, less allowance of $1,209 and $1,765 in 2016 and 2015, respectively | 9,784 | 8,948 |
| Inventory, net | 13,523 | 12,566 |
| Prepaid expenses and other current assets | 1,505 | 1,387 |
| **Total current assets** | 33,987 | 34,800 |
| Property, plant, and equipment, net | 4,478 | 3,727 |
| Intangible assets, net | — | 51 |
| Goodwill | 2,926 | 2,926 |
| Other assets | 550 | 747 |
| **Total assets** | $ 41,941 | $ 42,251 |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| **Current liabilities:** | | |
| Accounts payable | $ 9,125 | $ 5,960 |
| Accrued liabilities | 5,778 | 5,906 |
| Customer deposits | 101 | 85 |
| Deferred revenue, current portion | 3,010 | 3,155 |
| **Total current liabilities** | 18,014 | 15,106 |
| Deferred income taxes, net | 798 | 738 |
| Deferred revenue, long-term | 23 | 142 |
| Capital lease obligation, long-term | — | 159 |
| Warranty accrual, long-term | 773 | 843 |
| Other liabilities, long-term | 268 | 338 |
| **Total liabilities** | 19,876 | 17,326 |
| **Commitments, contingencies and subsequent events (Notes 6 and 10)** | | |
| **Stockholders' equity:** | | |
| Preferred stock, par value $0.001; 1,000 shares authorized, 88 and 0 shares issued in 2016 and 2015, respectively; no shares outstanding in 2016 and 2015, respectively | — | — |
| Common stock, par value $0.001; 100,000 shares authorized, 67,566 and 58,228 shares issued and outstanding in 2016 and 2015, respectively | 68 | 58 |
| Additional paid-in capital | 201,198 | 188,622 |
| Accumulated other comprehensive loss | (876) | (801) |
| Accumulated deficit | (178,325) | (162,954) |
| **Total stockholders' equity** | 22,065 | 24,925 |
| **Total liabilities and stockholders' equity** | $ 41,941 | $ 42,251 |

See accompanying notes to consolidated financial statements.

**BIOLASE, INC.**

**CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS**
(in thousands, except per share data)

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Products and services revenue | $ 51,661 | $ 48,269 | $ 47,511 |
| License fees and royalty revenue | 149 | 206 | 145 |
| Net revenue | 51,810 | 48,475 | 47,656 |
| Cost of revenue | 31,502 | 32,525 | 29,484 |
| Gross profit | 20,308 | 15,950 | 18,172 |
| Operating expenses: | | | |
| Sales and marketing | 17,018 | 18,696 | 16,375 |
| General and administrative | 10,453 | 10,256 | 14,854 |
| Engineering and development | 7,799 | 7,283 | 4,577 |
| Excise tax | — | 361 | 307 |
| Legal settlement | — | (731) | — |
| Total operating expenses | 35,270 | 35,865 | 36,113 |
| Loss from operations | (14,962) | (19,915) | (17,941) |
| Loss on foreign currency transactions | (332) | (259) | (415) |
| Interest income (expense), net | 74 | 74 | (458) |
| Non-operating loss, net | (258) | (185) | (873) |
| Loss before income tax provision | (15,220) | (20,100) | (18,814) |
| Income tax provision | 151 | 178 | 112 |
| Net loss | (15,371) | (20,278) | (18,926) |
| Other comprehensive income (loss) items: | | | |
| Foreign currency translation adjustments | (75) | (244) | (283) |
| Comprehensive loss | $ (15,446) | $ (20,522) | $ (19,209) |
| | | | |
| Net loss | $ (15,371) | $ (20,278) | $ (18,926) |
| Deemed dividend on convertible preferred stock | (2,184) | — | — |
| Net loss attributable to common stockholders | $ (17,555) | $ (20,278) | $ (18,926) |
| | | | |
| Net loss per share attributable to common stockholders: | | | |
| Basic | $ (0.29) | $ (0.35) | $ (0.45) |
| Diluted | $ (0.29) | $ (0.35) | $ (0.45) |
| Shares used in the calculation of net loss per share: | | | |
| Basic | 60,664 | 58,189 | 42,232 |
| Diluted | 60,664 | 58,189 | 42,232 |

See accompanying notes to consolidated financial statements.

**BIOLASE, INC.**

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**
(in thousands)

| | Common Stock and Additional Paid-in Capital | | Convertible Preferred Stock | | Treasury Stock | | Accumulated Other Comprehensive Loss | Accumulated Deficit | Total Stockholders' Equity |
|---|---|---|---|---|---|---|---|---|---|
| | Shares | Amount | Shares | Amount | Shares | Amount | | | |
| Balances, January 1, 2014 | 37,336 | $ 148,904 | — | $ — | (1,964) | $ (16,399) | $ (274) | $ (123,750) | $ 8,481 |
| Exercise of stock options, net | 153 | 310 | — | — | — | — | — | — | 310 |
| Stock-based compensation | — | 1,233 | — | — | — | — | — | — | 1,233 |
| Retirement of treasury stock | (1,964) | (16,399) | — | — | 1,964 | 16,399 | — | — | — |
| Other compensation | — | 123 | — | — | — | — | — | — | 123 |
| Issuance of stock, net | 22,359 | 51,118 | — | — | — | — | — | — | 51,118 |
| Exercise of warrants | 39 | — | — | — | — | — | — | — | — |
| Stock dividends | 192 | — | — | — | — | — | — | — | — |
| Net loss | — | — | — | — | — | — | — | (18,926) | (18,926) |
| Foreign currency translation adjustment | — | — | — | — | — | — | (283) | — | (283) |
| Balances, December 31, 2014 | 58,115 | 185,289 | — | — | — | — | (557) | (142,676) | 42,056 |
| Exercise of stock options, net | 113 | 44 | — | — | — | — | — | — | 44 |
| Stock-based compensation | — | 3,350 | — | — | — | — | — | — | 3,350 |
| Cost of issuance | — | (3) | — | — | — | — | — | — | (3) |
| Net loss | — | — | — | — | — | — | — | (20,278) | (20,278) |
| Foreign currency translation adjustment | — | — | — | — | — | — | (244) | — | (244) |
| Balances, December 31, 2015 | 58,228 | 188,680 | — | — | — | — | (801) | (162,954) | 24,925 |
| Exercise of stock options, net | — | 1 | — | — | — | — | — | — | 1 |
| Stock-based compensation | — | 3,065 | — | — | — | — | — | — | 3,065 |
| Issuance of stock from RSUs, net | 489 | — | — | — | — | — | — | — | — |
| Issuance of Series C participating convertible preferred stock and warrants, net of issuance cost of $480 | — | 1,092 | 88 | 8,428 | — | — | — | — | 9,520 |
| Beneficial conversion feature of Series C participating convertible preferred stock | — | 1,092 | — | (1,092) | — | — | — | — | — |
| Deemed dividend related to beneficial conversion feature of Series C participating convertible preferred stock | — | (2,184) | — | 2,184 | — | — | — | — | — |
| Issuance of common stock upon conversion of Series C participating convertible preferred stock | 8,849 | 9,520 | (88) | (9,520) | — | — | — | — | — |
| Net loss | — | — | — | — | — | — | — | (15,371) | (15,371) |
| Foreign currency translation adjustment | — | — | — | — | — | — | (75) | — | (75) |
| Balances, December 31, 2016 | 67,566 | $ 201,266 | — | $ — | — | $ — | $ (876) | $ (178,325) | $ 22,065 |

See accompanying notes to consolidated financial statements.

**BIOLASE, INC.**

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

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| **Cash Flows From Operating Activities:** | | | |
| Net loss | $ (15,371) | $ (20,278) | $ (18,926) |
| Adjustments to reconcile net loss to net cash and cash equivalents used in operating activities: | | | |
| Depreciation and amortization | 1,048 | 880 | 696 |
| (Gain) loss on disposal of assets, net | (2) | 6 | 9 |
| (Recovery) provision for bad debts, net | (118) | 86 | 1,295 |
| Provision for inventory excess and obsolescence | 272 | 647 | 585 |
| Provision for sales returns allowance | — | 100 | — |
| Amortization of discount on lines of credit | — | — | 200 |
| Amortization of debt issuance costs | — | — | 128 |
| Stock-based compensation | 3,065 | 3,350 | 1,233 |
| Other non-cash compensation | — | — | 123 |
| Deferred income taxes | 60 | 61 | 60 |
| Earned interest income, net | (70) | (74) | — |
| Changes in operating assets and liabilities: | | | |
| Restricted cash | (51) | (200) | — |
| Accounts receivable | (644) | (52) | 826 |
| Inventory | (1,989) | (705) | (1,715) |
| Prepaid expenses and other current assets | 79 | (65) | (21) |
| Customer deposits | 16 | (27) | (174) |
| Accounts payable and accrued liabilities | 3,322 | (640) | 451 |
| Accrued legal settlement | — | (1,664) | — |
| Deferred revenue | (264) | 803 | (971) |
| Net cash and cash equivalents used in operating activities | (10,647) | (17,772) | (16,201) |
| **Cash Flows From Investing Activities:** | | | |
| Purchases of property, plant, and equipment | (1,414) | (1,803) | (198) |
| Proceeds from disposal of property, plant, and equipment | — | 25 | 1 |
| Net cash and cash equivalents used in investing activities | (1,414) | (1,778) | (197) |
| **Cash Flows From Financing Activities:** | | | |
| Principal payments under capital lease obligation | (171) | (107) | — |
| Borrowings under lines of credit | — | — | 16,875 |
| Payments under lines of credit | — | — | (21,508) |
| Payment of debt issuance costs | — | — | (45) |
| Proceeds from equity offering, net of expenses | 9,520 | — | 51,118 |
| Deposit on capital lease | — | (42) | — |
| Proceeds from exercise of stock options | 1 | 44 | 312 |
| Net cash and cash equivalents provided by (used in) financing activities | 9,350 | (105) | 46,752 |
| Effect of exchange rate changes | (64) | (206) | (234) |
| **(Decrease) increase in cash and cash equivalents** | (2,775) | (19,861) | 30,120 |
| **Cash and cash equivalents, beginning of year** | 11,699 | 31,560 | 1,440 |
| **Cash and cash equivalents, end of year** | $ 8,924 | $ 11,699 | $ 31,560 |
| **Supplemental cash flow disclosure - Cash Paid:** | | | |
| Interest paid | $ 4 | $ 4 | $ 148 |
| Income taxes paid | $ 76 | $ 57 | $ 52 |
| **Supplemental cash flow disclosure - Non-cash:** | | | |
| Assets acquired under capital lease | $ — | $ 378 | $ — |
| Accrued capital expenditures and tenant improvement allowance | $ 251 | $ 1,137 | $ — |

See accompanying notes to consolidated financial statements.

**BIOLASE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENT**

## NOTE 1 — BASIS OF PRESENTATION

***The Company***

BIOLASE, Inc. ("BIOLASE" and, together with its consolidated subsidiaries the "Company") incorporated in Delaware in 1987, is a medical device company that develops, manufactures, markets, and sells laser systems in dentistry and medicine and also markets, sells, and distributes dental imaging equipment, including cone beam digital x-rays and three-dimensional CAD/CAM intra-oral scanners.

***Basis of Presentation***

The consolidated financial statements include the accounts of BIOLASE, Inc. and its wholly-owned subsidiaries. The Company has eliminated all material intercompany transactions and balances in the accompanying consolidated financial statements. Certain amounts for prior years have been reclassified to conform to the current year presentation.

***Use of Estimates***

The preparation of these consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires the Company to make estimates and assumptions that affect amounts reported in the consolidated financial statements and the accompanying notes. Significant estimates in these consolidated financial statements include allowances on accounts receivable, inventory, and deferred taxes, as well as estimates for accrued warranty expenses, goodwill and the ability of goodwill to be realized, revenue deferrals, effects of stock-based compensation and warrants, contingent liabilities, and the provision or benefit for income taxes. Due to the inherent uncertainty involved in making estimates, actual results reported in future periods may differ materially from those estimates.

***Fair Value of Financial Instruments***

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market (or, if none exists, the most advantageous market) for the specific asset or liability at the measurement date (referred to as the "exit price"). The fair value is based on assumptions that market participants would use, including a consideration of non-performance risk. Under the accounting guidance for fair value hierarchy, there are three levels of measurement inputs. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are observable, either directly or indirectly. Level 3 inputs are unobservable due to little or no corroborating market data.

The Company's financial instruments, consisting of cash and cash equivalents, accounts receivable, accounts payable, capital lease obligations, and accrued liabilities, approximate fair value because of the liquid or short term nature of these items.

***Convertible Preferred Stock and Warrant Transaction***

On August 8, 2016, the Company completed a private placement with several institutional and individual investors, and certain of its directors and officers, under which the Company sold an aggregate of 88,494 shares of its Preferred Stock and warrants to purchase up to an aggregate of 2,035,398 unregistered shares of its common stock at an exercise price of $2.00 per share. Each share of Preferred Stock converts automatically upon receipt of stockholder approval and was convertible into 100 shares of common stock, reflecting a conversion price equal to $1.13 per share, which is the closing price of the common stock quoted on the NASDAQ Capital Market on July 29, 2016. On September 30, 2016, the Company held a meeting of its stockholders and received requisite stockholder approval with respect to the issuance of 8,849,400 shares of common stock upon automatic conversion of the Preferred Stock and the issuance of common stock related exercise of the warrants by certain holders whose warrants were subject to a beneficial ownership limitation. Gross proceeds from the sale were approximately $10.0 million, and net proceeds, after offering expenses of approximately $0.5 million, were approximately $9.5 million. In accordance with applicable accounting standards, the $10.0 million gross proceeds from sale were allocated to the convertible preferred stock and warrants in the amount of $8.9 million and $1.1 million, respectively. The allocation was based on the relative fair values of the underlying common stock and warrants as of the commitment date, with the fair value of the warrants determined using a Black Scholes model. Assumptions used in the Black-Scholes model include an expected term of five years, risk-free rate of 1.03% and a dividend yield of 0%. This transaction resulted in a discount from allocation of proceeds to separable instruments of $1.1 million and a beneficial conversion to common stock with a value of $1.1 million, which have been reflected as a deemed distribution to preferred shareholders in the year ended December 31, 2016.

***Concentration of Credit Risk, Interest Rate Risk and Foreign Currency Exchange Rate***

Financial instruments which potentially expose the Company to a concentration of credit risk consist principally of cash and cash equivalents, restricted cash, and trade accounts receivable. The Company maintains its cash and cash equivalents and restricted cash with established commercial banks. At times, balances may exceed federally insured limits. To minimize the risk associated with trade accounts receivable, management performs ongoing credit evaluations of customers' financial condition and maintains relationships with the Company's customers that allow management to monitor current changes in business operations so the Company can respond as needed. The Company does not, generally, require customers to provide collateral before it sells them its products. However, the Company has required certain distributors to make prepayments for significant purchases of products.

Substantially all of the Company's revenue is denominated in U.S. dollars, including sales to international distributors. Only a small portion of its revenue and expenses is denominated in foreign currencies, principally the Euro and Indian Rupee. The Company's foreign currency expenditures primarily consist of the cost of maintaining offices, consulting services, and employee-related costs. During the years ended December 31, 2016, 2015, and 2014 the Company did not enter into any hedging contracts. Future fluctuations in the value of the U.S. dollar may affect the price competitiveness of the Company's products outside the U.S.

***Liquidity and Management's Plans***

The Company has reported recurring losses from operations and has not generated cash from operations for the three years ended December 31, 2016. During the years ended December 31, 2016, 2015 and 2014, the principal sources of liquidity for the Company were its net proceeds from the August 8, 2016, February 10, 2014, July 22, 2014, and November 7, 2014 sales by the Company of $9.5 million, $4.8 million, $11.5 million, and $34.8 million, respectively, of unregistered shares of BIOLASE equity securities. The Company's recurring losses, level of cash used in operations, potential need for additional capital, and the uncertainties surrounding our ability to raise additional capital, raises substantial doubt about its ability to continue as a going concern. The financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

At December 31, 2016, the Company had approximately $16.0 million in working capital. The Company's principal sources of liquidity at December 31, 2016 consisted of approximately $9.2 million in cash, cash equivalents, and restricted cash, and $9.8 million of net accounts receivable.

In order for the Company to continue operations beyond the next 12 months and be able to discharge its liabilities and commitments in the normal course of business, the Company must increase sales of its products, control or potentially reduce expenses and establish profitable operations in order to generate cash from operations or obtain additional funds when needed.

Additional capital requirements may depend on many factors, including, among other things, the rate at which the Company's business grows, demands for working capital, manufacturing capacity, and any acquisitions that the Company may pursue. From time to time, the Company could be required, or may otherwise attempt, to raise capital through either equity or debt offerings. The Company cannot provide assurance that it will be able to successfully enter into any such equity or debt financings in the future or that the required capital would be available on acceptable terms, if at all, or that any such financing activity would not be dilutive to its stockholders.

## NOTE 2 — SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

***Cash and Cash Equivalents***

The Company considers all highly liquid investments with maturities of three months or less when purchased, as cash equivalents. Cash equivalents are carried at cost, which approximates fair market value.

***Restricted Cash***

Restricted cash represents a revolving 90-day certificate of deposit maintained by the Company as collateral in connection with corporate credit cards. At December 31, 2016 and 2015, the restricted cash balance was $251,000 and $200,000, respectively.

***Accounts Receivable***

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in its existing accounts receivable. The Company evaluates its allowance for doubtful accounts based upon its knowledge of customers and their compliance with credit terms. The evaluation process includes a review of customers' accounts on a regular basis which incorporates input from sales, service, and finance personnel. The review process evaluates all account balances with amounts outstanding more than 90 days from the due date and other specific amounts for which information obtained indicates that the balance may be uncollectible. The allowance for doubtful accounts is adjusted based on such evaluation, with a corresponding provision included in general and administrative expenses. Account balances are charged off against the allowance when it is probable the receivable will not be recovered. The Company does not have any off-balance-sheet credit exposure related to its customers.

***Inventory***

The Company values inventory at the lower of cost or market, with cost determined using the first-in, first-out method. The carrying value of inventory is evaluated periodically for excess quantities and obsolescence. Management evaluates quantities on hand, physical condition, and technical functionality as these characteristics may be impacted by anticipated customer demand for current products and new product introductions. The allowance is adjusted based on such evaluation, with a corresponding provision included in cost of revenue. Abnormal amounts of idle facility expenses, freight, handling costs and wasted material are recognized as current period charges and the Company's allocation of fixed production overhead is based on the normal capacity of its production facilities.

***Property, Plant, and Equipment***

Property, plant, and equipment is stated at acquisition cost less accumulated depreciation. Maintenance and repairs are expensed as incurred. Upon sale or disposition of assets, any gain or loss is included in the consolidated statements of operations.

The cost of property, plant, and equipment is depreciated using the straight-line method over the following estimated useful lives of the respective assets, except for leasehold improvements, which are depreciated over the lesser of the estimated useful lives of the respective assets or the related lease terms.

| | |
|---|---|
| Building | 30 years |
| Leasehold improvements | 3 to 5 years |
| Equipment and computers | 3 to 5 years |
| Furniture and fixtures | 5 years |

Depreciation expense for the years ended December 31, 2016, 2015, and 2014 totaled approximately $997,000, $817,000, and $627,000, respectively.

***Goodwill and Other Intangible Assets***

Goodwill is not subject to amortization but is evaluated for impairment annually or whenever events or changes in circumstances indicate that the asset might be impaired. The Company operates in one reporting segment and has one operating unit; therefore goodwill is tested for impairment at the consolidated level against the fair value of the Company. The fair value of a reporting unit refers to the amount at which the unit as a whole could be bought or sold in a current transaction between willing parties. Quoted market prices in active markets are the best evidence of fair value and are used as the basis for measurement, if available. Management assesses potential impairment on an annual basis on June 30th and compares the Company's market capitalization to its carrying amount, including goodwill. A significant decrease in the Company's stock price could indicate a material impairment of goodwill which, after further analysis, could result in a material charge to operations. If goodwill is considered impaired, the impairment loss to be recognized is measured by the amount by which the carrying amount of the goodwill exceeds the implied fair value of that goodwill. Inherent in the Company's fair value determinations are certain judgments and estimates, including projections of future cash flows, the discount rate reflecting the inherent risk in future cash flows, the interpretation of current economic indicators and market valuations, and strategic plans with regard to operations. A change in these underlying assumptions could cause a change in the results of the tests, which could cause the fair value of the reporting unit to be less than its respective carrying amount.

Costs incurred to acquire and successfully defend patents, and costs incurred to acquire trademarks and trade names are capitalized. Costs related to the internal development of technologies that are ultimately patented are expensed as incurred. Intangible assets, except those determined to have an indefinite life, are amortized using the straight-line method or over management's best estimate of the pattern of economic benefit over the estimated useful life of the assets. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable.

