

BIOLASE, INC
Form 424B3
August 25, 2017

Filed Pursuant to Rule 424(b)(3)

Registration No. 333-219406

PROSPECTUS

11,990,271 Shares

BIOLASE, INC.

Common Stock

This prospectus relates to the possible resale of up to 11,990,271 shares of our common stock, \$0.001 par value per share, which includes 3,925,871 shares of our common stock that may be issued upon the exercise of warrants, by the selling stockholders identified in this prospectus or in supplements to this prospectus. The shares and the warrants were issued to the selling stockholders in connection with a previously disclosed April 18, 2017 private placement. We are registering the shares to provide the selling stockholders with freely tradable securities. This prospectus does not necessarily mean that the selling stockholders will offer or sell those shares. Up to 8,064,400 shares may be sold from time to time after the effectiveness of the registration statement, of which this prospectus forms a part, and up to 3,925,871 shares may be sold from time to time after October 18, 2017, which is the date the warrants pursuant to which such shares may be issued become exercisable.

We will receive no proceeds from any sale by the selling stockholders of the shares of our common stock covered by this prospectus, but we have agreed to pay certain expenses relating to the registration of such shares. The selling stockholders may from time to time offer and resell, transfer or otherwise dispose of any or all of the shares of our common stock covered by this prospectus through underwriters or dealers, directly to purchasers or through broker-dealers or agents. See "Plan of Distribution."

Our common stock trades on the NASDAQ Capital Market under the symbol "BIOL." On August 18, 2017, the closing price for our common stock, as reported on the NASDAQ Capital Market, was \$0.60 per share.

Investing in our securities involves certain risks. See "Risk Factors" on page 3 of this prospectus and in any applicable prospectus supplement for certain risks you should consider. You should read the entire prospectus carefully before you make your investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is August 24, 2017

TABLE OF CONTENTS

	Page
<u>Prospectus Summary</u>	1
<u>Risk Factors</u>	3
<u>Description of Common Stock</u>	3
<u>Selling Stockholders</u>	6
<u>Use of Proceeds</u>	8
<u>Plan of Distribution</u>	8
<u>Legal Matters</u>	10
<u>Experts</u>	10
<u>Incorporation of Certain Information by Reference</u>	10
<u>Where You Can Find More Information</u>	10

This prospectus is part of a “shelf” registration statement that we have filed with the Securities and Exchange Commission (the “SEC”). Under the shelf registration statement, the selling stockholders may offer and resell up to 11,990,271 shares of our common stock, which includes 3,925,971 shares of our common stock that may be issued upon the exercise of warrants, in one or more offerings. The exhibits to the registration statement contain the full text of certain contracts and other important documents we have summarized in this prospectus. Since these summaries may not contain all the information that you may find important in deciding whether to purchase our common stock, you should review the full text of these documents. The registration statement and the exhibits can be obtained from the SEC as indicated under the sections entitled “Incorporation of Certain Information by Reference” and “Where You Can Find More Information.”

You should rely only on the information provided or incorporated by reference in this prospectus or any applicable prospectus supplement. Neither we nor the selling stockholders have authorized anyone to provide you with different or additional information. Neither we nor the selling stockholders are making an offer to sell our common stock in any jurisdiction where the offer or sale thereof is not permitted. You should not assume that the information appearing in this prospectus or any applicable prospectus supplement or the documents incorporated by reference herein or therein is accurate as of any date other than their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read carefully the entirety of this prospectus and any applicable prospectus supplement, as well as the documents incorporated by reference in this prospectus and any applicable prospectus supplement, before making an investment decision.

In this prospectus, unless otherwise specified or the context requires otherwise, we use the terms “company,” “we,” “us” and “our” to refer to Biolase, Inc., a Delaware corporation, together with its consolidated subsidiaries.

PROSPECTUS SUMMARY

Our Company

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 United States Food and Drug Administration 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 United States. 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 210 issued and 90 pending United States and international patents, the majority of which are related to Waterlase technology. From 1998 through March 31, 2017 we sold approximately 34,200 laser systems in over 90 countries around the world. Contained in this total are over 11,900 Waterlase systems, including approximately 7,800 Waterlase MD and iPlus systems.

For additional information about our Company, please refer to other documents we have filed with the SEC and that are incorporated by reference into this prospectus, as listed under the heading “Incorporation of Certain Information by Reference.”

Our principal executive offices are located at 4 Cromwell, Irvine, California 92618. Our telephone number is (949) 361-1200. Additional information can be found on our website, at www.biolase.com, and in our periodic and current reports filed with the SEC. Copies of our current and periodic reports filed with the SEC are available at the SEC Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549, and online at www.sec.gov and our website at www.biolase.com. No portion of our website is incorporated by reference into this prospectus.

Description of the Private Placement

On April 18, 2017, we completed a private placement with the selling stockholders (the “private placement”) and issued 80,644 shares of our Series D Participating Convertible Preferred Stock (the “convertible preferred stock”) at a per share price of \$124.00. Each share of convertible preferred stock was convertible into 100 shares of our common stock, reflecting a conversion price of \$1.24 per share, which was the closing price of the common stock quoted on the NASDAQ Capital Market on April 10, 2017. In addition, the selling stockholders purchased warrants to acquire up to an aggregate of 3,925,871 shares of our common stock (the “warrants”) at an exercise price of \$1.80 per share, subject to customary anti-dilution adjustments. The warrants become exercisable on October 18, 2017, six months after the closing of the private placement, and expire five years after the date of issuance or, if earlier, five business days after we deliver notice that the closing price per share of common stock exceeded the exercise price for 30 consecutive trading days during the exercise period.

We completed the private placement in reliance on an exemption to registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “Securities Act”), and rules promulgated thereunder. Each of the selling stockholders is either a “qualified institutional buyer” as defined in Rule 144A(a) under the Securities Act or an “accredited investor” as defined in Rule 501(a) under the Securities Act.

On June 30, 2017, we held a special meeting of our stockholders in order to, among other things, satisfy NASDAQ requirements with respect to certain aspects of the private placement. After receiving stockholder approval at the special meeting, the shares of convertible preferred stock were automatically converted to shares of common stock.

In accordance with the registration rights that we granted in the securities purchase agreement entered into in connection with the private placement, we are registering for resale by the selling stockholders the shares of our common stock into which the convertible preferred stock issued in the private placement converted, as well as the shares of our common stock that may be issued upon exercise of the warrants issued in the private placement.

THE OFFERING

Securities Offered by the Selling Stockholders Up to 11,990,271 shares of common stock

Common Stock Outstanding 75,976,779 shares (1)

Terms of the Offering The selling stockholders may from time to time offer and resell, transfer or otherwise dispose of any or all of the shares of our common stock covered by this prospectus through underwriters or dealers, directly to purchasers or through broker-dealers or agents. See "Plan of Distribution."

Use of Proceeds We will not receive any of the proceeds from the sale of the shares of common stock being offered under this prospectus. We may receive proceeds from the exercise of the warrants to purchase our common stock, and any such proceeds will be used for working capital, including but not limited to new product development, launch and subsequent scale-up, as well as general corporate purposes. See "Use of Proceeds."

NASDAQ Capital Market Symbol BIOL

Risk Factors You should read the "Risk Factors" section of this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.

(1) Based upon the total number of issued and outstanding shares as of July 21, 2017. Does not reflect the 3,925,871 shares of our common stock that may be issued upon the exercise of the warrants issued in the private placement and held by the selling stockholders.

RISK FACTORS

We face a variety of significant and diverse risks, many of which are inherent in our business. You should carefully consider the risks described under the caption “Risk Factors” in our most recent annual report on Form 10-K, subsequent quarterly reports on Form 10-Q and other filings we make with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), incorporated by reference herein, before making an investment decision. The occurrence of any of those risks could materially and adversely affect our business, prospects, financial condition, results of operations or cash flow. Other risks and uncertainties that we do not now consider to be material or of which we are not now aware may become important factors that affect us in the future. You should carefully consider the risks and uncertainties described in the documents incorporated by reference herein before deciding to invest in our common stock.

DESCRIPTION OF COMMON STOCK

The following summary description sets forth some of the general terms and provisions of our common stock. Because this is a summary description, it does not contain all of the information that may be important to you. For a more detailed description of our common stock, you should refer to the applicable provisions of the General Corporation Law of the State of Delaware (the “DGCL”) and our charter and bylaws as in effect at the time of any offering. Copies of our Restated Certificate of Incorporation, as amended, and our Sixth Amended and Restated Bylaws are included as exhibits to the registration statement of which this prospectus forms a part.