***Long-Lived Assets***

The carrying values of long-lived assets, including intangible assets subject to amortization, are reviewed when indicators of impairment, such as reductions in demand or significant economic slowdowns, are present. Reviews are performed to determine whether carrying value of an asset is impaired based on comparisons to undiscounted expected future cash flows. If this comparison indicates that there is impairment, the impaired asset is written down to fair value, which is typically calculated using discounted expected future cash flows. Impairment is based on the excess of the carrying amount over the fair value of those assets.

***Other Comprehensive (Loss) Income***

Other comprehensive (loss) income encompasses the change in equity from transactions and other events and circumstances from non-owner sources and is included as a component of stockholders' equity but is excluded from net (loss) income. Accumulated other comprehensive (loss) income is comprised of foreign currency translation adjustments.

***Foreign Currency Translation and Transactions***

Transactions of the Company's German, Spanish, Australian, and Indian subsidiaries are denominated in their local currencies. The results of operations and cash flows are translated at average exchange rates during the period, and assets and liabilities are translated at end-of-period exchange rates. Translation gains or losses are shown as a component of accumulated other comprehensive (loss) income in stockholders' equity. Income and losses resulting from foreign currency transactions, which are denominated in a currency other than the entity's functional currency, are included in comprehensive loss in the consolidated statements of operations.

***Revenue Recognition***

The Company's products are sold in North America directly to customers through its field sales force and through non-exclusive distributors. The Company sells its products internationally through exclusive and non-exclusive distributors as well as directly to customers in certain countries. Sales are recorded upon shipment from the Company's facility and payment of its invoices is generally due within 90 days or less. Internationally, the Company primarily sells products through independent distributors. Revenue is recorded based on four basic criteria that must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred and title and the risks and rewards of ownership have been transferred to the customer or services have been rendered; (3) the price is fixed or determinable; and (4) collectability is reasonably assured. Revenue is recorded for all sales upon shipment assuming all other revenue recognition criteria are met.

Sales of the Company's laser systems include separate deliverables consisting of the product, disposables used with the laser systems, installation, and training. For sale of deliverables that are part of a multiple-element arrangement, the Company applies a method which approximates the relative selling price method, which requires that arrangement consideration be allocated at the inception of an arrangement to all deliverables using the relative selling price method. This requires the Company to use estimated selling prices of each of the deliverables in the total arrangement. The sum of those prices is then compared to the arrangement, and any difference is applied to the separate deliverable ratably. This method also establishes a selling price hierarchy for determining the selling price of a deliverable, which includes: (i) vendor-specific objective evidence ("VSOE"), if available, (ii) third-party evidence if VSOE is not available, and (iii) estimated selling price if neither VSOE nor third-party evidence is available. VSOE is determined based on the value the Company sells the undelivered element to a customer as a stand-alone product. Revenue attributable to the undelivered elements is included in deferred revenue when the product is shipped and is recognized when the related service is performed. Disposables not shipped at time of sale and installation services are typically shipped or installed within 30 days. Training is included in deferred revenue when the product is shipped and is recognized when the related service is performed or upon the appropriate expiration of time offered under the agreement. Deferred revenue attributable to undelivered elements, which primarily consists of training, totaled approximately $1.4 million and $1.6 million as of December 31, 2016 and 2015, respectively.

Key judgments of the Company's revenue recognition include the collectability of payment from the customer, the satisfaction of all elements of the arrangement having been delivered, and that no additional customer credits and discounts are needed. The Company evaluates the customer's credit worthiness prior to the shipment of the product. Based on the assessment of the credit information available, the Company may determine the credit risk is higher than normally acceptable, and will either decline the purchase or defer the revenue until payment is reasonably assured. Future obligations required at the time of sale may also cause the Company to defer the revenue until the obligation is satisfied.

Although all sales are final, the Company accepts returns of products in certain, limited circumstances and records a provision for sales returns based on historical experience concurrent with the recognition of revenue. The sales returns allowance is recorded as a reduction of accounts receivable and revenue. As of December 31, 2016 and 2015, $210,000 and $210,000, respectively, was recorded as a reduction of accounts receivable for sales returns.

Extended warranty contracts, which are sold to laser and certain imaging customers, are recorded as revenue on a straight-line basis over the period of the contracts, which is typically one year. Included in deferred revenue for each of the years ended December 31, 2016 and 2015, was approximately $1.5 million and $1.4 million, respectively, for extended warranty contracts.

For sales transactions involving used laser trade-ins, the Company records the purchased trade-ins as inventory at the fair value of the asset surrendered with the offset to accounts receivable. In determining the estimated fair value of used laser trade-ins, the Company makes an assessment of usable parts and key components and considers the ultimate resale value of the certified pre-owned (or "CPO") laser with applicable margins. The Company sells these CPO laser trade-ins as refurbished lasers. Trade-in rights are not established or negotiated with customers during the initial sales transaction of the original lasers. Trade-in rights are promotional events used at management's discretion to encourage existing laser customers to purchase new lasers. A customer is not required to trade in a laser nor is the Company required to accept a trade-in. However, the promotional value offered in exchange for the trade-in laser is not offered without a laser trade-in. The transaction is treated as a monetary transaction as each sale transaction involving a customer trade-in includes significant boot of greater than 25% of the fair value of the exchange. As a monetary transaction, the sale is recognized following the Company's laser system revenue recognition policy. There have been no sales transactions in which the cash consideration was less than 25% of the total transaction value.

The Company recognizes revenue for royalties under licensing agreements for its patented technology when the product using its technology is sold. The Company estimates and recognizes the amount earned based on historical performance and current knowledge about the business operations of its licensees. The Company's estimates have been consistent with amounts historically reported by the licensees. Licensing revenue related to exclusive licensing arrangements is recognized concurrent with the related exclusivity period.

From time to time, the Company may offer sales incentives and promotions on its products. The cost of sales incentives are recorded at the date at which the related revenue is recognized as a reduction in revenue, an increase in cost of goods sold or a selling expense, as applicable, or later, in the case of incentives offered after the initial sale has occurred.

***Provision for Warranty Expense***

The Company provides warranties against defects in materials and workmanship of its laser systems for specified periods of time. For the years ended December 31, 2016, 2015, and 2014 laser systems sold domestically were covered by the warranty for a period of up to two years from the date of sale by the Company or the distributor to the end-user. Laser systems sold internationally were covered by the warranty for a period of up to 28 months from the date of sale to the international distributor. Estimated warranty expenses are recorded as an accrued liability with a corresponding provision to cost of revenue. This estimate is recognized concurrent with the recognition of revenue on the sale to the distributor or end-user. Warranty expenses expected to be incurred after one year from the time of sale to the distributor are classified as a long-term warranty accrual. The Company's overall accrual is based on its historical experience and management's expectation of future conditions, taking into consideration the location and type of customer and the type of laser, which directly correlate to the materials and components under warranty, the duration of the warranty period, and the logistical costs to service the warranty. Additional factors that may impact the Company's warranty accrual include changes in the quality of materials, leadership and training of the production and services departments, knowledge of the lasers and workmanship, training of customers, and adherence to the warranty policies. Additionally, an increase in warranty claims or in the costs associated with servicing those claims would likely result in an increase in the accrual and a decrease in gross profit. All imaging products are initially covered by the manufacturer's warranties. However, the Company offers extended warranties on certain imaging products.

Changes in the initial product warranty accrual and the expenses incurred under the Company's initial and extended warranties for the years ended December 31 are included within accrued liabilities on the Consolidated Balance Sheets and were as follows (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Initial warranty accrual, beginning balance | $ 2,188 | $ 1,449 | $ 1,096 |
| Provision for estimated warranty cost | 348 | 1,715 | 1,214 |
| Warranty expenditures | (830) | (976) | (861) |
| Initial warranty accrual, ending balance | 1,706 | 2,188 | 1,449 |
| Less warranty accrual, long-term | 773 | 843 | 519 |
| Total warranty accrual, current portion | $ 933 | $ 1,345 | $ 930 |

***Shipping and Handling Costs and Revenues***

Shipping and handling costs are expensed as incurred and are recorded as a component of cost of revenue. Charges to customers for shipping and handling are included as a component of revenue.

***Advertising Costs***

Advertising costs are expensed as incurred and totaled approximately $351,000, $929,000, and $543,000 for the years ended December 31, 2016, 2015, and 2014, respectively.

***Engineering and Development***

Engineering and development expenses are generally expensed as incurred and consist of engineering personnel salaries and benefits, prototype supplies, contract services, and consulting fees related to product development.

***Stock-Based Compensation***

During the years ended December 31, 2016, 2015, and 2014, the Company recognized compensation cost related to stock options of $3.1 million, $3.4 million, and $1.2 million, respectively, based on the grant-date fair value. The following table summarizes the income statement classification of compensation expense associated with share-based payments (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Cost of revenue | $ 226 | $ 333 | $ 134 |
| Sales and marketing | 477 | 679 | 401 |
| General and administrative | 2,051 | 2,020 | 616 |
| Engineering and development | 311 | 318 | 82 |
| | $ 3,065 | $ 3,350 | $ 1,233 |

As of December 31, 2016 and 2015, the Company had $4.0 million and $4.4 million, respectively, of total unrecognized compensation cost, net of estimated forfeitures, related to unvested share-based compensation arrangements granted under its existing plans. The $4.0 million in cost is expected to be recognized over a weighted-average period of 2.5 years as of December 31, 2016.

The Company uses the Black-Scholes option valuation model for estimating the fair value of options. This option-pricing model requires the Company to make several assumptions regarding the key variables used to calculate the fair value of its stock options. The risk-free interest rate used is based on the U.S. Treasury yield curve in effect for the expected lives of the options at their dates of grant. Since July 1, 2005, the Company has used a dividend yield of zero as it does not intend to pay cash dividends on its common stock in the foreseeable future. The most critical assumptions used in calculating the fair value of stock options is the expected life of the option and the expected volatility of BIOLASE common stock. The expected life is calculated in accordance with the simplified method, whereby for service-based awards the expected life is calculated as a midpoint between the vest and expiry period. The Company uses the simplified method as there is not a sufficient history of share option exercises. For performance-based awards the expected life equals the life of the award. Management believes that the historic volatility of BIOLASE common stock is a reliable indicator of future volatility, and accordingly, a stock volatility factor based on the historical volatility of BIOLASE common stock over a lookback period of the expected life is used in approximating the estimated volatility of new stock options. Compensation expense is recognized using the straight-line method for all service-based employee awards and graded amortization for all performance-based awards. Compensation expense is recognized only for those options expected to vest, with forfeitures estimated at the date of grant based on historical experience and future expectations. Forfeitures are estimated at the time of the grant and revised in subsequent periods as actual forfeitures differ from those estimates. BIOLASE applied a forfeiture rate of 4.87% and 35.56% to awards granted to executives and employees, respectively, during the year ended December 31, 2016.

The stock option fair values, under the 2002 Plan, were estimated using the Black-Scholes option-pricing model with the following assumptions:

| | 2016 | 2015 | 2014 |
|---|---|---|---|
| Expected term (years) | 5.96 | 5.80 | 3.83 |
| Volatility | 86% | 90% | 94% |
| Annual dividend per share | $ — | $ — | $ — |
| Risk-free interest rate | 1.39% | 1.64% | 1.66% |

### *Excise Tax*

Commencing January 1, 2013, certain of the Company's product sales have been subject to the medical device excise tax. The Company has included such taxes separately as a component of operating expense. Effective beginning 2016, the excise tax imposed on the sale of medical devices has been suspended for the calendar years 2016 and 2017.

### *Income Taxes*

Differences between accounting for income taxes for financial statement purposes and accounting for tax return purposes are stated as deferred tax assets or deferred tax liabilities in the accompanying consolidated financial statements. The provision for income taxes represents the tax payable for the period and the change during the period in deferred tax assets and liabilities. The Company establishes a valuation allowance when it is more likely than not that the deferred tax assets will not be realized.

On January 1, 2007, the Company adopted the interpretations issued by the Financial Accounting Standards Board ("FASB") which establish a single model to address accounting for uncertain tax positions. The interpretations clarify the accounting for income taxes by prescribing a minimum recognition threshold a tax position is required to meet before being recognized in the financial statements and also provides guidance on de-recognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure, and transition.

The income tax provisions for the years ended December 31, 2016, 2015, and 2014 were calculated using the discrete year-to-date method. See *Note 5 – Income Taxes* for additional disclosures related to the Company's income tax.

### *Net Loss Per Share — Basic and Diluted*

Basic net income (loss) per share is computed by dividing income (loss) available to common stockholders by the weighted-average number of common shares outstanding for the period. In computing diluted net income (loss) per share, the weighted average number of shares outstanding is adjusted to reflect the effect of potentially dilutive securities.

Outstanding stock options, restricted stock units and warrants to purchase approximately 20,537,000, 17,371,000, and 13,606,000 shares were not included in the calculation of diluted loss per share amounts for the years ended December 31, 2016, 2015, and 2014, respectively, as their effect would have been anti-dilutive.

***Recent Accounting Pronouncements***

Changes to U.S. GAAP are established by the FASB in the form of accounting standards updates ("ASUs") to the FASB's Accounting Standards Codification ("ASC").

The Company considers the applicability and impact of all ASUs. ASU's not listed below were assessed and determined not to be applicable or are expected to have minimal impact on the Company's consolidated financial position and results of operations.

*Adopted Accounting Standards*

In August 2014, the FASB issued ASU No. 2014-15, Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern. The standard requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date the financial statements are issued and provides guidance on determining when and how to disclose going concern uncertainties in the financial statements. Certain disclosures will be required if conditions give rise to substantial doubt about an entity's ability to continue as a going concern. ASU 2014-15 applies to all entities and is effective for annual and interim reporting periods ending after December 15, 2016, with early adoption permitted. The Company performed an assessment and has concluded that substantial doubt currently exists about its ability to continue as a going concern. The financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern. The adoption of this standard did not have a material effect on the Company's consolidated financial statements.

*Accounting Standards Not Yet Adopted*

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (ASU 2014-09), which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASU 2014-09 defines a five-step process to achieve this core principle, and, in doing so, more judgment and estimates may be required within the revenue recognition process than are required under existing U.S. GAAP.

The standard is effective for annual periods beginning after December 15, 2017, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients or (ii) a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional footnote disclosures). The Company will adopt the standard during the year ending December 31, 2018. The expected adoption method and implementation analysis of ASU 2014-09 is in the early stages and the Company expects to have further information next quarter. The FASB has issued and may issue in the future, interpretive guidance, which may impact the Company's implementation analysis.

In July 2015, the FASB issued ASU No. 2015-11, Simplifying the Measurement of Inventory ("ASU 2015-11"), as part of its simplification initiative. The standard requires inventory within the scope of ASU 2015-11 to be measured using the lower of cost and net realizable value. The changes apply to all types of inventory, except those measured using the-last-in-first-out method or the retail inventory method. ASU 2015-11 applies to all entities and is effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2016, with early adoption permitted. The Company does not expect that the adoption of this standard will have a material effect on its financial statements.

In November 2015, FASB issued ASU 2015-17, Income Taxes (Topic 740). Current GAAP requires an entity to separate deferred income tax liabilities and assets into current and noncurrent amounts in a classified statement of financial position. To simplify the presentation of deferred income taxes, the amendments in this ASU require that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. The amendments in this ASU apply to all entities that present a classified statement of financial position. The new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years with early adoption permitted. The Company will follow this guidance beginning in fiscal 2017. The Company does not expect that the adoption of this standard will have a material effect on its financial statements.

In February 2016, FASB issued ASU 2016-02, Leases. The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company is currently evaluating the impact of its pending adoption of the new standard on its consolidated financial statements, which will result in the recordation of an asset and liability relating to lease commitments greater than one year.

In March 2016, the FASB issued ASU 2016-09, Compensation – Stock Compensation (Topic 718) ("ASU 2016-09"). The updated standard simplifies several aspects of the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The standard requires the recognition of the income tax effects of awards in the income statement when the awards vest or are settled, thus eliminating additional paid in capital ("APIC") pools. ASU 2016-09 is effective for public business entities for annual reporting periods beginning after December 15, 2016, including interim periods within those annual reporting periods. Early adoption is permitted. The Company adopted ASU 2016-09 as of January 1, 2017, and made the accounting policy election to estimate the number of awards expected to vest for stock-based compensation expense. The Company does not expect that the adoption of ASU 2016-09 and related accounting policy election will have a material effect on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230) ("ASU 2016-15"). The updated standard addresses eight specific cash flow issues with the objective of reducing diversity in practice. ASU 2016-15 is effective for public business entities for annual reporting periods beginning after December 15, 2017, including interim periods within those annual reporting periods. Early adoption is permitted. The Company is assessing the impact of the adoption of ASU 2016-15 on its consolidated financial statements.

## NOTE 3 — SUPPLEMENTARY BALANCE SHEET INFORMATION

*Accounts Receivable, net:*

| | December 31, | |
|---|---|---|
| **(in thousands):** | **2016** | **2015** |
| Components of accounts receivable, net of allowances, are as follows: | | |
| Trade | $ 9,699 | $ 8,850 |
| Royalties | 62 | 61 |
| Other | 23 | 37 |
| Total receivables, net | $ 9,784 | $ 8,948 |

Accounts receivable is net of allowances for doubtful accounts of approximately $1.2 million and $1.8 million and sales returns of approximately $210,000 and $210,000 at December 31, 2016 and 2015, respectively.

*Inventory, net:*

| | December 31, | |
|---|---|---|
| **(in thousands):** | **2016** | **2015** |
| Components of inventory, net of allowances, are as follows: | | |
| Raw materials | $ 4,837 | $ 3,627 |
| Work-in-process | 2,261 | 1,379 |
| Finished goods | 6,425 | 7,560 |
| Inventory, net | $ 13,523 | $ 12,566 |

Inventory is net of a provision for excess and obsolete inventory totaling approximately $1.7 million and $2.1 million at December 31, 2016 and 2015, respectively.

*Property, Plant, and Equipment, net:*

| (in thousands): | December 31, 2016 | 2015 |
|---|---|---|
| Components of property, plant, and equipment, net of depreciation, are as follows: | | |
| Building | $ 196 | $ 203 |
| Leasehold improvements | 2,003 | 2,019 |
| Equipment and computers | 6,163 | 6,031 |
| Furniture and fixtures | 599 | 585 |
| Construction in progress | 1,590 | 1,045 |
| | 10,551 | 9,883 |
| Accumulated depreciation | (6,225) | (6,314) |
| | 4,326 | 3,569 |
| Land | 152 | 158 |
| Property, plant, and equipment, net | $ 4,478 | $ 3,727 |

The cost basis of assets held under capital lease was $378,000 and the accumulated depreciation related to assets held under capital lease was $227,000 as of December 31, 2016. The cost basis of assets held under capital lease was $590,000 and the accumulated depreciation related to assets held under capital lease was $118,000 as of December 31, 2015.

*Accrued Liabilities:*

| (in thousands): | December 31, 2016 | 2015 |
|---|---|---|
| Components of accrued liabilities are as follows: | | |
| Payroll and benefits | $ 2,147 | $ 2,303 |
| Warranty accrual, current portion | 933 | 1,345 |
| Taxes | 638 | 445 |
| Accrued professional services | 782 | 681 |
| Accrued capital lease, current portion | 159 | 167 |
| Accrued insurance premium | 906 | 467 |
| Other | 213 | 498 |
| Accrued liabilities | $ 5,778 | $ 5,906 |

*Deferred Revenue:*

| (in thousands): | December 31, 2016 | 2015 |
|---|---|---|
| Components of deferred revenue are as follows: | | |
| Undelivered elements (training, installation, product and support services) | $ 1,404 | $ 1,608 |
| Extended warranty contracts | 1,487 | 1,428 |
| Deferred royalties | 142 | 261 |
| Total Deferred Revenue | 3,033 | 3,297 |
| Less long-term amounts: | | |
| Deferred royalties | 23 | 142 |
| Total Deferred Revenue - Long-Term | 23 | 142 |
| Total Deferred Revenue - Current | $ 3,010 | $ 3,155 |

In connection with the Company's initiatives to measure and improve customer satisfaction and concurrent with the launch of Waterlase iPlus 2.0 in February 2015, the Company introduced its exclusive Practice Growth Guarantee, which is a program to assist with growth in the Company's clients' dental practices through training on a select number of clinical procedures and with billing and marketing support for dentists included. Consistent with the Company's standard terms and conditions applicable to all of its products, the Practice Growth Guarantee does not give the customer the right to return purchased laser systems or receive a refund of any amount of the purchase price. However, the Practice Growth Guarantee does provide for additional training opportunities and certain billing and marketing support activities to the customer. The Company has estimated additional deferred revenue related to the Practice Growth Guarantee for all Waterlase iPlus 2.0 system sales for the year ended December 31, 2016 and 2015 to be approximately $18,000 and $119,000, respectively.