General

Under our charter, we are authorized to issue 200,000,000 shares of our common stock, par value \$0.001 per share, and 1,000,000 shares of preferred stock, par value \$0.001 par value per share. As of July 21, 2017, there were 75,976,779 shares of our common stock issued and outstanding and no shares of our preferred stock issued and outstanding.

Holders of our common stock are entitled to one vote per share. Each of our directors is elected by the affirmative vote of a majority of the votes cast with respect to such director in uncontested elections. In a contested election, each of our directors is elected by an affirmative vote of a plurality of the votes cast by the shares represented and entitled to vote with respect to the election of such director. A “contested election” is defined in our bylaws as an election with respect to which, as of the record date for the meeting at which directors are to be elected, the number of nominees exceeds the number of directors to be elected at such meeting. Vacancies on the Board of Directors may be filled by an affirmative vote of two-thirds of the remaining members of the Board of Directors or at a meeting of the stockholders in the manner set forth in the second preceding sentence.

Subject to any preferential rights of any outstanding shares of our preferred stock to receive dividends before any dividends may be paid on our common stock, the holders of our common stock will be entitled to share ratably in any dividends that may be declared by our Board of Directors out of funds legally available for the payment of dividends. Subject to any preferential rights of any outstanding shares of our preferred stock, in the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in the assets remaining after payment of liabilities and the liquidation preferences of any outstanding preferred stock. Our common stock does not carry any redemption rights or any preemptive rights enabling a holder to subscribe for, or receive shares of, any class of our common stock or any other securities convertible into shares of any class of our common stock.

Our charter authorizes our Board of Directors to provide for the issuance of shares of preferred stock in one or more series. Prior to issuance of shares of each series, our Board of Directors is required by the DGCL and our charter to

fix the designation, powers, preferences and rights of the shares of such series and the qualifications, limitations or restrictions thereof. Thus, our Board of Directors could authorize the issuance of shares of preferred stock that have priority over our common stock with respect to dividends or rights upon liquidation or with terms and conditions that could have the effect of delaying, deferring or preventing a transaction or a change of control of our company that might involve a premium price for holders of our common stock or otherwise be in their best interests.

Anti-Takeover Provisions of Delaware Law and Our Governing Documents

Delaware Law

We are subject to Section 203 of the DGCL (“Section 203”). In general, Section 203 prohibits a publicly held Delaware corporation from engaging in “business combination” transactions with any “interested stockholder” for a period of three years following the time that the stockholder became an interested stockholder, unless:

- prior to the time the stockholder became an interested stockholder, either the applicable business combination or the transaction which resulted in the stockholder becoming an interested stockholder is approved by the corporation’s board of directors;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding (but not the voting stock owned by

the interested stockholder) shares owned by directors who are also officers of the corporation and shares owned by employee stock plans in which the employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

at or subsequent to the time that the stockholder became an interested stockholder, the business combination is approved by the corporation's board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder. A "business combination" is defined to include, in general and subject to exceptions, a merger of the corporation with the interested stockholder; a sale of 10% or more of the market value of the corporation's consolidated assets to the interested stockholder; certain transactions that result in the issuance of the corporation's stock to the interested stockholder; a transaction that has the effect of increasing the proportionate share of the corporation's stock owned by the interested stockholder; and any receipt by the interested stockholder of loans, guarantees or other financial benefits provided by the corporation. An "interested stockholder" is defined to include, in general and subject to exceptions, a person that (1) owns 15% or more of the outstanding voting stock of the corporation or (2) is an "affiliate" or "associate" (as defined in Section 203) of the corporation and was the owner of 15% or more of the corporation's outstanding voting stock at any time within the prior three year period.

A Delaware corporation may opt out of Section 203 with an express provision in its original certificate of incorporation or by an amendment to its certificate of incorporation or bylaws expressly electing not to be governed by Section 203 and approved by a majority of its outstanding voting shares. We have not opted out of Section 203. As a result, Section 203 could delay, deter or prevent a merger, change of control or other takeover of our company that our stockholders might consider to be in their best interests, including transactions that might result in a premium being paid over the market price of our common stock, and may also limit the price that investors are willing to pay in the future for our common stock.