On March 24, 2015 a patent infringement lawsuit against Fotona Proizvodnja Optoelektronskih Naprav D.D. and Fotona LLC (collectively, "Fotona") was settled whereby the Company was to receive payments totaling $1.4 million. The Company calculated the present value of the settlement amount to be $1.2 million and allocated such amount to each significant element of the settlement on a relative fair value basis. $731,000 and $68,000 were allocated towards the recovery of the Company's legal expenses and as settlement for the dismissal of the patent infringement lawsuit and are reflected as legal settlement and license fees and royalty revenue, respectively, on the Consolidated Statements of Operations and Comprehensive Loss. The remaining amount of $379,000 was allocated towards the three-year, non-exclusive, paid-up license in the United States and the five-year, non-exclusive, paid-up license in countries outside of the United States which was reflected within other assets and long-term deferred revenue on the Consolidated Balance Sheets. The deferred revenue is being recognized as license revenue over the terms of the paid-up licenses. The Company has recorded $119,000 and $119,000 in revenue and has $142,000 and $261,000 in deferred revenue for and as of the year ended December 31, 2016 and 2015, respectively. For additional information on litigation, see Note 6, Commitments and Contingencies.

**NOTE 4 — INTANGIBLE ASSETS AND GOODWILL**

The Company conducted its annual impairment test of goodwill as of June 30, 2016 and determined that there was no impairment. The Company also tests its intangible assets and goodwill between the annual impairment test if events occur or circumstances change that would more likely than not reduce the fair value of the Company or its assets below their carrying amounts. For intangible assets subject to amortization, the Company performs its impairment test when indicators, such as reductions in demand or significant economic slowdowns, are present. No events have occurred that triggered further impairment testing of the Company's intangible assets and goodwill during the years ended December 31, 2016 and 2015.

Amortization expense for the years ended December 31, 2016, 2015, and 2014, totaled $51,000, $63,000, and $69,000, respectively.

The following table presents the details of the Company's intangible assets, related accumulated amortization and goodwill (in thousands):

| | As of December 31, 2016 | | | | As of December 31, 2015 | | | |
|---|---|---|---|---|---|---|---|---|
| | Gross | Accumulated Amortization | Impairment | Net | Gross | Accumulated Amortization | Impairment | Net |
| Patents (4-10 years) | $ 1,914 | $ (1,914) | $ — | $ — | $ 1,914 | $ (1,914) | $ — | $ — |
| Trademarks (6 years) | 69 | (69) | — | — | 69 | (69) | — | — |
| Other (4 to 6 years) | 817 | (817) | — | — | 817 | (766) | — | 51 |
| Total | $ 2,800 | $ (2,800) | $ — | $ — | $ 2,800 | $ (2,749) | $ — | $ 51 |
| Goodwill (Indefinite life) | $ 2,926 | | | $ 2,926 | $ 2,926 | | | $ 2,926 |

**NOTE 5 — INCOME TAXES**

The Company accounts for income taxes under the asset and liability method, whereby 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. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply 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 that includes the enactment date. Management evaluates the need to establish a valuation allowance for deferred tax assets based upon the amount of existing temporary differences, the period in which they are expected to be recovered, and expected levels of taxable income. A valuation allowance to reduce deferred tax assets is established when it is "more likely than not" that some or all of the deferred tax assets will not be realized. Management has determined that a full valuation allowance against the Company's net deferred tax assets is appropriate.

The following table presents the current and deferred provision for income taxes for the years ended December 31 (in thousands):

| | 2016 | 2015 | 2014 |
|---|---|---|---|
| **Current:** | | | |
| Federal | $ — | $ — | $ — |
| State | 22 | 30 | 27 |
| Foreign | 69 | 87 | 25 |
| | 91 | 117 | 52 |
| **Deferred:** | | | |
| Federal | 60 | 61 | 60 |
| State | — | — | — |
| Foreign | — | — | — |
| | 60 | 61 | 60 |
| | $ 151 | $ 178 | $ 112 |

The provision for income taxes differs from the amount that would result from applying the federal statutory rate as follows for the years ended December 31:

| | 2016 | 2015 | 2014 |
|---|---|---|---|
| Statutory regular federal income tax rate | (34.0)% | (34.0)% | (34.0)% |
| Change in valuation allowance | 40.4 % | 40.2 % | 37.4 % |
| State tax benefit (net of federal benefit) | (3.0)% | (3.1)% | (3.3)% |
| Research credits | (3.4)% | (3.1)% | (1.9)% |
| Foreign amounts with no tax benefit | 0.2 % | 0.1 % | (0.1)% |
| Non-deductible expenses | 0.6 % | 0.4 % | 1.0 % |
| Effect of change in rate | 0.5 % | 0.9 % | 2.3 % |
| Other | (0.2)% | (0.5)% | (0.8)% |
| Total | 1.1 % | 0.9 % | 0.6 % |

The components of the deferred income tax assets and liabilities as of December 31 (in thousands):

| | 2016 | 2015 |
|---|---|---|
| Capitalized intangible assets for tax purposes | $ 47 | $ 104 |
| Reserves not currently deductible | 2,117 | 2,527 |
| Deferred revenue | 8 | 8 |
| Stock options | 4,966 | 4,072 |
| State taxes | 9 | 9 |
| Income tax credits | 2,379 | 2,471 |
| Inventory | 940 | 905 |
| Property and equipment | 201 | 345 |
| Other comprehensive income | 252 | 320 |
| Unrealized gain on foreign currency | 136 | 136 |
| Net operating losses | 43,687 | 38,753 |
| Total deferred tax assets | 54,742 | 49,650 |
| Valuation allowance | (54,310) | (49,514) |
| Net deferred tax assets | 432 | 136 |
| Capitalized intangible assets | (876) | (813) |
| Other | (354) | (61) |
| Total deferred tax liabilities | (1,230) | (874) |
| Net deferred tax liabilities | $ (798) | $ (738) |

Based upon the Company's operating losses incurred for each of three years ended December 31, 2016, and the available evidence, the Company has established a valuation allowance against its net deferred tax assets in the amount of $54.3 million as of December 31, 2016. Management considered factors such as the Company's earnings history, future projected earnings, and tax planning strategies. If sufficient evidence of the Company's ability to generate sufficient future taxable income tax benefits becomes apparent, the valuation allowance may be reduced, thereby resulting in tax benefits in the statement of operations and additional paid-in-capital. Management evaluates the potential realization of the Company's deferred tax assets and assesses the need for reducing the valuation allowance periodically.

As of December 31, 2016, the Company had net operating loss ("NOL") carryforwards for federal and state purposes of approximately $124.0 million and $75.2 million, respectively, which expire in 2019 through 2036. The utilization of NOL and credit carryforwards may be limited under the provisions of the Internal Revenue Code ("IRC") Section 382 and similar state provisions. IRC Section 382 generally imposes an annual limitation on the amount of NOL carryforwards that may be used to offset taxable income where a corporation has undergone significant changes in stock ownership. As of December 31, 2016, the Company had research and development tax credit carryforwards for federal and state purposes of approximately $1.5 million and $1.2 million, respectively, which will begin to expire in 2019 through 2036 for federal purposes and will carry forward indefinitely for state purposes. An updated analysis may be required at the time the Company begins utilizing any of its net operating losses to determine if there is an IRC Section 382 limitation.

In addition to the NOL carryforwards included in the deferred tax asset and liability schedule are excess tax deductions relating to stock options that have not been realized. As of December 31, 2016 and 2015, the cumulative unrealized excess tax deductions amounted to approximately $7.1 million and $6.9 million, respectively. These amounts have been excluded from the Company's NOL carryforwards. In connection with the adoption of ASU 2015-09 effective January 1, 2017, the effects of such excess tax deductions of the awards will be recognized in the income statement when the awards vest or are settled. The Company follows the appropriate ordering rules to determine when such NOLs have been realized.

The following table summarizes the activity related to the Company's unrecognized tax benefits during the year ended December 31, 2016 (in thousands):

| | | |
|---|---|---|
| Balance at January 1, 2016 | $ | 568 |
| Additions for tax positions related to the prior year | | — |
| Lapse of statute of limitations | | — |
| Balance at December 31, 2016 | $ | 568 |

The Company expects resolution of unrecognized tax benefits, if created, would occur while the full valuation allowance of deferred tax assets is maintained. The Company does not expect to have any unrecognized tax benefits that, if recognized, would affect the effective tax rate. As of December 31, 2016 and 2015, the Company does not have liability for potential penalties or interest. The Company does not expect its unrecognized tax benefits to change significantly over the next 12 months.

The Company files U.S., state and foreign income tax returns in jurisdictions with varying statutes of limitations. The 2012 through 2016 tax years generally remain subject to examination by federal and most state tax authorities. In foreign jurisdictions, the 2010 through 2016 tax years remain subject to examination by their respective tax authorities.

U.S. income taxes or withholding taxes were provided for all the distributed earnings for the Company's foreign subsidiaries as of December 31, 2016. There were no undistributed earnings from foreign subsidiaries as of December 31, 2016 or 2015. The Company intends to reinvest any earnings until such time a decision is made to liquidate the foreign operations.

## NOTE 6 — COMMITMENTS AND CONTINGENCIES

***Leases***

The Company leases its 57,000 square foot corporate headquarters and manufacturing facility located at 4 Cromwell, Irvine, California. In March 2015, the corporate headquarters and manufacturing facility lease was amended to extend the term through April 30, 2020, modify provisions for tenant improvement allowance of up to $398,000, and adjust the basic rent terms. Future minimum rental commitments under operating lease agreements with non-cancelable terms greater than one year for the years ending December 31 are listed below. The Company also leases additional office space and certain office equipment under various operating lease arrangements.

In February 2015, the Company entered into a 30-month capital lease agreement for information technology equipment. Future minimum lease payments (using a 1.6% interest rate) under the capital lease, together with the present value of the net minimum lease payments, for the year ending December 31, 2017 is $159,000. The current obligation with respect to the present value of net minimum lease payments of $159,000 is reflected in the Consolidated Balance Sheets classified as an accrued liability, and there was no remaining portion of the present value of net minimum lease payments classified as a long-term obligation within capital lease obligations as of December 31, 2016.

Future minimum rental commitments under lease agreements, including both operating and capital leases, with non-cancelable terms greater than one year for each of the years ending December 31 are as follows (in thousands):

| | | |
|---|---|---|
| 2017 | $ | 932 |
| 2018 | | 734 |
| 2019 | | 656 |
| 2020 | | 219 |
| Thereafter | | — |
| Total future minimum lease obligations | $ | 2,541 |

Rent expense totaled approximately $1.0 million for each of the years ended December 31, 2016, 2015, and 2014.

***Employee Arrangements and Other Compensation***

Certain members of management are entitled to severance benefits payable upon termination following a change in control, which would approximate $1.3 million and $1.6 million at December 31, 2016 and 2015, respectively. The Company also has agreements with certain employees to pay bonuses based on targeted performance criteria. As of December 31, 2016 and 2015, approximately $67,000 and $248,000 was accrued for performance bonuses, which is included in accrued liabilities in the Consolidated Balance Sheets.

***Purchase Commitments***

The Company generally purchases components and subassemblies for its products from a limited group of third-party suppliers through purchase orders. The Company had $18.0 million of purchase commitments as of December 31, 2016, for which the Company has not received the goods or services and which is expected to be purchased primarily within one year. These purchase commitments were made to secure better pricing and to ensure the Company will have the necessary parts to meet anticipated near term demand. Although open purchase orders are considered enforceable and legally binding, the Company may be able to cancel, reschedule, or adjust requirements prior to supplier fulfillment.

***Litigation***

The Company discloses material loss contingencies deemed to be reasonably possible and accrues for loss contingencies when, in consultation with its legal advisors, management concludes that a loss is probable and reasonably estimable. The ability to predict the ultimate outcome of such matters involves judgments, estimates, and inherent uncertainties. The actual outcome of such matters could differ materially from management's estimates.

*Class Action Lawsuits*

On August 23, 2013, a purported class action lawsuit entitled Brady Adams v. Biolase, Inc., et al., Case No. 13-CV-1300 JST (FFMx), was filed in the United States District Court for the Central District of California against BIOLASE and its then Chief Executive Officer, Federico Pignatelli, and its then Chief Financial Officer, Frederick D. Furry. On August 26, 2013, a purported class action lawsuit entitled Ralph Divizio v. Biolase, Inc., et al., Case No. 13-CV-1317 DMG (MRWx), was filed in the same court against BIOLASE, Messrs. Pignatelli and Furry, and its then President and Chief Operating Officer, Alexander K. Arrow. Each of the lawsuits alleges violations of the federal securities laws and asserts causes of action against the defendants under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934. In accordance with the Private Securities Litigation Reform Act of 1995, on December 10, 2013, the court entered an order consolidating the lawsuits, appointing a lead plaintiff, and approving the lead plaintiff's selection of lead counsel. On February 24, 2014, the lead plaintiff filed a consolidated complaint against the Company and Messrs. Pignatelli, Furry, and Arrow, alleging violations of the federal securities laws and asserting causes of action against the defendants under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934.

On June 5, 2015, the United States District Court for the Central District of California approved, on a preliminary basis, the settlement of the consolidated securities class action lawsuit. The hearing on the final approval of the settlement was held on October 9, 2015, and the court entered final judgment and ordered the case dismissed on October 30, 2015.

On February 24, 2016, a purported class action lawsuit entitled Dr. Charles Shulruff v. Biolase, Inc., Case No. 1:16-cv-02533, was filed in the United States District Court for the Northern District of Illinois. The case alleged that the Company violated the federal Telephone Consumer Protection Act (TCPA) and other related Illinois state statutes, by sending unsolicited marketing communications via fax machine to a Chicago dentist, Dr. Shulruff. The plaintiff and his counsel sought to certify a nation-wide class of comprised of other dentists who received the same or similar faxes from BIOLASE. BIOLASE responded to the case on April 14, 2016 and denied liability on all claims. BIOLASE also denied that class certification was appropriate. After initial document discovery and fact gathering, BIOLASE filed a petition with the FCC for "retroactive waiver" of some of the TCPA violations alleged by Dr. Shulruff. The FCC granted the petition, which significantly weakened plaintiff's case. BIOLASE then demonstrated to plaintiff's counsel the individualized nature of the fax messages at issue, arguing that class certification was highly unlikely from the data. Based on these events, BIOLASE and Dr. Shulruff entered into a nominal settlement agreement, and in December 2016 Dr. Shulruff dismissed his claims with prejudice. The potential class action claims were dismissed without prejudice, and BIOLASE is unaware of any remaining viable class allegations on these facts.

*Intellectual Property Litigation*

On April 24, 2012, CAO Group, Inc. ("CAO") filed a lawsuit against the Company in the District of Utah for patent infringement of U.S. Patent No. 7,485,116 (the "116 Patent") regarding the Company's ezlase dental laser. On September 9, 2012, CAO filed its First Amended Complaint, which added claims for (1) business disparagement/injurious falsehood under common law and (2) unfair competition under 15 U.S.C. Section 1125(a). The additional claims stem from a press release that the Company issued on April 30, 2012, which CAO claims contained false statements that are disparaging to CAO and its diode product. The First Amended Complaint seeks injunctive relief, treble damages, attorneys' fees, punitive damages, and interest. On November 13, 2012, the Court stayed the lawsuit for 120 days to allow the United States Patent and Trademark Office (the "USPTO") to consider the Company's request for reexamination of the patent-in-suit. The USPTO granted the request to reexamine the asserted claims of the patent-in-suit and, on February 28, 2013, the Court stayed the lawsuit until the termination of the reexamination proceedings. On April 23, 2013, the USPTO issued an office action rejecting all of the asserted claims over the prior art, and CAO responded to the office action. On August 28, 2013, the USPTO issued an Action Closing Procedure, rejecting all of CAO's patent claims. CAO responded to the USPTO's ruling and on December 10, 2013, the USPTO issued a Right of Appeal Notice, finally rejecting some claims of the 116 Patent while finding that other claims appeared to be patentable. The Company appealed the USPTO's findings on January 9, 2014 and on January 27, 2014, the USPTO declined to reconsider the finding of certain claims as patentable and instructed the parties to proceed to appeal to the Patent Trial and Appeal Board (the "Patent Board"). On March 17, 2014, the Company filed its brief in support of its appeal of the USPTO's decision not to reject certain claims of the 116 Patent. On March 24, 2014, CAO filed its brief in support of its appeal of the USPTO's decision to reject certain claims of the 116 patent. On April 18, 2014, the Company filed a respondent brief in opposition to the CAO's appeal arguments. On May 30, 2014, both parties filed rebuttal briefs in support of their appeals. On June 30, 2014, the Company requested an oral hearing before the Patent Board. On July 1, 2014, the Patent Board noted that request and docketed the case for consideration. A hearing on reconsideration was held in November 2014. On July 1, 2015, the Patent Board issued a decision that was generally favorable to the Company. On July 31, 2015, CAO requested a rehearing of the decision. On November 27, 2015, the Patent Board issued its decision regarding CAO's request for rehearing, partially granting CAO's request. On January 27, 2016, CAO filed its Notice of Appeal to the United States Court of Appeals for the Federal Circuit for review of the Patent Board's decision dated July 1, 2015 and the Patent Board's decision regarding CAO's request for rehearing. CAO filed its opening appeal brief on June 1, 2016 and BIOLASE filed its responsive brief on July 25, 2016. CAO filed its reply brief on August 11, 2016. Oral argument before the Federal Circuit was held on January 11, 2017 and, on January 27, 2017, an order was entered by the Federal Circuit affirming all of the Patent Board's findings. On February 9, 2017, the parties jointly filed a document with the Court in the Utah litigation notifying it of the Federal Circuit's decision and requesting that the stay remain in place until a reexamination certificate issues. The reexamination certificate is expected to issue in the next few months.

The Company filed a patent infringement lawsuit against Fotona on April 12, 2012 alleging infringement with respect to the Fotona Fidelis dental laser system. Fotona has denied liability and sought the reimbursement of statutory fees from the Company. Together with its response brief, Fotona also filed a nullity action against the patent in dispute, patent number EP 1 560 470.

On March 24, 2015 the parties reached an agreement to settle the foregoing litigation and to dismiss the litigation with prejudice. As part of the settlement, Fotona agreed to pay the Company a total of $1.4 million, with $550,000 payable within 10 days of March 24, 2015 and the remaining, $825,000 payable in three increments of $275,000 each to be paid no later than the first, second, and third anniversary of the effective date of the agreement. Pursuant to the settlement agreement, the Company (i) granted Fotona a three-year, non-exclusive, paid-up license in the United States and a five-year, non-exclusive, paid-up license in countries outside of the United States and (ii) agreed to grant Fotona a non-exclusive, royalty-based license following the expiration of the paid-up licenses. The Company calculated the present value of the settlement amount to be $1.2 million and allocated such amount to each significant element of the settlement on a relative fair value basis. $731,000 and $68,000 were allocated towards the recovery of the Company's legal expenses and as settlement for the dismissal of the patent infringement lawsuit and are reflected as legal settlement and license fees and royalty revenue, respectively, on the Consolidated Statements of Operations and Comprehensive Loss. The remaining amount of $379,000 was allocated towards the three-year, non-exclusive, paid-up license in the United States and the five-year, non-exclusive, paid-up license in countries outside of the United States which was reflected within other assets and long-term deferred revenue on the Consolidated Balance Sheets. The deferred revenue is being recognized as license revenue over the terms of the paid-up licenses.

## NOTE 7 — STOCKHOLDERS' EQUITY

### *Preferred Stock*

The Board, without further stockholder authorization, may issue from time to time up to 1,000,000 shares of the Company's preferred stock. Of the 1,000,000 shares of preferred stock, 500,000 shares are designated as Series B Junior Participating Cumulative Preferred Stock. As of December 31, 2016 and 2015, 88,494 shares and 0 shares of preferred stock was issued, respectively. As of December 31, 2016 and 2015, no preferred stock was outstanding.

The Company adopted a stockholder rights plan, as amended (the "Rights Plan") under which one preferred stock purchase right ("Right") was distributed on January 11, 1999 with respect to each share of common stock outstanding at the close of business on December 31, 1998 and with respect to each share of common stock issued by the Company since then. On November 10, 2015, the Company terminated the Rights Plan. No Rights were executed, traded, or redeemed under the Rights Plan.

### *Common Stock*

At December 31, 2016, the Company had 67,565,951 shares of BIOLASE common stock issued and outstanding. BIOLASE currently has 100,000,000 shares of Company common stock authorized for issuance.

#### *2016 Common Stock Issuance*

On August 8, 2016, the Company completed a private placement (the "August 2016 Private Placement") with several institutional and individual investors, and certain of its directors and officers, under which the Company sold an aggregate of 88,494 shares of BIOLASE Series C Participating Convertible Preferred Stock ("Preferred Stock") and warrants to purchase up to an aggregate of 2,035,398 unregistered shares of BIOLASE common stock at an exercise price of $2.00 per share. Each share of Preferred Stock was, automatically upon receipt of stockholder approval, convertible into 100 shares of common stock, reflecting a conversion price equal to $1.13 per share, which is the closing price of the common stock quoted on the NASDAQ Capital Market on July 29, 2016. On September 30, 2016, the Company held a meeting of its stockholders and received requisite stockholder approval with respect to the issuance of 8,849,400 shares of common stock upon automatic conversion of the Preferred Stock and the issuance of common stock in connection with the exercise of the warrants by certain holders whose warrants were subject to a beneficial ownership limitation. Gross proceeds from the sale were $10.0 million, and net proceeds, after offering expenses of approximately $0.5 million, were approximately $9.5 million. The warrants became exercisable on February 8, 2017, six months after the closing of the private placement, and have a term of five years from the date of issuance. The Company is using the proceeds from the sale for working capital and general corporate purposes. In connection with the registration rights granted to these investors, the Company filed a registration statement on Form S-3 with the SEC, which was declared effective on November 3, 2016.

*2014 Common Stock Issuances*

On November 7, 2014, the Company completed a private placement (the "November 2014 Private Placement") with several institutional and individual investors, and certain of its directors and officers, under which the Company agreed to sell an aggregate of 14,162,873 unregistered shares of BIOLASE common stock at the price of $2.39 per share, the closing price of BIOLASE common stock on November 3, 2014, and warrants to purchase up to an aggregate of 9,205,862 unregistered shares of its common stock at an exercise price of $4.00 per share. Gross proceeds from the sale totaled $35.0 million, and net proceeds, after offering expenses of approximately $235,000, were approximately $34.8 million. The warrants became exercisable on May 7, 2015, six months after the closing of the private placement, and have a term of three years from the date of issuance. The Company is using the proceeds for working capital and general corporate purposes. In connection with the registration rights granted to these investors, the Company filed a registration statement on Form S-3 with the SEC, which was declared effective on December 12, 2014.

On July 22, 2014, the Company completed a private placement with several institutional and individual investors, and several of its directors and officers, wherein the Company sold 6,250,000 unregistered shares of BIOLASE common stock at a price of $1.92 per share (the closing price of BIOLASE common stock on July 18, 2014). Gross proceeds from the sale totaled $12.0 million, and net proceeds, after offering expenses of approximately $462,000, were approximately $11.5 million. The Company used the proceeds to repay the Company's lines of credit with Comerica Bank and for working capital and general corporate purposes. In connection with the registration rights granted to these investors, the Company filed a registration statement on Form S-3 with the SEC, which was declared effective on September 18, 2014.

On February 10, 2014, the Company entered into a subscription agreement with Oracle Partners L.P., Oracle Institutional Partners, L.P., and Oracle Ten Fund Master, L.P., under which the Company sold an aggregate of 1,945,525 unregistered shares of BIOLASE common stock in a private placement at a price of $2.57 per share. Gross proceeds from the sale totaled $5.0 million and net proceeds, after offering expenses of approximately $188,000, totaled approximately $4.8 million. The Company used the proceeds for working capital and general corporate purposes.

*Stock Dividends*

There were no dividends paid or declared in 2016 or 2015. The following table sets forth certain information relating to the Company's stock dividends declared during 2014:

| | Declaration Date | Record Date | Payment Date | Dividend per Share | Number of Shares Outstanding | Total Number of Shares Distributed |
|---|---|---|---|---|---|---|
| Calendar year 2014 | Mar. 5, 2014 | Mar. 14, 2014 | Mar. 28, 2014 | 0.50% | 37,422,753 | 193,032 |

In August 2016, we completed a private placement with several institutional and individual investors, and certain of our directors and officers. Gross proceeds from the sale were $10.0 million. In accordance with applicable accounting standards, this transaction resulted in a discount from allocation of proceeds to separable instruments of $1.1 million and a beneficial conversion to common stock with a value of $1.1 million, both of which have been reflected as a deemed distribution to preferred shareholders in the year ended December 31, 2016. Further discussion of this transaction is discussed in *Note 1 – Basis of Presentation*.

***Warrants***

BIOLASE issues warrants for the sale of its common stock as approved by its Board. Warrants to purchase up to an aggregate of 2,035,398 unregistered shares of BIOLASE common stock at an exercise price of $2.00 per share were issued in connection with the August 2016 Private Placement. Warrants to purchase up to an aggregate of 9,205,862 unregistered shares of BIOLASE common stock at an exercise price of $4.00 per share were issued in connection with the November 2014 Private Placement. Both private placements are accounted for within stockholders' equity on the Consolidated Balance Sheets in accordance with U.S. GAAP. In addition to the aforementioned warrants issued in connection with common stock transactions, the Company may also issue warrants in connection with strategic initiatives.

The following table summarizes warrant activity:

| | Shares | | Weighted-Average Exercise Price Per Share |
|---|---|---|---|
| Warrants outstanding, January 1, 2014 | 1,697,974 | $ | 5.44 |
| Granted | 9,205,862 | $ | 4.00 |
| Exercised | (200,000) | $ | 2.00 |
| Forfeited, cancelled, or expired | (610,000) | $ | 5.71 |
| Warrants outstanding, December 31, 2014 | 10,093,836 | $ | 4.18 |
| Granted | — | $ | — |
| Exercised | — | $ | — |
| Forfeited, cancelled, or expired | — | $ | — |
| Warrants outstanding, December 31, 2015 | 10,093,836 | $ | 4.18 |
| Granted | 2,035,398 | $ | 2.00 |
| Exercised | — | $ | — |
| Forfeited, cancelled, or expired | (722,974) | $ | 6.50 |
| Warrants outstanding, December 31, 2016 | 11,406,260 | $ | 3.64 |
| Warrants exercisable, December 31, 2016 | 9,235,862 | $ | 4.00 |
| Vested warrants expired during the 12 months ended December 31, 2016 | — | | n.a. |

***Stock Options***

The Company currently has one stock-based compensation plan, the 2002 Stock Incentive Plan (as amended effective as of May 26, 2004, November 15, 2005, May 16, 2007, May 5, 2011, June 6, 2013, August 27, 2014, April 27, 2015 and May 6, 2016) (the “2002 Plan”), which will expire on May 5, 2019. Persons eligible to receive awards under the 2002 Plan include officers and employees of the Company, directors of the Company, and consultants. As of December 31, 2016, a total of 15,550,000 shares have been authorized for issuance under the 2002 Plan, of which 3,557,068 shares of BIOLASE common stock have been issued pursuant to options that were exercised, 7,030,074 shares of BIOLASE common stock have been reserved for options and restricted stock units that are outstanding, and 4,962,858 shares of BIOLASE common stock remain available for future grant.

Stock options may be granted as incentive or non-qualified options; however, no incentive stock options have been granted to date. The exercise price of options is at least equal to the market price of the stock as of the date of grant. Options may vest over various periods but typically vest on a quarterly basis over four years. Options expire after five years, ten years, or within a specified time from termination of employment, if earlier. The Company issues new shares of BIOLASE common stock upon the exercise of stock options. The following table summarizes option activity under the 2002 Plan (in thousands, except per share data):

| | Shares | Weighted-Average Exercise Price Per Share | Weighted-Average Remaining Contractual Term (Years) | Aggregate Intrinsic Value(1) |
|---|---|---|---|---|
| Options outstanding, January 1, 2014 | 4,441 | $ 3.51 | | |
| Granted at fair market value | 240 | $ 2.23 | | |
| Granted at above fair market value | 369 | $ 3.05 | | |
| Exercised | (153) | $ 2.03 | | |
| Forfeited, cancelled, or expired | (1,422) | $ 4.50 | | |
| Options outstanding, December 31, 2014 | 3,475 | $ 3.03 | | |
| Granted at fair market value | 1,931 | $ 2.22 | | |
| Granted at above fair market value | 1,340 | $ 2.46 | | |
| Exercised | (38) | $ 1.15 | | |
| Forfeited, cancelled, or expired | (2,215) | $ 2.64 | | |
| Options outstanding, December 31, 2015 | 4,493 | $ 2.72 | | |
| Granted at fair market value | 3,113 | $ 1.42 | | |
| Exercised | (1) | $ 0.82 | | |
| Forfeited, cancelled, or expired | (993) | $ 3.01 | | |
| Options outstanding, December 31, 2016 | 6,612 | $ 2.06 | 7.70 | $ 178 |
| Options exercisable, December 31, 2016 | 3,352 | $ 2.50 | 6.22 | $ 63 |
| Vested options expired during the 12 months ended December 31, 2016 | 387 | $ 4.11 | | |

(1) The intrinsic value calculation does not include negative values. This can occur when the fair market value on the reporting date is less than the exercise price of a grant.

The following table summarizes additional information for those options under the 2002 Plan that are outstanding and exercisable as of December 31, 2016:

| | Options Outstanding | | | Exercisable | |
|---|---|---|---|---|---|
| Range of Exercise Prices | Number of Shares | Weighted-Average Exercise Price | Weighted-Average Remaining Life (Years) | Number of Shares | Weighted-Average Exercise Price |
| $ 0.82 — $ 1.43 | 1,207,757 | $ 1.26 | 8.77 | 504,736 | $ 1.28 |
| $ 1.44 — $ 1.55 | 1,410,000 | $ 1.45 | 9.80 | 33,332 | $ 1.44 |
| $ 1.56 — $ 2.10 | 1,470,510 | $ 1.87 | 8.47 | 547,171 | $ 1.94 |
| $ 2.11 — $ 2.50 | 976,947 | $ 2.28 | 7.22 | 975,155 | $ 2.28 |
| $ 2.51 — $ 3.50 | 1,054,499 | $ 2.70 | 5.93 | 805,528 | $ 2.70 |
| $ 3.51 — $ 8.75 | 491,850 | $ 4.59 | 1.53 | 486,433 | $ 4.59 |
| Total | 6,611,563 | $ 2.06 | 7.70 | 3,352,355 | $ 2.50 |

Cash proceeds, along with fair value disclosures related to grants, exercises, and vesting options, are as follows for the years ended December 31 (in thousands, except per share amounts):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Proceeds from stock options exercised | $ 1 | $ 44 | $ 312 |
| Tax benefit related to stock options exercised(1) | N/A | N/A | N/A |
| Intrinsic value of stock options exercised(2) | $ — | $ 52 | $ 108 |
| Weighted-average fair value of options granted | $ 1.03 | $ 1.54 | $ 1.61 |
| Total fair value of shares vested during the year | $ 1,728 | $ 2,268 | $ 1,208 |

(1) Excess tax benefits received related to stock option exercises are presented as financing cash inflows. For the periods presented, the Company did not receive a tax benefit related to the exercise of stock options due to its net operating losses.

(2) The intrinsic value of stock options exercised is the amount by which the market price of the stock on the date of exercise exceeded the market price of the stock on the date of grant.

*2016 Stock Option Activity*

On February 26, 2016, the Compensation Committee of the Board of Directors (the "Board"), awarded to certain employees and consultants of the Company a total of 295,000 non-qualified stock options to purchase shares of BIOLASE common stock. These awards were issued at $0.86 per share, the closing market price of BIOLASE common stock on the grant date, and expire 10 years from the grant date. Vesting periods for options are as follows: (i) 185,000 options, awarded to existing employees, vest ratably over a 48 month period, commencing one month from the grant date, and (ii) 110,000 options, awarded to new 2016 employees, vest 25% on the one-year anniversary of the grant date and the remainder ratably over the 36-month period, commencing 13 months after of the grant date.

On April 18, 2016, in connection with the hiring of the two new Vice Presidents, the Compensation Committee of the Board awarded 325,000 non-qualified stock options to purchase shares of BIOLASE common stock. These awards were issued at $1.43 per share, the closing market price of BIOLASE common stock on the grant date, and expire 10 years from the grant date. Vesting periods for the options are as follows: (i) one-half of the total grant is subject to time vesting, with 25% vesting as of April 18, 2017 and the remaining 75% vesting ratably monthly over a thirty-six month period commencing on April 18, 2017, and (ii) one-half of the total grant is subject to specific 2016 and 2017 performance criteria, with vesting upon completion of the applicable performance criteria. As of December 31, 2016, 243,750 non-qualified stock options to purchase shares of BIOLASE common stock remain outstanding.

On May 6, 2016, non-employee directors of the Company were granted a total of 597,757 non-qualified stock options to purchase shares of BIOLASE common stock. These awards were issued at $1.41 per share, the closing market price of BIOLASE common stock on the grant date, and expire 10 years from the grant date. The total grant vests in equal installments over a consecutive twelve month period, commencing on June 6, 2016.

On August 29, 2016, in connection with the hiring of a new Senior Director, the Compensation Committee of the Board awarded 60,000 non-qualified stock options to purchase shares of BIOLASE common stock. This award was issued at $1.65 per share, the closing market price of BIOLASE common stock on the grant date, and expires 10 years from the grant date. Vesting periods for the options are as follows: (i) one-half of the total grant is subject to ratable time vesting over a forty-eight month period commencing on September 29, 2016, and (ii) one-half of the total grant is subject to specific 2017 performance criteria, with vesting upon completion of the applicable performance criteria. As of December 31, 2016, 60,000 non-qualified stock options to purchase shares of BIOLASE common stock remain outstanding.

On September 15, 2016, in connection with the hiring of a new Vice President, the Compensation Committee of the Board awarded 250,000 non-qualified stock options to purchase shares of BIOLASE common stock. This award was issued at $1.78 per share, the closing market price of BIOLASE common stock on the grant date, and expires 10 years from the grant date. Vesting periods for the options are as follows: (i) one-half of the total grant is subject to time vesting with 25% vesting as of September 15, 2017 and the remaining 75% vesting ratably monthly over a thirty-six month period commencing on September 15, 2017, and (ii) one-half of the total grant is subject to specific 2017 and 2018 performance criteria, with vesting upon completion of the applicable performance criteria. As of December 31, 2016, 250,000 non-qualified stock options to purchase shares of BIOLASE common stock remain outstanding.

On October 3, 2016, in connection with the hiring of a new Vice President, the Compensation Committee of the Board awarded 125,000 non-qualified stock options to purchase shares of BIOLASE common stock. This award was issued at $1.72 per share, the closing market price of BIOLASE common stock on the grant date, and expires 10 years from the grant date. Vesting periods for the options are as follows: (i) one-half of the total grant is subject to time vesting with 25% vesting as of October 3, 2017 and the remaining 75% vesting ratably monthly over a thirty-six month period commencing on October 3, 2017, and (ii) one-half of the total grant is subject to specific 2017 through 2019 performance criteria, with vesting upon completion of the applicable performance criteria. As of December 31, 2016, 125,000 non-qualified stock options to purchase shares of BIOLASE common stock remain outstanding.

During the year ended December 31, 2016, the Compensation Committee of the Board granted non-qualified stock options to purchase 1.4 million shares of BIOLASE common stock to the Company's President and Chief Executive Officer. The exercise price of such options ranged from $1.44-$1.45 per share, vest over two to four years, and expire 10 years from the grant date.

*2015 Stock Option Activity*

On January 2, 2015, the Compensation Committee of the Board granted non-qualified stock options to purchase 1,365,702 shares of BIOLASE common stock to certain officers of the Company in connection with a compensation plan for 2015 and 86,000 shares of BIOLASE common stock to members of the Dental Professional Advisory Board ("DPAB") as consultants for the Company. These options were granted at an exercise price of $2.64, the closing market price of BIOLASE common stock on the grant date. Options granted to certain officers of the Company expire ten years from the grant date and vest as follows: (i) as to 50% of the options, one-fourth on the one year anniversary of the grant date and the remaining three-fourths, ratably over the next 36 month period, commencing on the thirteenth month from grant date over a requisite service period of four years, and (ii) as to 50% of the options, upon achievement of specific annual Company performance criteria with a requisite service period of one year. Options granted to the DPAB fully vest and become exercisable upon the achievement of specified performance conditions, as defined in the consulting agreements, and expires five years from grant date.

On August 12, 2015, the Compensation Committee of the Board approved a modification to the performance criteria applicable to the unvested options. As a result of this modification, the fair value of the awards decreased by $661,000, and the Company recognized additional compensation expense of $154,000 for the year ended December 31, 2015. The vesting schedule and requisite service period of the award remained unchanged by the modification.

On December 31, 2015 the performance criteria related to the officer grants on January 2, 2015 was partially achieved and 80% of the performance-based options vested on January 2, 2016. As a result, 122,038 shares became available under the 2002 Plan on December 31, 2015, and options to purchase 488,170 shares vested on January 2, 2016.

**Restricted Stock Units**

Under the 2002 Plan, effective February 26, 2016, the Compensation Committee of the Board granted the following awards:

- 388,500 restricted stock units ("RSUs") were awarded to certain employees and consultants of the Company. These awards were valued at $0.86 per share, the closing market price of BIOLASE common stock on the grant date, and fully vested on July 1, 2016.
- 140,000 RSUs were awarded to certain employees and consultants of the Company as part of their compensation plan. These awards were valued at $0.86 per share, the closing market price of BIOLASE common stock on the grant date, and vest 25% on each of the first, second, third, and fourth anniversaries of the grant date.
- In connection with the President and Chief Executive Officer's employment agreement, the maximum performance bonus was awarded, consisting of (i) $100,000 paid in cash during the nine months ended September 30, 2016, and (ii) the grant of 59,523 RSUs, valued at $0.86 per share, the closing market price of BIOLASE common stock on the grant date. Half of these RSUs vested on March 30, 2016 and half of these RSUs vested on February 18, 2017.

On March 10, 2016, the Compensation Committee of the Board approved the grant of 70,000 RSUs to the Company's Chief Financial Officer as part of his 2015 compensation. These awards were valued at $1.23 per share, the closing market price of BIOLASE common stock on the grant date, and fully vested on July 1, 2016.

On May 6, 2016, as compensation for their service during the current year, non-employee directors of the Company were granted a total of 248,750 RSUs valued at $1.41 per share, the closing market price of BIOLASE common stock on the grant date. These awards vest on May 6, 2017.

On August 27, 2014, as compensation for their service, non-employee directors of the Company were granted a total of 36,868 RSUs valued at $2.17 per share, the closing market price of BIOLASE common stock on the grant date. These awards vested over a 12-month period.

The following table summarize RSU activity under the 2002 Plan:

| | Shares | Weighted-Average Grant Price Per Share |
|---|---|---|
| Unvested restricted stock units, January 1, 2014 | — | $ — |
| Granted | 36,868 | $ 2.17 |
| Vested | — | $ — |
| Forfeited or cancelled | — | $ — |
| Unvested restricted stock units, December 31, 2014 | 36,868 | $ 2.17 |
| Granted | — | $ — |
| Vested | (36,868) | $ 2.17 |
| Forfeited or cancelled | — | $ — |
| Unvested restricted stock units, December 31, 2015 | — | $ — |
| Granted | 906,773 | $ 1.06 |
| Vested | (488,262) | $ 0.91 |
| Forfeited or cancelled | — | $ — |
| Unvested restricted stock units, December 31, 2016 | 418,511 | $ 1.23 |

**Inducement Stock-Based Awards**

Effective March 9, 2015, the Compensation Committee of the Board granted non-qualified stock options to purchase up to 871,710 shares of BIOLASE common stock to the Company's Chief Financial Officer in connection with his employment agreement with BIOLASE. These options were granted at an exercise price of $1.99 per share, the closing price of BIOLASE common stock on the grant date. These options expire ten years from the grant date and vest in two tranches as follows: (i) as to options to purchase 523,026 shares (the "First Tranche"), options to purchase 130,757 shares vested and became exercisable on March 9, 2016, and options to purchase 10,896 shares vest and become exercisable each month following March 9, 2016 for a period of 35 consecutive months, and options to purchase 10,909 shares vest and become exercisable on March 9, 2019, and (ii) as to options to purchase 348,684 shares (the "Second Tranche"), all such shares vest and become exercisable on March 9, 2025 or based on the Company's achievement of certain enumerated financial performance targets or other milestones, at the discretion of the Compensation Committee of the Board. The fair value of the First Tranche of $1.48 per share was estimated using the Black-Scholes option-pricing model with assumptions of 6.1 years for expected term, 88.79% volatility and 1.83% risk-free interest rate. The fair value of the Second Tranche of $1.70 per share was estimated using the Black-Scholes option-pricing model with assumptions of 10.0 years for expected term, 87.87% volatility and 2.19% risk-free interest rate. On December 30, 2016, the Chief Financial Officer tendered his resignation and entered into a transition letter agreement with the Company. Pursuant to the transition letter agreement, modifications occurred to vest 294,205 unvested options and extend the exercise period of 623,026 vested stock options from 90 days to one year. As a result of these modifications, the Company recognized additional compensation expense of $215,000 for the year ended December 31, 2016.

On June 23, 2015 the Board elected to accelerate options to purchase 100,000 shares in the Second Tranche of the Chief Financial Officer's award. As of December 31, 2016, 100,000 shares were vested and exercisable.

Effective July 13, 2015, the Compensation Committee of the Board granted non-qualified stock options to purchase up to 870,000 shares of BIOLASE common stock to the Company's President and Chief Executive Officer in connection with his employment agreement with BIOLASE. These options were granted at an exercise price of $1.64 per share, the closing price of BIOLASE common stock on the grant date. These options expire ten years from the grant date and vest over four years, with options to purchase 217,500 shares vesting and becoming exercisable on July 13, 2016 and options to purchase 18,125 shares vesting and becoming exercisable each month following July 13, 2016 for a period of 36 consecutive months.

Also effective July 13, 2015, the Compensation Committee of the Board awarded 870,000 stock-settled RSUs to its President and Chief Executive Officer in connection with his employment agreement with BIOLASE. The RSUs are valued at $1.64 per share and vest upon the achievement of specific interim and annual Company performance criteria. As of December 31, 2016, 435,000 stock-settled RSUs remain outstanding.

On July 13, 2014, the Compensation Committee of the Board approved the previous Chief Executive Officer's stock-based compensation consisting of non-qualified stock options to purchase 172,282 shares of BIOLASE common stock at an exercise price of $1.98 per share and 37,879 RSUs valued at $1.98 per share. All of the non-qualified stock options are vested and outstanding, and none of the RSUs remain outstanding as of December 31, 2016.

## NOTE 8 — SEGMENT INFORMATION

The Company currently operates in a single business segment. Management uses one measurement of profitability and does not segregate its business for internal reporting. Sales to customers located in the United States accounted for approximately 64%, 61%, and 63% of net revenue and international sales accounted for approximately 36%, 39%, and 37% of net revenue for the years ended December 31, 2016, 2015, and 2014, respectively. No individual international country represented more than 10% of net revenue during the years ended December 31, 2016, 2015, and 2014.

Net revenue by geographic location based on the location of customers was as follows (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| United States | $ 33,385 | $ 29,433 | $ 29,848 |
| International | 18,425 | 19,042 | 17,808 |
| | $ 51,810 | $ 48,475 | $ 47,656 |

Long-lived assets by geographic location was as follows (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| United States | $ 4,175 | $ 3,401 | $ 921 |
| International | 302 | 326 | 374 |
| | $ 4,478 | $ 3,727 | $ 1,295 |

## NOTE 9 — CONCENTRATIONS

Revenue from the Company's products for the years ended December 31, 2016, 2015 and 2014 are as follows:

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | 2014 |
| Laser systems | 67.9 % | 67.5 % | 61.9 % |
| Imaging systems | 5.9 % | 4.6 % | 9.0 % |
| Consumables and other | 13.3 % | 14.2 % | 13.7 % |
| Services | 12.6 % | 13.3 % | 15.1 % |
| License fees and royalties | 0.3 % | 0.4 % | 0.3 % |
| Total revenue | 100.0 % | 100.0 % | 100.0 % |

The Company maintains its cash and cash equivalent accounts with established commercial banks. Such cash deposits periodically exceed the Federal Deposit Insurance Corporation insured limit.

No individual customer represented more than 10% of the Company's accounts receivable at December 31, 2016 and 2015.

The Company currently purchases certain key components of its products from single suppliers. Although there are a limited number of manufacturers of these key components, management believes that other suppliers could provide similar key components on comparable terms. A change in suppliers, however, could cause delays in manufacturing and a possible loss of sales, which could adversely affect the Company's business, results of operations and financial condition.

**NOTE 10 — SUBSEQUENT EVENTS (unaudited)**

**Leadership Addition**

On March 1, 2017, the Company announced the appointment of a new Senior Vice President and Chief Financial Officer, with significant leadership and technical experience in finance and business management from both public and private companies.

**Equity Awards**

Effective February 6, 2017, the Compensation Committee of Board issued the following awards:

***Stock Options***

611,000 non-qualified stock options to purchase shares of BIOLASE common stock were awarded to certain employees of the Company. These awards were valued at $1.55 per share, the closing market price of BIOLASE common stock on the grant date, and expire 10 years from the grant date. Vesting periods for options are as follows: (i) for the 586,000 options awarded to existing employees, one-half vest on the first anniversary of award date and one-half vest on the second anniversary of the award date, and (ii) for the 25,000 options awarded to new employees, 25% vest on February 6, 2018 and the remainder ratably over the 36-month period, commencing on March 6, 2018.

***Restricted Stock Units and Other Awards***

80,000 RSUs were awarded to an employee of the Company as part of his 2017 compensation. These awards were valued at $1.55 per share, the closing market price of BIOLASE common stock on the grant date, and will vest as follows: (i) 30,000 of the RSUs vest on March 14, 2017, (ii) 20,000 of the RSUs vest on September 14, 2017, and (iii) 30,000 of the RSUs vest on May 10, 2018.

1,000,000 stock-settled RSUs were awarded to the Company's President and Chief Executive Officer as part of his 2017 compensation. These RSUs were valued at $1.55 per share, the closing market price of BIOLASE common stock on the grant date. These RSUs vest as follows: (i) one-quarter of the RSUs vest on February 6, 2019, (ii) one-eighth of the RSUs vest on February 6, 2020, (iii) one-eighth of the RSUs vest on February 6, 2021, and (iv) one-half of the RSUs vest upon the achievement of specific interim and annual Company performance criteria.

Further discussion of the stock-based compensation is discussed in *Note 7 – Stockholders' Equity*.

**BIOLASE, INC.**

**Schedule II — Consolidated Valuation and Qualifying Accounts and Reserves**
**For the Years Ended December 31, 2016, 2015, and 2014**
**(in thousands)**

| | Balance at Beginning of Year | Charges (Reversals) to Cost or Expenses | Deductions | Balance at End of Year |
|---|---|---|---|---|
| Year Ended December 31, 2016: | | | | |
| Allowance for doubtful accounts | $ 1,765 | $ (438) | $ (118) | $ 1,209 |
| Allowance for sales returns | 210 | — | — | 210 |
| Allowance for tax valuation | 49,514 | 4,796 | — | 54,310 |
| Year Ended December 31, 2015: | | | | |
| Allowance for doubtful accounts | $ 1,711 | $ 86 | $ (32) | $ 1,765 |
| Allowance for sales returns | 110 | 100 | — | 210 |
| Allowance for tax valuation | 42,069 | 7,445 | — | 49,514 |
| Year Ended December 31, 2014: | | | | |
| Allowance for doubtful accounts | $ 573 | $ 1,261 | $ (123) | $ 1,711 |
| Allowance for sales returns | 110 | — | — | 110 |
| Allowance for tax valuation | 35,566 | 6,503 | — | 42,069 |

**Exhibit 10.18**

**Biolase, Inc.**
**4 Cromwell**
**Irvine, California 92612**

November 22, 2016

Harold C. Flynn, Jr.
BIOLASE, Inc.
4 Cromwell
Irvine, California 92618

Dear Harold,

The purpose of this letter is to acknowledge that, in consideration of the sum of $1.00 and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, you and BIOLASE, Inc. (the "Company") have agreed that the restricted stock unit award granted to you on November 8, 2016, representing the right to acquire 1,000,000 shares of Company common stock pursuant to the terms of the BIOLASE, Inc. 2002 Stock Incentive Plan, as amended (the "Plan"), has been rescinded in its entirety. As discussed, the Compensation Committee of the Board of Directors of the Company (the "Compensation Committee") intends to review your compensation in January 2017 and may, at such time, grant you equity awards upon such terms and conditions as approved by the Compensation Committee and which are consistent with the terms of the Plan.

Please acknowledge the foregoing by signing below and returning this letter to me at your earliest convenience. If you have any questions or otherwise wish to discuss, please do not hesitate to contact me.

Sincerely,

Jonathan T. Lord
Chairman of the Compensation Committee of the Board of Directors of BIOLASE, Inc.

| /s/ Harold C. Flynn, Jr. | November 23, 2016 |
| --- | --- |
| Harold C. Flynn, Jr. | Date |

**Exhibit 10.19**

Biolase, Inc.
4 Cromwell
Irvine, California 92618

December 28, David C. Dreyer

c/o Biolase, Inc.
4 Cromwell
Irvine, California 92618

Re: Transition Arrangement Letter

Dear David:

The purpose of this letter is to confirm the circumstances of your employment as Senior Vice President and Chief Financial Officer of Biolase, Inc. (the "Company"). Our intent is to facilitate the Company's transition to a new Chief Financial Officer and to provide you with a monetary payment (the "Transition Payment") in exchange for your help and assistance in this transition.

We plan to continue your employment as Senior Vice President and Chief Financial Officer at your current base salary and benefits, through and including January 13, 2017 (the "Final Transition Date"). During that period of time, we expect that you will devote your full business time and best efforts to the Company, although you may be transitioning your duties and responsibilities to others, as advised by the Chief Executive Officer. Although our plan is to continue your employment through the Final Transition Date, your employment status until that time will remain "at will," which means that either you or the Company may end your employment at any time for any reason.

Provided that you remain employed by the Company on the Final Transition Date, and you have performed your transitional duties to the reasonable satisfaction of the Chief Executive Officer, and provided on the Final Transition Date you cease to act in any capacity (including as an officer) for the Company, the Company agrees to (i) provide you with a Transition Payment equal to $50,000.00, payable in lump sum following the expiration of the revocation period set forth in the form of Separation Agreement with Release of All Claims attached hereto (the "Separation Agreement"), (ii) the vesting of your stock options existing as of the date hereof such that a total of 623,026 option shares shall be vested and fully exercisable as of the Separation Date (as defined in the Separation Agreement), (iii) extend the period to exercise your vested stock options for a period of one year from the Separation Date (as defined in the Separation Agreement), and (iv) subject to your timely election of COBRA continuation coverage, reimburse you for COBRA premiums for you (and your eligible dependents) under the Company's medical and dental benefit plans in which you participated in as of the Final Transition Date, for a period of six (6) months following the Separation Date. The foregoing benefits shall be subject to your execution and non-revocation of the attached Separation Agreement with Release of All Claims within the time-period specified in such agreement.

If your employment ends for any reason before the Final Transition Date (unless by mutual agreement between you and the Company), you will not be eligible for the Transition Payment or the other benefits described in this letter.

Please sign below to indicate your acceptance of this agreement. If this letter is not countersigned by you on or before 5:00 p.m. Pacific Time on December 30, 2016, the offer contained herein shall be of no force and effect and shall expire without any further action on the part of the Company.

We thank you, David, for your hard work, dedication, and contribution to the Company, and we look forward to a mutually beneficial transition.

Very truly yours,

/s/ Harold C. Flynn, Jr.

Harold C. Flynn, Jr.
Chief Executive Officer

ACCEPTED AND AGREED:

/s/ David C. Dryer
David C. Dreyer

Dated: December 30, 2016

**EXHIBIT A**

**SEPARATION AGREEMENT WITH GENERAL RELEASE OF ALL CLAIMS**

This Separation Agreement With General Release of All Claims ("Agreement") is entered into by and between David C. Dreyer ("Mr. Dreyer"), and Biolase, Inc., a Delaware corporation (the "Company"), and is intended by the parties hereto to settle fully and finally any claims that Mr. Dreyer may have against the Company and all obligations of the Company to Mr. Dreyer, except as set forth in and incorporated into this Agreement.

a. **Employment Separation.** Mr. Dreyer's employment with the Company ended effective January 13, 2016 (the "Separation Date"). From and after the Separation Date, Mr. Dreyer shall no longer be employed by, or act in any capacity (including as a director) for, the Company, and Mr. Dreyer hereby resigns from all Company positions held and on any Company subsidiary boards as of the Separation Date.

b. **Termination Pay.** Mr. Dreyer acknowledges that he has been paid his base salary and accrued but unused vacation through the Separation Date ("Termination Pay"). Mr. Dreyer shall submit expense reimbursement requests with suitable documentation within thirty (30) days following the Separation Date, and the Company shall promptly process such requests in accordance with its expense reimbursement policies.

c. **Payments; Extension of Vesting and Exercise Periods; COBRA Premiums.** In consideration for the promises contained herein and subject to Mr. Dreyer's continued compliance with the terms and conditions of this Agreement and his execution and non-revocation of this Agreement within the timeframe specified herein, Mr. Dreyer shall receive the following benefits:

i. Compensation equal to $50,000.00, less all applicable withholding and deductions. The foregoing compensation shall be payable in lump sum following the non-revocation and expiration of the seven (7) day revocation period identified below, and shall be paid in accordance with the Company's standard payroll practices and procedures.

ii. Mr. Dreyer's existing stock options shall be vested such that a total of 623,026 option shares shall be vested and fully exercisable as of the Separation Date, and the period to exercise such vested stock options shall be extended (as specified in the underlying award agreement) for a period of one year following the Separation Date.

iii. Subject to Mr. Dreyer's timely election of COBRA continuation coverage, the Company shall pay COBRA premiums for Mr. Dreyer (and his eligible dependents) under the Company's medical and dental benefit plans in which Mr. Dreyer participated in as of the Separation Date, for the six (6) month period following the Separation Date.

d. **Vested Retirement Benefits.** Nothing in this Agreement shall limit, expand upon, or alter in any way any vested retirement benefits that Mr. Dreyer has or is entitled to receive under any Company sponsored 401(k) or other retirement plan to which Mr. Dreyer may have been entitled to participate by virtue of his employment. Mr. Dreyer's rights and obligations shall continue to be governed by the terms of such plans, as they presently exist or as they may permissibly be amended, and shall be based upon his Separation Date.

e. **No Other Payments.** Other than whatever is specifically provided for in this Agreement, Mr. Dreyer acknowledges that there are no other sums or benefits of any nature whatsoever due and owing to him, including without limitation any sums or benefits set forth in that certain Employment Agreement, dated February 22, 2015, by and between the Company and Mr. Dreyer (the "Employment Agreement"), other than whatever payments or benefits are specifically provided for and set forth in this Agreement. In consideration for this Agreement, Mr. Dreyer specifically waives any claim that he may have to any past, present, or future compensation of any nature whatsoever arising out of his prior employment with the Company.

f. **Confirmation Of Payment Of Wages.** Mr. Dreyer acknowledges that he has been paid all wages due and owing to him from the Company, including all minimum wages, overtime compensation, commissions, bonuses, waiting-time penalties, and liquidated damages. Accordingly, Mr. Dreyer understands that the release provisions below release and discharge the Company from any and all claims that he may have against the

Company for unpaid wages and other compensation including, but not limited to, any claims for unpaid wages, salary, bonuses, commissions, stock, stock options, vacation pay, holiday pay, sick or disability pay, fringe benefits, expense reimbursements, severance pay, or any other form of compensation.

g. **Biolase Proprietary Information.** As a material inducement to Biolase to enter into this Agreement, Mr. Dreyer covenants and represents that (i) he has complied with the terms and conditions of the Biolase Proprietary Information Agreement at all times during his employment with Biolase; and (ii) he will continue to comply with such terms for the periods specified therein. The terms of the Biolase Proprietary Agreement are incorporated into this Agreement by reference and made a part hereof.

h. **Continuing Obligations of Mr. Dreyer.** To the extent that Mr. Dreyer has come into contact with confidential or trade secret information concerning the Company and its operations or concerning the Company's customers, prospective customers, or projects, Mr. Dreyer will continue to protect the confidentiality of such information. In addition, Mr. Dreyer represents and warrants that, he has returned to the Company and has not copied or duplicated in any manner whatsoever, all tangible and intangible property (including, without limitation, all computer hardware, whether portable or stationary, and software), books, records, documents and reports owned by, or pertaining to the business of, the Company or any of the Company's existing or prospective clients that was in Mr. Dreyer's possession or under Mr. Dreyer's direct or indirect control as of the Separation Date. If Mr. Dreyer shall come into possession of any property (tangible or intangible), books, records, documents or reports of the type described above after the Separation Date, Mr. Dreyer will promptly return them to the Company.

i. **Complete Release.** Mr. Dreyer, on behalf of himself, his heirs and assigns, fully and forever releases and discharges the Company and, as the case may be, each of its respective employees, shareholders, officers, directors, agents, attorneys, predecessors, successors, assigns, and affiliated corporations or organizations, whether previously or hereafter affiliated in any manner (collectively, the "Released Company Parties"), to the fullest extent permitted by law, from any and all claims, demands, causes of action, charges of discrimination, obligations, damages, attorneys' fees, costs and liabilities of any nature whatsoever, including all claims of race, sex, national origin, religion, handicap and age discrimination under any federal or state statute, whether or not now known, suspected or claimed of any nature, including without limitation any claims, demands, causes of action, charges of discrimination, obligations, damages, attorneys' fees, costs and liabilities of any nature in connection with the Employment Agreement, which Mr. Dreyer ever had, now has, or may claim to have as of the date of this Agreement against the Released Company Parties.

j. **General Nature of Release.** The Release set forth above is a general release of all claims, demands, causes of action, obligations, damages, and liabilities of any nature whatsoever that are described in the Release and is intended to encompass all known and unknown, foreseen and unforeseen claims which Mr. Dreyer may have against the Released Company Parties, except that Mr. Dreyer does not release any claims that may not be released herein as a matter of law, including but not limited to claims for indemnity under Labor Code Section 2802, claims that may be adjudicated before the California Workers' Compensation Appeals Board, claims for vested benefits or any claims for enforcement of any other provision of this Agreement. This Release specifically includes, without limiting the generality of the foregoing, any claims against any Released Company Party occurring before the effective date of this Agreement and arising out of or related to alleged violations of any federal or state employment discrimination laws, including, but not limited to, the California Fair Employment and Housing Act; the Age Discrimination In Employment Act; the Older Workers Benefit Protection Act; Title VII of the Civil Rights Act of 1964; the Americans With Disabilities Act; the National Labor Relations Act; the Equal Pay Act; the Employee Retirement Income Security Act of 1974; as well as claims arising out of or related to violations of the provisions of the California Government Code; the California Business & Professions Code, including Business & Professions Code Section 17200 et seq.; state and federal wage and hour laws; breach of contract; fraud; misrepresentation; common counts; unfair competition; unfair business practices; negligence; defamation; infliction of emotional distress; invasion of privacy; assault; battery; false imprisonment; wrongful termination; and any other state or federal law, rule, or regulation. Mr. Dreyer acknowledges that his separation and the consideration offered hereunder were based on an individual determination and were not offered in conjunction with any group termination or group severance program and waives any claim to the contrary, and further acknowledges that he does not presently believe he has suffered any work-related injury or illness.

k. **Release of Unknown Claims**. It is the intention of Mr. Dreyer to release both known and unknown claims of any nature whatsoever. This includes, without limitation, claims, which Mr. Dreyer does not know or suspect to exist in his favor at the time of executing this release, even though such claims, if known by him would have materially affected his settlement with the Company. Accordingly, Mr. Dreyer expressly waives all rights under Section 1542 of the Civil Code of the State of California, which reads as follows:

"**A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor.**"

l. **Non-Disparagement; Neutral Reference**. Mr. Dreyer agrees during the term of this Agreement and for a period of ten (10) years thereafter, he shall not, in any communication with any person or entity, including any actual or potential customer, client, investor, vendor, or business partner of the Company, or any third party media outlet, make any derogatory or disparaging or critical negative statements – orally, written or otherwise – against the Company, or any of its directors, officers, agents, employees, contractors, or affiliated persons or entities. Mr. Dreyer also agrees that unless compelled by valid legal process he will not give or offer to provide any statements, testimony or the like in connection with any claim, action, or demand (being contemplated or) brought against the Company which concerns the Company, his employment or the cessation of his employment with the Company, the Company's business practices, its customers and/or prospective customers, its products, and/or any other aspect of the Company's business, its directors, officers, agents, employees, contractors, or affiliated persons or entities. Further, Mr. Dreyer agrees that if he agrees that should he be called as a witness or to provide testimony in any case, action, and/or proceeding concerning the Company, he and/or his counsel will contact either the Chief Executive Officer or the Secretary of the Company immediately, but in no event later than ten (10) days before he is to be deposed or to testify as a witness, so that the Company can take whatever precautionary measures it deems necessary to protect from disclosure any of its proprietary and/or confidential information and/or documents.

m. **No Other Actions.** Mr. Dreyer represents and covenants that he has not filed or lodged any complaints or charges against any of the Released Company Parties with any local, state, or federal agency or court.

n. **Risk of Different Facts.** The parties to this Agreement acknowledge that they may hereafter discover facts different from or in addition to those they now know or believe to be true, and they expressly agree to assume the risk of the possible discovery of additional or different facts, and agree that this Agreement shall be and remain effective in all respects regardless of such additional or different facts.

o. **No Future Actions.** Mr. Dreyer covenants and agrees never to commence, aid in any way, prosecute or cause to be commenced or prosecuted any action or other proceeding based upon any claims, demands, causes of action, obligations, damages or liabilities which are the subject of this Agreement; provided however, that Mr. Dreyer does not relinquish any protected rights he may have to file a charge, testify, assist or participate in any manner in an investigation, hearing or proceeding conducted by the Equal Employment Opportunity Commission, the Office of Federal Contract Compliance, or any similar state human rights agency. However, Mr. Dreyer may not recover additional compensation or damages as a result of such participation.

p. **Twenty-One Day Consideration Period.** This Agreement was originally given to Mr. Dreyer on the Separation Date. Mr. Dreyer shall have twenty-one (21) days to consider this Agreement; provided however, that if Mr. Dreyer chooses to sign this Agreement before the end of this twenty-one (21)-day period, Mr. Dreyer acknowledges that he does so knowingly and voluntarily and waives any claim that to the effect that he was not given the full twenty-one (21) days to consider whether to sign this Agreement or did not use the entire period of time available to consider this Agreement or to consult with an attorney.

q. **Seven Day Revocation Period.** Following execution of this Agreement, Mr. Dreyer shall have seven (7) days to revoke this Agreement. To be effective, the revocation must be in writing and signed by Mr. Dreyer and must be delivered to and received by the Company, before 5 p.m. local time of the 7th day. This Agreement shall become effective on the eighth (8th) day following the execution of this Agreement. Any revocation shall be in writing and shall be effective upon timely receipt by the Company by: Corporate Secretary, c/o Harold C. Flynn, Jr., Chief Executive Officer, Biolase, Inc., 4 Cromwell, Irvine, California, 92618.

r. **Non-Assignment of Claim.** Mr. Dreyer warrants that he has made no assignment and will make no assignment of any claim, chose in action, right of action, or any right of any kind whatsoever, embodied in this Agreement and referred to herein, and that no other person or entity of any kind (other than as expressly mentioned above) had or has any interest in any of the demands, obligations, actions, causes of action, debts, liabilities, rights, contracts, damages, attorneys' fees, costs, expenses, losses or claims referred to herein.

s. **Successors and Assigns.** This Agreement, and all the terms and provisions hereof, shall be binding upon and shall inure to the benefit of the parties and their respective heirs, legal representatives, successors and assigns.

t. **Assistance of Counsel.** Mr. Dreyer acknowledges that he has been advised to consult with counsel of his choosing before entering into this Agreement. The parties specifically represent that they either have consulted to their satisfaction with their attorneys, or have elected on their own accord not to seek legal counsel, prior to executing this Agreement concerning the terms and conditions of this Agreement.

u. **Interpretation.** Should any portion, word, clause, phrase, sentence or paragraph of this Agreement be declared void or unenforceable, such portion shall be considered independent and severable from the remainder, the validity of which shall remain unaffected. Whenever required by the context, as used in this Agreement the singular number shall include the plural, and the masculine gender shall include the feminine and neuter.

v. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties who have executed it and supersedes any and all other agreements, understandings, negotiations, or discussions, either oral or in writing, express or implied, between the parties to this Agreement. The parties hereto acknowledge that no representations, inducements, promises, agreements, or warranties, oral or otherwise, have been made by them, or anyone acting on their behalf, which are not embodied in this Agreement, that they have not executed this Agreement in reliance on any such representations, inducements, promise, agreement or warranty, and that no representation, inducement, promise, agreement or warranty not contained in this Agreement, including, but not limited to, any purported supplements, modifications, waivers or terminations of this Agreement shall be valid or binding, unless executed in writing by all of the parties to this Agreement.

w. **Governing Law.** This Agreement shall be enforced and governed under the laws of the State of California without reference to its choice of law provisions.

x. **Knowing and Voluntary Agreement.** This Agreement in all respects has been voluntarily and knowingly executed by the parties hereto.

y. **Counterparts.** This Agreement may be executed in counterparts, and when each party has signed and delivered at least one such counterpart, each counterpart shall be deemed an original, and, when taken together with other signed counterparts, shall constitute one agreement, which shall be binding upon and effective as to all parties.

z. **No Waiver.** Failure to insist on compliance of any term, covenant or condition contained in this Agreement shall not be deemed a waiver of that term, covenant, or condition, nor shall any waiver or relinquishment of any right or power contained in this Agreement at any one time or more times be deemed a waiver or relinquishment of any right or power at any other time or times.

aa. **Arbitration.** Any disputes concerning this Agreement or otherwise arising out of this Agreement or Mr. Dreyer's employment or termination that the parties are unable to resolve among them shall be submitted to final and binding arbitration in Orange County, California at and under the rules of the Judicial Arbitration and Mediation Service ("JAMS"); provided that nothing in this provision shall prevent the Company from seeking injunctive relief in any Court of competent jurisdiction.

bb. **Section 409A**. The payments to Mr. Dreyer pursuant to this Agreement are intended to be exempt from Section 409A of the Internal Revenue Code of 1986, as amended, to the maximum extent possible, under either the separation pay exemption pursuant to Treasury regulation §1.409A-1(b)(9)(iii) or as short-term deferrals pursuant to Treasury regulation §1.409A-1(b)(4), and for such purposes, each installment paid to Mr. Dreyer under this Agreement shall be considered a separate payment. In the event the terms of this Agreement would subject Mr. Dreyer to taxes or penalties under Section 409A of the Code ("409A Penalties"), the Company and

Mr. Dreyer shall cooperate diligently to amend the terms of the Agreement to avoid such 409A Penalties, to the extent possible; provided that in no event shall the Company be responsible for any 409A Penalties that arise in connection with any amounts payable under this Agreement.

IN WITNESS WHEREOF, the undersigned have executed this Separation Agreement and General Release of All Claims on the date(s) set forth hereinafter.

Dated: January 13, 2016

By: ________________________
DAVID C. DREYER

BIOLASE, INC.

Dated: January 13, 2016

By: ________________________
Harold C. Flynn, Jr.
Chief Executive Officer

**Exhibit 10.20**

**SEPARATION AGREEMENT WITH GENERAL RELEASE OF ALL CLAIMS**

This Separation Agreement With General Release of All Claims ("Agreement") is entered into by and between David C. Dreyer ("Mr. Dreyer"), and Biolase, Inc., a Delaware corporation (the "Company"), and is intended by the parties hereto to settle fully and finally any claims that Mr. Dreyer may have against the Company and all obligations of the Company to Mr. Dreyer, except as set forth in and incorporated into this Agreement.

a. **Employment Separation.** Mr. Dreyer's employment with the Company ended effective January 13, 2016 (the "Separation Date"). From and after the Separation Date, Mr. Dreyer shall no longer be employed by, or act in any capacity (including as a director) for, the Company, and Mr. Dreyer hereby resigns from all Company positions held and on any Company subsidiary boards as of the Separation Date.

b. **Termination Pay.** Mr. Dreyer acknowledges that he has been paid his base salary and accrued but unused vacation through the Separation Date ("Termination Pay"). Mr. Dreyer shall submit expense reimbursement requests with suitable documentation within thirty (30) days following the Separation Date, and the Company shall promptly process such requests in accordance with its expense reimbursement policies.

c. **Payments; Extension of Vesting and Exercise Periods; COBRA Premiums.** In consideration for the promises contained herein and subject to Mr. Dreyer's continued compliance with the terms and conditions of this Agreement and his execution and non-revocation of this Agreement within the timeframe specified herein, Mr. Dreyer shall receive the following benefits:

    i. Compensation equal to $50,000.00, less all applicable withholding and deductions. The foregoing compensation shall be payable in lump sum following the non-revocation and expiration of the seven (7) day revocation period identified below, and shall be paid in accordance with the Company's standard payroll practices and procedures.

    ii. 283,309 of Mr. Dreyer's existing unvested stock options shall be vested such that a total of 623,026 option shares shall be vested and fully exercisable as of the Separation Date, and the period to exercise such vested stock options shall be extended (as specified in the underlying award agreement) for a period of one year following the Separation Date.

    iii. Subject to Mr. Dreyer's timely election of COBRA continuation coverage, the Company shall pay COBRA premiums for Mr. Dreyer (and his eligible dependents) under the Company's medical and dental benefit plans in which Mr. Dreyer participated in as of the Separation Date, for the six (6) month period following the Separation Date.

d. **Vested Retirement Benefits.** Nothing in this Agreement shall limit, expand upon, or alter in any way any vested retirement benefits that Mr. Dreyer has or is entitled to receive under any Company sponsored 401(k) or other retirement plan to which Mr. Dreyer may have been entitled to participate by virtue of his employment. Mr. Dreyer's rights and obligations shall continue to be governed by the terms of such plans, as they presently exist or as they may permissibly be amended, and shall be based upon his Separation Date.

e. **No Other Payments.** Other than whatever is specifically provided for in this Agreement, Mr. Dreyer acknowledges that there are no other sums or benefits of any nature whatsoever due and owing to him, including without limitation any sums or benefits set forth in that certain Employment Agreement, dated February 22, 2015, by and between the Company and Mr. Dreyer (the "Employment Agreement"), other than whatever payments or benefits are specifically provided for and set forth in this Agreement. In consideration for this Agreement, Mr. Dreyer specifically waives any claim that he may have to any past, present, or future compensation of any nature whatsoever arising out of his prior employment with the Company.

f. **Confirmation Of Payment Of Wages.** Mr. Dreyer acknowledges that he has been paid all wages due and owing to him from the Company, including all minimum wages, overtime compensation, commissions, bonuses, waiting-time penalties, and liquidated damages. Accordingly, Mr. Dreyer understands that the release provisions below release and discharge the Company from any and all claims that he may have against the Company for unpaid wages and other compensation including, but not limited to, any claims for unpaid wages, salary, bonuses, commissions, stock, stock options, vacation pay, holiday pay, sick or disability pay, fringe benefits, expense reimbursements, severance pay, or any other form of compensation.

g. **Biolase Proprietary Information.** As a material inducement to Biolase to enter into this Agreement, Mr. Dreyer covenants and represents that (i) he has complied with the terms and conditions of the Biolase Proprietary Information Agreement at all times during his employment with Biolase; and (ii) he will continue to comply with such terms for the periods specified therein. The terms of the Biolase Proprietary Agreement are incorporated into this Agreement by reference and made a part hereof.

h. **Continuing Obligations of Mr. Dreyer.** To the extent that Mr. Dreyer has come into contact with confidential or trade secret information concerning the Company and its operations or concerning the Company's customers, prospective customers, or projects, Mr. Dreyer will continue to protect the confidentiality of such information. In addition, Mr. Dreyer represents and warrants that, he has returned to the Company and has not copied or duplicated in any manner whatsoever, all tangible and intangible property (including, without limitation, all computer hardware, whether portable or stationary, and software), books, records, documents and reports owned by, or pertaining to the business of, the Company or any of the Company's existing or prospective clients that was in Mr. Dreyer's possession or under Mr. Dreyer's direct or indirect control as of the Separation Date. If Mr. Dreyer shall come into possession of any property (tangible or intangible), books, records, documents or reports of the type described above after the Separation Date, Mr. Dreyer will promptly return them to the Company.

i. **Complete Release.** Mr. Dreyer, on behalf of himself, his heirs and assigns, fully and forever releases and discharges the Company and, as the case may be, each of its respective employees, shareholders, officers, directors, agents, attorneys, predecessors, successors, assigns, and affiliated corporations or organizations, whether previously or hereafter affiliated in any manner (collectively, the "Released Company Parties"), to the fullest extent permitted by law, from any and all claims, demands, causes of action, charges of discrimination, obligations, damages, attorneys' fees, costs and liabilities of any nature whatsoever, including all claims of race, sex, national origin, religion, handicap and age discrimination under any federal or state statute, whether or not now known, suspected or claimed of any nature, including without limitation any claims, demands, causes of action, charges of discrimination, obligations, damages, attorneys' fees, costs and liabilities of any nature in connection with the Employment Agreement, which Mr. Dreyer ever had, now has, or may claim to have as of the date of this Agreement against the Released Company Parties.

j. **General Nature of Release.** The Release set forth above is a general release of all claims, demands, causes of action, obligations, damages, and liabilities of any nature whatsoever that are described in the Release and is intended to encompass all known and unknown, foreseen and unforeseen claims which Mr. Dreyer may have against the Released Company Parties, except that Mr. Dreyer does not release any claims that may not be released herein as a matter of law, including but not limited to claims for indemnity under Labor Code Section 2802, claims that may be adjudicated before the California Workers' Compensation Appeals Board, claims for vested benefits or any claims for enforcement of any other provision of this Agreement. This Release specifically includes, without limiting the generality of the foregoing, any claims against any Released Company Party occurring before the effective date of this Agreement and arising out of or related to alleged violations of any federal or state employment discrimination laws, including, but not limited to, the California Fair Employment and Housing Act; the Age Discrimination In Employment Act; the Older Workers Benefit Protection Act; Title VII of the Civil Rights Act of 1964; the Americans With Disabilities Act; the National Labor Relations Act; the Equal Pay Act; the Employee Retirement Income Security Act of 1974; as well as claims arising out of or related to violations of the provisions of the California Government Code; the California Business & Professions Code, including Business & Professions Code Section 17200 et seq.; state and federal wage and hour laws; breach of contract; fraud; misrepresentation; common counts; unfair competition; unfair business practices; negligence; defamation; infliction of emotional distress; invasion of privacy; assault; battery; false imprisonment; wrongful termination; and any other state or federal law, rule, or regulation. Mr. Dreyer acknowledges that his separation and the consideration offered hereunder were based on an individual determination and were not offered in conjunction with any group termination or group severance program and waives any claim to the contrary, and further acknowledges that he does not presently believe he has suffered any work-related injury or illness.

k. **Release of Unknown Claims**. It is the intention of Mr. Dreyer to release both known and unknown claims of any nature whatsoever. This includes, without limitation, claims, which Mr. Dreyer does not know or suspect to exist in his favor at the time of executing this release, even though such claims, if known by him would have materially affected his settlement with the Company. Accordingly, Mr. Dreyer expressly waives all rights under Section 1542 of the Civil Code of the State of California, which reads as follows:

"**A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor.**"

l. **Non-Disparagement; Neutral Reference**. Mr. Dreyer agrees during the term of this Agreement and for a period of ten (10) years thereafter, he shall not, in any communication with any person or entity, including any actual or potential customer, client, investor, vendor, or business partner of the Company, or any third party media outlet, make any derogatory or disparaging or critical negative statements – orally, written or otherwise – against the Company, or any of its directors, officers, agents, employees, contractors, or affiliated persons or entities. Mr. Dreyer also agrees that unless compelled by valid legal process he will not give or offer to provide any statements, testimony or the like in connection with any claim, action, or demand (being contemplated or) brought against the Company which concerns the Company, his employment or the cessation of his employment with the Company, the Company's business practices, its customers and/or prospective customers, its products, and/or any other aspect of the Company's business, its directors, officers, agents, employees, contractors, or affiliated persons or entities. Further, Mr. Dreyer agrees that if he agrees that should he be called as a witness or to provide testimony in any case, action, and/or proceeding concerning the Company, he and/or his counsel will contact either the Chief Executive Officer or the Secretary of the Company immediately, but in no event later than ten (10) days before he is to be deposed or to testify as a witness, so that the Company can take whatever precautionary measures it deems necessary to protect from disclosure any of its proprietary and/or confidential information and/or documents.

m. **No Other Actions.** Mr. Dreyer represents and covenants that he has not filed or lodged any complaints or charges against any of the Released Company Parties with any local, state, or federal agency or court.

n. **Risk of Different Facts.** The parties to this Agreement acknowledge that they may hereafter discover facts different from or in addition to those they now know or believe to be true, and they expressly agree to assume the risk of the possible discovery of additional or different facts, and agree that this Agreement shall be and remain effective in all respects regardless of such additional or different facts.

o. **No Future Actions.** Mr. Dreyer covenants and agrees never to commence, aid in any way, prosecute or cause to be commenced or prosecuted any action or other proceeding based upon any claims, demands, causes of action, obligations, damages or liabilities which are the subject of this Agreement; provided however, that Mr. Dreyer does not relinquish any protected rights he may have to file a charge, testify, assist or participate in any manner in an investigation, hearing or proceeding conducted by the Equal Employment Opportunity Commission, the Office of Federal Contract Compliance, or any similar state human rights agency. However, Mr. Dreyer may not recover additional compensation or damages as a result of such participation.

p. **Twenty-One Day Consideration Period.** This Agreement was originally given to Mr. Dreyer on the Separation Date. Mr. Dreyer shall have twenty-one (21) days to consider this Agreement; provided however, that if Mr. Dreyer chooses to sign this Agreement before the end of this twenty-one (21)-day period, Mr. Dreyer acknowledges that he does so knowingly and voluntarily and waives any claim that to the effect that he was not given the full twenty-one (21) days to consider whether to sign this Agreement or did not use the entire period of time available to consider this Agreement or to consult with an attorney.

q. **Seven Day Revocation Period.** Following execution of this Agreement, Mr. Dreyer shall have seven (7) days to revoke this Agreement. To be effective, the revocation must be in writing and signed by Mr. Dreyer and must be delivered to and received by the Company, before 5 p.m. local time of the 7th day. This Agreement shall become effective on the eighth (8th) day following the execution of this Agreement. Any revocation shall be in writing and shall be effective upon timely receipt by the Company by: Corporate Secretary, c/o Harold C. Flynn, Jr., Chief Executive Officer, Biolase, Inc., 4 Cromwell, Irvine, California, 92618.

r. **Non-Assignment of Claim.** Mr. Dreyer warrants that he has made no assignment and will make no assignment of any claim, chose in action, right of action, or any right of any kind whatsoever, embodied in this Agreement and referred to herein, and that no other person or entity of any kind (other than as expressly mentioned above) had or has any interest in any of the demands, obligations, actions, causes of action, debts, liabilities, rights, contracts, damages, attorneys' fees, costs, expenses, losses or claims referred to herein.

s. **Successors and Assigns.** This Agreement, and all the terms and provisions hereof, shall be binding upon and shall inure to the benefit of the parties and their respective heirs, legal representatives, successors and assigns.

t. **Assistance of Counsel.** Mr. Dreyer acknowledges that he has been advised to consult with counsel of his choosing before entering into this Agreement. The parties specifically represent that they either have consulted to their satisfaction with their attorneys, or have elected on their own accord not to seek legal counsel, prior to executing this Agreement concerning the terms and conditions of this Agreement.

u. **Interpretation.** Should any portion, word, clause, phrase, sentence or paragraph of this Agreement be declared void or unenforceable, such portion shall be considered independent and severable from the remainder, the validity of which shall remain unaffected. Whenever required by the context, as used in this Agreement the singular number shall include the plural, and the masculine gender shall include the feminine and neuter.

v. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties who have executed it and supersedes any and all other agreements, understandings, negotiations, or discussions, either oral or in writing, express or implied, between the parties to this Agreement. The parties hereto acknowledge that no representations, inducements, promises, agreements, or warranties, oral or otherwise, have been made by them, or anyone acting on their behalf, which are not embodied in this Agreement, that they have not executed this Agreement in reliance on any such representations, inducements, promise, agreement or warranty, and that no representation, inducement, promise, agreement or warranty not contained in this Agreement, including, but not limited to, any purported supplements, modifications, waivers or terminations of this Agreement shall be valid or binding, unless executed in writing by all of the parties to this Agreement.

w. **Governing Law.** This Agreement shall be enforced and governed under the laws of the State of California without reference to its choice of law provisions.

x. **Knowing and Voluntary Agreement.** This Agreement in all respects has been voluntarily and knowingly executed by the parties hereto.

y. **Counterparts.** This Agreement may be executed in counterparts, and when each party has signed and delivered at least one such counterpart, each counterpart shall be deemed an original, and, when taken together with other signed counterparts, shall constitute one agreement, which shall be binding upon and effective as to all parties.

z. **No Waiver.** Failure to insist on compliance of any term, covenant or condition contained in this Agreement shall not be deemed a waiver of that term, covenant, or condition, nor shall any waiver or relinquishment of any right or power contained in this Agreement at any one time or more times be deemed a waiver or relinquishment of any right or power at any other time or times.

aa. **Arbitration.** Any disputes concerning this Agreement or otherwise arising out of this Agreement or Mr. Dreyer's employment or termination that the parties are unable to resolve among them shall be submitted to final and binding arbitration in Orange County, California at and under the rules of the Judicial Arbitration and Mediation Service ("JAMS"); provided that nothing in this provision shall prevent the Company from seeking injunctive relief in any Court of competent jurisdiction.

bb. **Section 409A**. The payments to Mr. Dreyer pursuant to this Agreement are intended to be exempt from Section 409A of the Internal Revenue Code of 1986, as amended, to the maximum extent possible, under either the separation pay exemption pursuant to Treasury regulation §1.409A-1(b)(9)(iii) or as short-term deferrals pursuant to Treasury regulation §1.409A-1(b)(4), and for such purposes, each installment paid to Mr. Dreyer under this Agreement shall be considered a separate payment. In the event the terms of this Agreement would subject Mr. Dreyer to taxes or penalties under Section 409A of the Code ("409A Penalties"), the Company and Mr. Dreyer shall cooperate diligently to amend the terms of the Agreement to avoid such 409A Penalties, to the extent possible; provided that in no event shall the Company be responsible for any 409A Penalties that arise in connection with any amounts payable under this Agreement.

IN WITNESS WHEREOF, the undersigned have executed this Separation Agreement and General Release of All Claims on the date(s) set forth hereinafter.

Dated: January 13, 2017

By: /s/ David C. Dreyer
DAVID C. DREYER

BIOLASE, INC.

Dated: January 13, 2017

By: /s/ Harold C. Flynn
Harold C. Flynn, Jr.
Chief Executive Officer

**Exhibit 10.21**

# EMPLOYMENT AGREEMENT

**EMPLOYMENT AGREEMENT** (the "Agreement") made as of the 23rd day of February, 2017 by and between Biolase, Inc. (the "Company") and Mark J. Nelson ("Executive").

**WHEREAS**, the Company and Executive wish to enter into a formal employment agreement which will govern the terms and conditions applicable to Executive's employment with the Company and will provide certain severance benefits for Executive in exchange for the Executive's agreement to abide by the terms and conditions set forth in this Agreement.

**NOW, THEREFORE**, the parties agree as follows:

## PART ONE — TERMS AND CONDITIONS OF EMPLOYMENT

1. **Duties and Responsibilities.**

A. Executive shall serve as the Senior Vice President and Chief Financial Officer of the Company and shall report directly to the Company's Chief Executive Officer. Executive shall perform the responsibilities of a Senior Vice President and Chief Financial Officer of a public company, including such duties and functions as may be reasonably assigned to Executive from time to time by the Chief Executive Officer. Executive shall comply with all proper and reasonable directives and instructions of the Chief Executive Officer, the Company's Board of Directors (the "Board"), or any committee of the Board.

B. Subject to the exceptions set forth in Paragraph 6, Executive agrees to devote all sufficiently necessary business time and attention to the Company, to use his best efforts to advance the business and welfare of the Company, to render his services under this Agreement fully, faithfully, diligently, competently and to the best of his ability.

2. **Period of Employment.** Executive's employment with the Company shall be governed by the provisions of this Agreement commencing as of March 27, 2017 (the "Effective Date") and for the duration of Executive's employment with the Company. Executive's employment shall be "at will." The period during which Executive's employment continues in effect shall be referenced as the "Employment Period."

3. **Base Salary.**

A. Executive shall be paid a base salary at the annual rate of not less than THREE HUNDRED AND TWENTY-FIVE THOUSAND dollars ($325,000.00) per annum (hereinafter "Base Salary") during the Employment Period. Executive's Base Salary shall be paid at periodic intervals in accordance with the Company's payroll practices for salaried employees.

B. The Company shall deduct and withhold from the compensation and benefits payable to Executive, including but not limited to Executive's Base Salary, any and all applicable federal, state and local income and employment withholding taxes and any other amounts required to be deducted or withheld by the Company under applicable statutes, regulations, ordinances or orders governing or requiring the withholding or deduction of amounts otherwise payable as compensation or wages to employees. The Company shall also deduct such amounts as may be authorized by Executive from time to time.

4. **Performance Bonus; Stock Option Grant.**

A. For each full calendar year during the Employment Period, Executive may earn an annual Performance Bonus of up to 50% of Executive's Base Salary (the "Performance Bonus Target") based on achievement of Performance Bonus criteria as established and determined by the Compensation Committee of the Board (the "Compensation Committee"). For any partial year at the beginning of the Employment Period, the Performance

Bonus Target shall be prorated based on the number of days in the calendar year during which Executive is employed by the Company divided by three hundred sixty-five (365). The bonus shall be paid no later than March 15 of the year following the year for which it is awarded. Executive must be employed by the Company as of December 31 of the year for which the bonus is awarded in order to earn the bonus.

B. The Company shall grant to Executive, effective as of the Effective Date, a nonqualified stock option to purchase 600,000 shares of the Company's common stock at a per share exercise price equal to the fair market value (determined based on the closing selling price per share on the grant date, as such price is reported by the National Association of Securities Dealers on the Nasdaq Stock Market and published in The Wall Street Journal) of the Company's common stock on the grant date. Except as otherwise provided in Section 8.C., such stock option shall vest and become exercisable in accordance with time-based and performance-based criteria as established by the Compensation Committee. Such stock option shall have a term of ten (10) years, and shall include such other terms and conditions as would apply to a stock option granted under the Company's equity plan and shall be subject to the terms and conditions of this Agreement.

5. **Fringe Benefits.**

A. Executive shall, throughout the Employment Period, be eligible to participate in any and all group term life insurance plans, group health plans, accidental death and dismemberment plans and short-term disability programs and other executive perquisites which are made available to the Company's executives and for which Executive qualifies under the terms of such plans, policies or programs.

B. Executive shall earn and accrue vacation time during the Employment Period at a rate of four (4) weeks of vacation per year. Executive shall not be permitted to accrue more than six (6) weeks' vacation. Once this maximum has been reached, all further accruals will cease. Vacation accruals will recommence after Executive has taken vacation and his accrued hours have dropped below the accrual maximum. Executive will not earn vacation during any unpaid leaves. If a recognized holiday falls during Executive's vacation period, it will not be considered as a vacation day.

C. During the Employment Period, Executive shall be authorized to incur necessary and reasonable travel, entertainment and other business expenses in connection with his duties hereunder. The Company shall reimburse Executive for such expenses upon presentation of an itemized account and appropriate supporting documentation.

D. Executive and the Company shall enter into the Company's standard Indemnification Agreement, which Indemnification Agreement shall be effective as of the Effective Date.

6. **Restrictive Covenants.**

A. Service to the Company. During the Employment Period, Executive shall devote all sufficiently necessary business time and attention to the performance of Executive's duties, except during periods of illness or vacation periods. Executive may continue to serve during the Employment Period as a non-employee member of the board of directors of the companies for which he has obtained the Board's prior written consent. Executive shall have the right to perform such services as are necessary in connection with (i) Executive's private investments and (ii) Executive's charitable or community activities, or participation in trade or professional organizations, but only if such incidental services do not materially interfere with the performance of Executive's services, or violate Section 6.B.

B. No Competitive Activities. During the Employment Period, Executive shall not directly or indirectly own, manage, operate, join, control or participate in the ownership, management, operation or control of, provide services to, or be employed by or connected in any manner with, any enterprise which is engaged in the Business; provided, however, that such restriction shall not apply to any passive investment representing an interest of less than two percent (2%) of an outstanding class of publicly-traded securities of any corporation or other enterprise which is not, at the time of such investment, engaged in the Business. For purposes of this Section 6, the "Business" shall refer to the design and manufacture of dental lasers, ophthalmologic lasers for Presbyopia, and such other

businesses as the Company may expand into while Executive is employed by the Company, its parents, subsidiaries or affiliates.

C. Confidential Information. As a condition of Executive's receipt of the benefits provided for in this Agreement, Executive will execute the Company's Confidential Information and Assignment of Inventions Agreement, a true and correct copy of which is attached to this Agreement as Exhibit A. Executive's obligations under this Paragraph 6.C. and Exhibit A shall continue in effect after the termination of his employment with the Company, whatever the reason or reasons for such termination, and Executive acknowledges and agrees that the Company shall have the right to communicate with any future or prospective employer of Executive concerning Executive's continuing obligations under this Paragraph 6.C. and Exhibit A.

D. Non Solicitation of Employees. Executive agrees that during his Employment Period and for a period of twenty-four (24) months after termination of his employment with the Company, he shall not, directly or indirectly, through any other individual or entity, solicit any employee of the Company, to cease his or her employment with the Company, and Executive will not approach any such employee for any such purpose or knowingly authorize the taking of any such action by any other individual or entity.

E. Non Solicitation of Customers. Executive agrees that during his employment by the Company, and any of its parents, subsidiaries or affiliates and for a period of twenty-four (24) months after termination of his employment with the Company, Executive shall not, without the prior written approval of the Company, directly or, with knowledge, indirectly, through or on behalf or any other individual or entity, solicit, entice or induce any business from any of the Company's customers (including actively sought prospective customers) or suppliers/vendors, the identity of whom, or information concerning, rises to the level of a "trade secret" within the meaning of the Uniform Trade Secrets Act ("UTSA").

F. Injunctive Relief. Executive acknowledges that monetary damages may not be sufficient to compensate the Company for any economic loss which may be incurred by reason of his breach of the foregoing restrictive covenants. Accordingly, in the event of any such breach, the Company shall, in addition to the termination of this Agreement and any remedies available to the Company under other provisions of this Agreement and/or at law, be entitled to obtain equitable relief in the form of an injunction precluding Executive from continuing such breach.

7. **Termination of Employment.**

A. Executive's employment may be terminated by either the Company or Executive at any time, for any reason, with or without Cause, upon written notice specifying the Effective Date of Termination, and without additional compensation, except as otherwise provided in Section 8. Except as provided in Section 7.B., the Effective Date of Termination specified in the written notice may be immediate.

B. For purposes of this Agreement, termination for "Cause" shall mean the involuntary termination of the Executive's employment by the Company for any of the following reasons:

(i) Executive's conviction by, or entry of a plea of guilty in, a court of competent jurisdiction for any felony;

(ii) A substantial and continual refusal by Executive to perform his duties and functions hereunder in accordance with the instructions of the Board as embodied in written resolutions of the Board and communicated in writing to Executive (provided that such instructions do not require Executive to take any actions that Executive reasonably believes to be are unlawful after a reasonable inquiry);

(iii) the willful and material breach of this Agreement by Executive which, if curable, Executive fails to cure within thirty (30) business days following written notice from the Company;

(iv) Executive's conviction by, or entry of a plea of guilty a nolo contendere, in a court of competent jurisdiction, for any act of fraud, misappropriation or embezzlement in connection with his employment by the Company;

(v) Executive is unable to perform the essential functions of his job for ninety or more consecutive days in any 12 month period; provided that such inability to perform is not due to the Executive's status as disabled under any short or long term disability provisions of the Company's Employee Benefit Plans; or

(vi) Executive's death.

An involuntary termination of Executive's employment by the Company in any other circumstances or for any other reason will be a termination "Without Cause."

C. The "Effective Date of Termination" shall be: (i) in the case of termination due to death, the date of Executive's death, or (ii) in the case of any other termination, the date of Executive's separation from service, within the meaning of Section 409A(a)(2)(A)(i) of the Internal Revenue Code of 1986, as amended (the "Code"), and the Treasury regulations thereunder, from the Company and its subsidiaries or affiliates (the "Separation from Service") specified in the written notice required by this Section.

D. On the Effective Date of Termination of Executive's employment for any reason during the Employment Period, Executive shall be paid all Base Salary earned through the end of the Employment Period, any unpaid business expenses, and any unused vacation earned through the Effective Date of Termination. Unless Executive is entitled to severance benefits under Section 8, he shall not be entitled to any compensation or benefits following the Effective Date of Termination, except as required by law or as provided under a retirement or welfare benefit plan of the Company.

E. Executive shall resign from Executive's position as the Senior Vice President and Chief Financial Officer of the Company, and shall resign from all other positions with the Company or any of its subsidiaries, effective as of the Effective Date of Termination.

**PART TWO — SEVERANCE BENEFITS**

8. **Benefit Entitlement.**

A. Executive shall be entitled to receive the severance benefits specified in Section 8.B. or Section 8.C., as the case may be, in the event that the Company terminates Executive's employment Without Cause. Such severance benefits shall be conditioned upon Executive properly executing on or after the Effective Date of Termination, and not revoking or attempting to revoke within the permitted timeframe, a general release of claims against the Company, its Board, its affiliates, and their employees and agents substantially in the form of Exhibit B or, in the event of a change in the law that would limit the effect of the release attached as Exhibit B, a general release that would have the same scope and effect as the release attached as Exhibit B (such release, the "Release ") and the Release becoming irrevocable within fifty-two (52) days following the Effective Date of Termination. Executive shall not be entitled to receive the severance benefits specified in Section 8 in the event Executive fails to timely execute the Release or Executive timely revokes the Release.

All severance payments made to Executive pursuant to Section 8 shall be subject to all applicable withholding requirements. In no event shall Executive be entitled to severance benefits under both Sections 8.B and 8.C and under no circumstances shall any severance payments or benefits be payable if Executive's employment is terminated for Cause or Executive resigns.

B. Subject to Section 8.C., in the event Executive's employment terminates, and the Release becomes irrevocable, under the conditions described in Section 8.A, Executive shall be entitled to severance benefits of:

(i) Twelve (12) months of Executive's annual Base Salary in effect under Section 3.A as of the Effective Date of Termination, plus the time-based prorated amount of the Executive's annual Performance Bonus at Target at full achievement (*i.e.*, not at overachievement) of the Performance Bonus criteria then in effect, payable in twenty-six (26) equal bi-weekly installments, during the twelve (12) months commencing on the first day of the calendar month next following sixty (60) days after the Effective Date of Termination, coinciding with the Company's regular payroll cycle;

(ii) The portion due to vest through the first anniversary of the Effective Date of Termination of the Executive's nonqualified stock option granted to Executive on the Effective Date shall become fully vested and exercisable on the first business day that is at least sixty (60) days after the Effective Date of Termination; provided however notwithstanding the above, the portion of the stock option grant having vesting terms that are based (in part or in full) on performance, including the Company's or Executive's achievement of financial performance targets or other milestones that are not achieved, then the portion of such stock option shall not become fully vested and shall terminate; and

(iii) Company paid COBRA premiums for Executive (and his eligible dependents) under the Company's medical and dental benefit plans, as in effect from time to time, for the twelve (12) month period following the Effective Date of Termination. The benefits under such plans shall be provided through insurance maintained by the Company.

C. In the event Executive's employment terminates, and the Release becomes irrevocable, under the conditions described in Section 8.A, and the Effective Date of Termination is during the twelve (12) months following a Change of Control, Executive shall be entitled to the following severance benefits (which shall be in lieu of the severance benefit under Section 8.B.):

(i) Twelve (12) months of Executive's annual Base Salary in effect under Section 3.A as of the Effective Date of Termination, plus the full amount of the Executive's annual Performance Bonus Target then in effect, both payable in a lump sum in cash. The Company shall pay such lump sum payment on the first business day that is at least sixty (60) days after the Effective Date of Termination;

(ii) Executive's nonqualified stock option granted to Executive on the Effective Date and any future stock options granted to Executive shall become fully vested on the first business day that is at least sixty (60) days after the Effective Date of Termination; provided however notwithstanding the above, one-half of the portion of the stock option grant has vesting terms that are based (in part or in full) on performance, including the Company's or Executive's achievement of financial performance targets or other milestones that are not achieved, then such one-half portion of such performance stock option shall not become fully vested and shall terminate; and

(iii) Company paid COBRA premiums for Executive (and his eligible dependents) under the Company's medical and dental benefit plans, as in effect from time to time, for the twelve (12) month period following the Effective Date of Termination. The benefits under such plans shall be provided through insurance maintained by the Company.

For purposes of the this Agreement, a "Change of Control" shall mean the occurrence of any of the following events following the Effective Date: (i) an acquisition of any voting securities of the Company by any "person"(as the term "person" is used for purposes of Section 13(d) or Section 14(d) of the Securities Exchange Act of 1934, as amended (the "1934 Act ")) immediately after which such person has "beneficial ownership"(within the meaning of Rule 13d-3 promulgated under the 1934 Act) of 50% or more of the combined voting power of the Company's then outstanding voting securities; or (ii) the consummation of: (x) a merger, consolidation, share exchange or reorganization involving the Company, unless the stockholders of the Company, immediately before such merger, consolidation, share exchange or reorganization, own, directly or indirectly immediately following such merger, consolidation, share exchange or reorganization, at least 50% of the combined voting power of the outstanding voting securities of the corporation that is the successor in such merger, consolidation, share exchange or reorganization in substantially the same proportion as their ownership of the voting securities immediately before such merger, consolidation, share exchange or reorganization; (y) a complete liquidation or dissolution of the Company; or (z) the sale or other disposition of all or substantially all of the assets of the Company; or (iii) the majority of members of the Board are replaced during any twelve (12) month period by directors whose appointment or election is not endorsed by a majority of the Board prior to the date of such appointment or election.

D. Parachute Payment. If any payment or benefit the Executive would receive pursuant to a Change of Control or otherwise ("Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then such Payment shall be reduced to the Reduced Amount. The "Reduced Amount" shall be either

(x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in the Executive's receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting "parachute payments" is necessary so that the Payment equals the Reduced Amount, reduction shall occur in the following order unless the Executive elects in writing a different order (provided, however, that such election shall be subject to Company approval if made on or after the effective date of the event that triggers the Payment): (1) reduction of cash payments, (2) cancellation of accelerated vesting of equity awards, and (3) reduction of employee benefits. In the event that acceleration of vesting of equity award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of the Executive's equity awards unless the Executive elects in writing a different order for cancellation.

The accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the Change of Control shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change of Control, or is unwilling to perform this function, then the Company shall appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such accounting or law firm required to be made hereunder.

The accounting firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to the Executive and the Company within fifteen (15) calendar days after the date on which the Executive's right to a Payment is triggered (if requested at that time by the Executive or the Company) or such other time as requested by the Executive or the Company. If the accounting or law firm determines that no Excise Tax is payable with respect to a Payment, either before or after the application of the Reduced Amount, it shall furnish the Executive and the Company with an opinion reasonably acceptable to the Executive that no Excise Tax will be imposed with respect to such Payment. Any good faith determinations of the accounting or law firm made hereunder shall be final, binding and conclusive upon the Executive and the Company.

E. The severance benefits provided Executive under this Paragraph 8 are the only severance benefits to which Executive is entitled upon the termination of his employment with the Company, and no other benefits shall be provided to Executive by the Company pursuant to any other severance plan or program of the Company, except as required by applicable law. Executive acknowledges and agrees that but for his execution of this Agreement, he would not be entitled to the severance benefits provided under this Paragraph 8.

F. Notwithstanding the foregoing, if the Executive is a specified employee, as defined under Section 409A(a)(2)(B)(i) of the Code, on the date of Executive's Separation from Service, to the extent that the payments or benefits under this Section 8 are subject to Section 409A of the Code and the delayed payment or distribution of all or any portion of such amounts to which Executive is entitled under Section 8 is required in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, then such payment or portion thereof shall be paid or distributed to Executive during the thirty (30) day period commencing on the earlier of (a) the expiration of the six-month period commencing on the date of Executive's Separation from Service or (b) the date of Executive's death.

## PART THREE — MISCELLANEOUS PROVISIONS

9. **Successors and Assigns.** The provisions of this Agreement shall inure to the benefit of, and shall be binding upon, the Company, its successors and assigns. This Agreement shall inure to the benefit of and be enforceable by Executive's personal or legal representatives, executors, administrators, successors, heirs, distributes, devisees and legatees.

10. **Creditor Status.** The benefits to which Executive may become entitled under Part Two of this Agreement shall be paid, when due, from the Company's general assets, and no trust fund, escrow arrangement or other segregated account shall be established as a funding vehicle for such payments. Executive is not waiving any rights he may have to collect any monies due to Executive under this Agreement in the same manner as any other employee of the Company would have.

11. **Notices.**

A. Any and all notices, demands or other communications required or desired to be given by any party shall be in writing and shall be validly given or made to another party if served either personally or if deposited in the United States mail, certified or registered, postage prepaid, return receipt requested. If such notice, demand or other communication shall be served personally, service shall be conclusively deemed made at the time of such personal service. If such notice, demand or other communication is given by overnight delivery, it shall be conclusively deemed given the day after it was sent addressed to the party to whom such notice, demand or other communication is to be given. If such notice, demand or other communication is given by mail, it shall be conclusively deemed given two (2) days after it was deposited in the United States mail addressed to the party to whom such notice, demand or other communication is to be given. The address for notice for each of the parties shall be as follows:

To the Company:

Biolase, Inc.

Attn: Chief Executive Officer

4 Cromwell

Irvine, California 92618

To Executive:

To the address listed as Executive's principal residence in the Company's human resources records and to his principal place of employment with the Company.

B. Both parties agree that if notice is by mail, then in good faith, the party giving notice will attempt to contact the other by their last known phone number and email address, to ensure notice was received.

C. Any party may change its address for the purpose of receiving notices, demands and other communications by a written notice given in the described manner to the other party.

12. **Governing Document.** Except as otherwise provided or referenced herein, this Agreement constitutes the entire agreement and understanding of the Company and Executive with respect to the terms and conditions of Executive's employment with the Company and the payment of severance benefits and supersedes all prior and contemporaneous written or verbal agreements and understandings between Executive and the Company relating to such subject matter. This Agreement may only be amended by written instrument signed by Executive and an officer of the Company specifically authorized by the Board for such purpose. Any and all prior agreements, understandings or representations relating to the Executive's employment with the Company are terminated and cancelled in their entirety and are of no further force or effect.

13. **Governing Law.** The provisions of this Agreement will be construed and interpreted under the laws of the State of California applicable to agreements executed and to be wholly performed within the State of California. If any provision of this Agreement as applied to any party or to any circumstance should be adjudged by a court of competent jurisdiction to be void or unenforceable for any reason, the invalidity of that provision shall in no way affect (to the maximum extent permissible by law) the application of such provision under circumstances different from those adjudicated by the court, the application of any other provision of this Agreement, or the enforceability or invalidity of this Agreement as a whole. Should any provision of this Agreement become or be deemed invalid, illegal or unenforceable in any jurisdiction by reason of the scope, extent or duration of its coverage, then such provision shall be deemed amended to the extent necessary to conform to applicable law so as to be valid and enforceable or, if such provision cannot be so amended without materially altering the intention of the parties, then such provision will be stricken and the remainder of this Agreement shall continue in full force and effect.

14. **Arbitration.** Any controversy, claim or dispute between the parties directly or indirectly concerning this Agreement, or the breach or subject matter hereof, shall be finally settled by arbitration held in Orange County, California. The arbitration will be held under the auspices of either the American Arbitration Association ("AAA") or Judicial Arbitration & Mediation Services, Inc. ("J • A • M • S"), with the designation of the sponsoring

organization to be made by the party who did not initiate the claim. The arbitration shall be in accordance with the AAA's then-current employment arbitration procedures (if AAA is designated) or the then-current J • A • M • S employment arbitration rules (if J • A • M • S is designated). The arbitrator shall be either a retired judge, or an attorney licensed to practice law in the state in which the arbitration is convened (the "Arbitrator"). The Arbitrator shall have jurisdiction to hear and rule on pre-hearing disputes and is authorized to hold pre-hearing conferences by telephone or in person, as the Arbitrator deems necessary. The Arbitrator shall have the authority to entertain a motion to dismiss, demurrer, and/or a motion for summary judgment by any party and shall apply the standards governing such motions under the federal rules of civil procedure applicable in the location of the arbitration. The Arbitrator shall render a written award and opinion which reveals, however briefly, the essential findings and conclusions on which the award is based. The arbitration shall be final and binding upon the parties, except as otherwise provided for by the law applicable to review of arbitration decisions/awards. Either party may bring an action in any court of competent jurisdiction to compel arbitration under this Agreement and/or to enforce an arbitration award. The Company will pay the Arbitrator's fees and any other fees, costs or expenses unique to arbitration, including the filing fee, the fees and costs of the Arbitrator, and rental of a room to hold the arbitration hearing. However, if Executive is the party initiating the claim, Executive shall be responsible for contributing an amount equal to the filing fee to initiate a claim in the court of general jurisdiction in the state which Executive is (or was last) employed by the Company. The Arbitrator may award reasonable legal fees and/or costs to the prevailing party in any dispute subject to arbitration under this Agreement. Notwithstanding the foregoing either party may seek temporary or preliminary injunction relief in any court of competent jurisdiction if such relief is unavailable or cannot be timely obtained through Arbitration.

15. **Remedies.** All rights and remedies provided pursuant to this Agreement or by law shall be cumulative, and no such right or remedy shall be exclusive of any other. A party may pursue any one or more rights or remedies provided by this Agreement or may seek damages or specific performance in the event of another party's breach or may pursue any other remedy by law or equity, whether or not stated in this Agreement.

16. **Counterparts.** This Agreement may be executed in more than one counterpart, each of which shall be deemed an original, but all of which together shall constitute but one and the same instrument.

**IN WITNESS WHEREOF**, the parties have executed this Employment Agreement as of the day and year written above.

**BIOLASE, INC.**

By: /s/ Harold C. Flynn, Jr.
Name: Harold C. Flynn, Jr.
Title: President and Chief Executive Officer

Dated: February 23, 2017

/s/ Mark J. Nelson
Mark J. Nelson

Dated: February 23, 2017

**EXHIBIT A TO**

**MARK J. NELSON EMPLOYMENT AGREEMENT**

**DATED AS OF FEBRUARY 23, 2017**

**BIOLASE, INC.**

**PROPRIETARY INFORMATION AGREEMENT**

As an employee of Biolase, Inc., its subsidiary or its affiliate (together, the "Company"), and in consideration of the compensation now and hereafter paid to me, I agree to the following:

**1) Maintaining Confidential Information**

a) Company Information. I agree at all times during the term of my employment and thereafter, except for the benefit of the Company, to hold in the strictest confidence, and not to use or to disclose to any person, firm or corporation without written authorization of the Board of Directors of the Company, any trade secrets, confidential knowledge, data or other proprietary information relating to products, processes, know-how, designs, formulas, developmental or experimental work, computer programs, data bases, other original works of authorship, customer lists, business plans, financial information or other subject matter pertaining to any Business of the Company or any of its clients, consultants or licensees.

b) Former Employer Information. I agree that I will not, during my employment with the Company, improperly use or disclose any proprietary information or trade secrets of my former or concurrent employers or companies, if any, and that, to my knowledge, I will not bring onto the premises of the Company any unpublished document or any property belonging to my former or concurrent employers or companies, if any, unless consented to in writing by said employers or companies.

c) Third Party Information. I recognize that the Company has received and in the future will receive from third parties their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. I agree that I owe the Company and such third parties, during the term of my employment and thereafter, a duty to hold all such confidential and proprietary information in the strictest confidence and not to disclose it to any person, firm or corporation (except as necessary in carrying out my work for the Company consistent with the Company's agreement with such third party) or to use it for the Company's benefit of anyone other than for the Company or such third party (consistent with Company's agreement with such third party) without the express written authorization of the Board of Directors of Biolase, Inc.

**2) Retaining and Assigning Inventions and Original Works**

a) Inventions and Original Works Assigned to the Company. I agree that I will promptly make full written disclosure to the Company, will hold in trust for the sole right and benefit of the Company, and will and hereby do assign to the Company all my right, title, and interest in and to any and all inventions, original works of authorship, developments, improvements or trade secrets which I may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, during the period of time I am in the employ of the Company related to the Business of the Company. For purposes of this Agreement, the "Business of the Company" is defined as the design and manufacture of dental lasers, ophthalmic lasers for Presbyopia, and such other expansions related to the Business of the Company or entirely new markets the Company may enter during the term of my employment. I recognize, however, that Section 2870 of the California Labor Code (as set forth in Exhibit 1 attached hereto) exempts from assignment under this provision any invention as to which I can prove the following:

i) It was developed entirely on my own time; and

ii) No equipment, supplies, facilities or trade secrets of the Company were used in its development; and

iii) It did not relate, at the time of its conception or its reduction to practice, to the Business of the Company or to the Company's actual or demonstrably anticipated research and development; and

iv) It did not result from any work performed by me for the Company.

I acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of my employments and which are protectable by copyright are "works made for hire,"as that term is defined in the United States Copyright Act (17 USCA, Section 101).

b) Inventions Assigned to the United States. I agree to assign to the United States government all my right, title, and interest in and to any and all inventions, original works of authorship, developments, improvements or trade secrets whenever such full title is required to be in the United States by a contract between the Company and the United States or any of its agencies.

c) Obtaining Letters Patent, Copyrights and Mask Work Rights. I agree that my obligation to assist the Company to obtain United States or foreign letters patent, copyrights, or mask work rights covering inventions, works of authorship, and mask works, respectively, assigned hereunder to the Company shall continue beyond the termination of my employment, but the Company shall compensate me at a reasonable rate for time actually spent by me at the Company's request on such assistance. If the Company is unable because of my mental or physical incapacity or for any other reason to secure my signature to apply for or to pursue any application for any United States or foreign letters patent, copyright, or mask rights covering inventions or other rights assigned to the Company as above, then I hereby irrevocably designate and appoint the Company and its duly authorized officers and agents as my agent and attorney in fact, to act for and in my behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent, copyrights, and mask work rights with the same legal force and effect as if executed by me. I hereby waive and quitclaim to the Company any and all claims, of any nature whatsoever, which I now or may hereafter have for infringement of any patents, copyrights, or mask work rights resulting from such application assigned hereunder to the Company.

d) Exception to Assignments. I understand that the provisions of this Agreements requiring assignment to the Company do not apply to any invention which qualifies fully under the provisions of Section 2870 of the California Labor Code, a copy of which is attached hereto as Exhibit 1. I understand that the Company will keep in confidence and will not disclose to third parties without my consent any confidential information disclosed in writing to the Company relating to inventions that qualify fully under the provisions of Section 2870 of the California Labor Code.

**3) Returning Company Documents.** I agree that to my best efforts, at the time of leaving the employ of the Company, I will deliver to the Company (and will not keep in my possession or deliver to anyone else) any and all devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any aforementioned items belonging to the Company, its successors or assigns, which constitutes a trade secret(s) and/or proprietary information of the Company. In the event of the termination of my employment, I agree to sign and deliver the "Termination Certification" attached hereto as Exhibit 2.

**4) Representations.** I agree to execute any proper oath or verify any proper document required to carry out the terms of this Agreement. I represent that my performance of all the terms of this Agreement will not breach any agreement to keep in confidence proprietary information acquired by me in confidence or in trust prior to my employment by the Company. I have not entered into, and I agree I will not enter into, any oral or written agreement in conflict herewith.

**5) General Provisions**

a) Governing Law. This Agreement will be governed by the laws of the State of California.

b) Entire Agreement. This Agreement sets forth the entire agreement and understanding between the Company and me relating to the subject matter herein and merges all prior discussions between us. No modification of or amendment to this Agreement, nor any waiver of any rights under this agreement, will be effective unless in writing signed by the party to be charged. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

c) Severability. If one or more of the provisions in this Agreement are deemed void by law, then the remaining provisions will continue in full force and effect.

d) Successors and Assigns. This Agreement will be binding upon my heirs, executors, administrators and other legal representatives and will be for the benefit of the Company, its successors, its assigns, and any third parties for which the company has developed proprietary technology.

e) At-Will Employment. I acknowledge that this agreement is not intended and does not constitute a contract between me and the Company limiting the rights of either of us to terminate my employment by the Company at any time for any reason with or without cause.

f) Notification to New Employer. In the event that I leave the employ of the Company, I hereby grant consent to notification by the Company to my new employer about my rights and obligations under this agreement.

Dated as of March 27, 2017

______________________________
Signature

______________________________
Name of Employee (typed or printed)

______________________________
Witness

**EXHIBIT 1**

**TO PROPRIETARY INFORMATION AGREEMENT**

**CALIFORNIA LABOR CODE SECTION 2870**

**EMPLOYMENT AGREEMENTS; ASSIGNMENT OF RIGHTS**

"(a) Any provision in an employment agreement which provides that an employee shall assign, or offer to assign, any of his or her rights in an invention to his or her employer shall not apply to an invention that the employee developed entirely on his or her own time without using the employer's equipment, supplies, facilities, or trade secret information except for those inventions that either:

1) Relate at the time of conception or reduction to practice of the invention to the employer's business, or actual demonstrably anticipated research or development of the employee.

2) Result from any work performed by the employee for the employer.

(b) To the extent a provision in an employment agreement purports to require an employee to assign an invention otherwise excluded from being required to be assigned under subdivision (a), the provision is against the public policy of this state and is unenforceable."

**EXHIBIT 2**

**TO PROPRIETARY INFORMATION AGREEMENT**

**BIOLASE, INC.**

**TERMINATION CERTIFICATION**

This is to certify that based on a reasonably diligent search by me, and to the best of my knowledge, I do not have in my possession, nor have I failed to return, any devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any aforementioned items which is a trade secret and/or proprietary information belonging to Biolase, Inc., its subsidiaries, affiliates, successors or assigns (together, the "Company").

I further certify that, to the best of my knowledge, I have complied with all the terms of the Company's Employee Proprietary Information Agreement signed by me.

I further agree that, in compliance with the Employee Proprietary Information Agreement, I will preserve as confidential all trade secrets, confidential knowledge, data or other proprietary information relating to products, processes, know-how, designs, formulas, developmental or experimental work, computer programs, data bases, other original works of authorship, customer lists, business plans, financial information or other subject matter pertaining to any Business of the Company or any of its clients, consultants or licensees which is proprietary and/or confidential information to the Company.

Date:____________________

________________________________________
(Employee's Signature)

________________________________________
(Type/Print Employee's Name)

**EXHIBIT B TO**

**MARK J. NELSON EMPLOYMENT AGREEMENT**

**DATED AS OF FEBRUARY 23, 2017**

**GENERAL RELEASE AND WAIVER OF CLAIMS**

In consideration of the payments and other benefits set forth in the Employment Agreement dated February 23, 2017 (the "Agreement"), to which this form shall be deemed to be attached, Mark J. Nelson ("Executive") hereby agrees to the following general release and waiver of claims ("General Release").

In exchange for the consideration provided to Executive by the Agreement that Executive is not otherwise entitled to receive, Executive hereby generally and completely releases Biolase, Inc. (the "Company") and its directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, parent and subsidiary entities, insurers, affiliates, and assigns from any and all claims, liabilities and obligations, both known and unknown, that arise out of or are in any way related to events, acts, conduct, or omissions occurring prior to my signing this General Release. This general release includes, but is not limited to: (1) all claims arising out of or in any way related to Executive's employment with the Company or the termination of that employment; (2) all claims related to Executive's compensation or benefits from the Company, including salary, bonuses, commissions, vacation pay, expense reimbursements, severance pay, fringe benefits, stock, or any other ownership interests in the Company; (3) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing; (4) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (5) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under Title VII of the 1964 Civil Rights Act, as amended, the Age Discrimination in Employment Act, the California Fair Employment and Housing Act, the Equal Pay Act of 1963, as amended, the provisions of the California Labor Code, the Americans with Disabilities Act, the Fair Labor Standards Act, the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), the Sarbanes-Oxley Act of 2002, and any other state, federal, or local laws and regulations relating to employment and/or employment discrimination. The only exceptions are claims Executive may have for unemployment compensation and worker's compensation, Base Salary (through the date of termination), outstanding business expenses, unused vacation earned through the date of termination of Executive, claims to accrued and vested benefits under the Company's employee benefit plans, and claims to the severance benefits which are the consideration for this General Release.

Executive expressly waives and relinquishes any and all rights and benefits Executive now has or may have in the future under the terms of Section 1542 of the Civil Code of the State of California, which sections reads in full as follows:

**A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor.**

Notwithstanding said Code Section, Executive knowingly and voluntarily waives the provisions of Section 1542 as well as any other statutory or common law provisions of similar effect and acknowledges and agrees that this waiver is an essential part of this Agreement.

Executive acknowledges that, among other rights, Executive is waiving and releasing any rights Executive may have under ADEA, that this General Release is knowing and voluntary, and that the consideration given for this General Release is in addition to anything of value to which Executive was already entitled as an executive of the Company. Executive further acknowledge that Executive has been advised, as required by the Older Workers Benefit Protection Act, that: (a) the General Release granted herein does not relate to claims under the ADEA which may arise after this General Release is executed; (b) Executive has the right to consult with an attorney prior to executing this General Release (although Executive may choose voluntarily not to do so); and (c) Executive has twenty-one (21) days from the date of termination of Executive's employment with the Company in which to

consider this General Release (although Executive may choose voluntarily to execute this General Release earlier, in which case he voluntarily waives the remainder of the twenty-one (21) day period); (d) Executive has seven (7) days following the execution of this General Release to revoke his consent to this General Release; and (e) this General Release shall not be effective until the seven (7) day revocation period has expired.

Executive acknowledges his continuing obligations under the Proprietary Information and Inventions Agreement and the non-solicitation provisions set forth in Section 6 of the Agreement. Nothing contained in this General Release shall be deemed to modify, amend or supersede the obligations set forth in that agreement.

By signing this General Release, Executive hereby represents that he is not aware of any affirmative conduct or the failure to act on the part of the Company, its officers, directors, and/or employees concerning the Company's business practices, its reporting obligations, its customers and/or prospective customers, its products, and/or any other any other aspect of the Company's business, which Executive has any reason to believe rises to the level of unfair, improper and/or unlawful conduct pursuant to any state or federal law, rule, regulation or order, including, but not limited to, any rule, regulation or decision promulgated or enforced by the Securities and Exchange Commission, or which has been promulgated or enforced by any other state or federal office or administrative body pursuant to the Sarbanes-Oxley Act of 2002.

With the exception of the terms set forth in the Proprietary Information Agreement and the non-solicitation provisions set forth in Section 6 of the Agreement, this General Release constitutes the complete, final and exclusive embodiment of the entire agreement between the Company and Executive with regard to the subject matter hereof. Executive is not relying on any promise or representation by the Company that is not expressly stated herein and the Company is not relying on any promise or representation by Executive that is not expressly stated herein. This General Release may only be modified by a writing signed by both Executive and a duly authorized officer of the Company.

The Company and Executive agree that for a period of ten (10) years after Executive's employment with the Company ceases, they will not, in any communication with any person or entity, including any actual or potential customer, client, investor, vendor, or business partner of the Company, or any third party media outlet, make any derogatory or disparaging or critical negative statements — orally, written or otherwise — against the other, or against the Executive's estate or affiliates, any of the Company's directors, officers or employees. The parties acknowledge and agree that the obligation on the part of the Company not to make any derogatory statements as set forth in this paragraph shall only apply to the Company's officers and directors.

The parties agree that this General Release does not in any way compromise or lessen Executive's rights to be indemnified by the Company pursuant to that certain Indemnification Agreement dated March 27, 2017, pursuant to the Company's by-laws or certificate of incorporation, or otherwise be covered under any applicable insurance policies that Executive would otherwise be entitled to receive and/or be covered by.

The parties agree that in no way does this General Release preclude Executive from enforcing his ownership rights pertaining to any stock or stock options which may have been purchased by Executive or granted to Executive by the Company pursuant to a written stock option grant and/or as memorialized in a written Board Resolution (and as reported periodically in the Company's proxy statements).

BIOLASE, INC.

By: ______________________
Title:
Dated: ______________________
Dated: ______________________

______________________

**Exhibit 21.1**

**Subsidiaries**

BL Acquisition II, Inc. (Delaware)
BL Acquisition Corp. (Delaware)
Biolase International, LLC. (Delaware)
Occulase, Inc. (Delaware)

Biolase Australia, Pty. Ltd. (AUSTRALIA)
Biolase Europe, GmbH (GERMANY)
Biolase Spain, S.L. (SPAIN)
Societe Endo Technic, Inc. (FRANCE)
Biolase India Private Limited (INDIA)

**Exhibit 23.1**

## Consent of Independent Registered Public Accounting Firm

BIOLASE, Inc.
Irvine, California

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-194889, 333-144095, 333-112173, 333-130677, 333-177339, 333-204059, and 333-150105) and Form S-3 (Nos. 333-106260, 333-200623, 333-198291, 333-166145, 333-190158, 333-193426 and 333-214281) of BIOLASE, Inc. of our report dated March 10, 2017, relating to the consolidated financial statements and consolidated financial statement schedule of BIOLASE, Inc., appearing in this Annual Report on Form 10-K for the year ended December 31, 2016. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

/s/ BDO USA, LLP

Costa Mesa, California
March 10, 2017

**Exhibit 31.1**

**CERTIFICATION**

I, Harold C. Flynn, Jr., certify that:

1. I have reviewed this Annual Report on Form 10-K for the period ended December 31, 2016 of BIOLASE, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 10, 2017

By: /s/ HAROLD C. FLYNN, JR.
Harold C. Flynn, Jr.
President and Chief Executive Officer
(Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)

**Exhibit 32.1**

**CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER**
**PURSUANT TO 18 U.S.C. § 1350**
**AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of BIOLASE, Inc. (the "Company") on Form 10-K for the year ended December 31, 2016, (the "Report"), I, Harold C. Flynn, Jr., President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(i) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 10, 2017

By:/s/ HAROLD C. FLYNN, JR.
Harold C. Flynn, Jr.
President and Chief Executive Officer
(Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)