Undesignated Preferred Stock

The ability to authorize undesignated preferred stock makes it possible for our Board of Directors to issue one or more series of preferred stock with voting or other rights or preferences. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the Board of Directors or a committee of the Board of Directors.

Stockholder Action by Written Consent Special Meetings of Stockholders

Our stockholders may take action by written consent in lieu of a meeting as provided in our bylaws. Our bylaws provide that certain procedures, including notifying the Board of Directors and awaiting a record date, must be followed for stockholders to act by written consent. A special meeting of our stockholders may be called only by our Board of Directors, the Chairman of the Board, the Executive Vice Chairman, the Chief Executive Officer or the President. A special meeting may also be called at the request of stockholders holding a majority of the aggregate number of shares of capital stock of the Company issued and outstanding and entitled to vote at that meeting (subject to certain timeliness and content requirements of the demand).

Amendment of Certificate of Incorporation and Bylaws

Our charter may be amended by the affirmative vote of a majority of the aggregate number of shares of each class of our capital stock issued and outstanding after a resolution of our Board of Directors declaring the advisability of such amendment has been adopted in accordance with Delaware law. Our bylaws may be amended by the affirmative vote of a majority of the aggregate number of shares of each class of our capital stock issued and outstanding (and entitled to vote on the subject matter) present in person or represented by proxy at a meeting of stockholders provided that notice thereof is stated in the written notice of the meeting. Our bylaws may also be amended by a majority of the Board of Directors in accordance with Delaware law and our charter, except that certain sections of our bylaws (including but not limited to certain provisions regarding special meetings, voting, officers, and approval of securities issuances) require either the affirmative vote of two-thirds of the persons then serving as directors on the Board of Directors or our stockholders.

Forum Selection

Unless the Board of Directors acting on behalf of the Company selects an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another state court located within the State of Delaware or, if no court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware) shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to the Company or our stockholders, (iii) any action asserting a claim against the Company or any of our directors, officers or other employees arising pursuant to any provision of

the DGCL, our charter or our bylaws or (iv) any action asserting a claim against the Company or any of our directors, officers or other employees governed by the internal affairs doctrine of the State of Delaware, in all cases subject to the court's having personal jurisdiction over all indispensable parties named as defendants.

If any action the subject matter of which is within the scope of the immediately preceding paragraph is filed in a court other than a court located within the State of Delaware in the name of any stockholder, such stockholder will be deemed to have consented to (i) the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce the exclusive forum provision (an "Enforcement Action") and (ii) having service of process made upon such stockholder in any such Enforcement Action by service upon such stockholder's counsel in the action outside of the State of Delaware as agent for such stockholder.

Stock Exchange Listing

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

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

SELLING STOCKHOLDERS

The “selling stockholders” named in this prospectus may sell shares of our common stock registered pursuant to the registration statement of which this prospectus forms a part. This prospectus covers the resale of 11,990,271 shares of common stock, including 3,925,871 shares of our common stock that may be issued upon the exercise of warrants, issued to the selling stockholders named in this prospectus in connection with our previously disclosed private placement. The selling stockholders are not required to offer any of the shares of our common stock covered by this prospectus for resale. Since the selling stockholders may sell all, some or none of their shares, and may or may not exercise any or all of the warrants, we cannot estimate the aggregate number of shares that the selling stockholders will offer pursuant to this prospectus or that the selling stockholders will own upon completion of the offering to which this prospectus relates.

Information about additional selling stockholders may be set forth in a prospectus supplement, in a post-effective amendment to the registration statement of which this prospectus forms a part or in filings that we make with the SEC under the Exchange Act, which are incorporated by reference in this prospectus.

Each selling stockholder that sells shares of common stock pursuant to this prospectus may be deemed to be an “underwriter” within the meaning of the Securities Act. Any commissions received by a broker or dealer in connection with resales of our common stock may be deemed to be underwriting commissions or discounts under the Securities Act.

The following table sets forth information with respect to our common stock beneficially owned by the selling stockholders as of July 21, 2017:

Name of Selling Stockholder	Shares Beneficially Owned Prior to Resale (1)			Warrant Shares Offered for Resale	Shares Beneficially Owned After Resale (2)	
	Number	%	Shares Offered for Resale		Number	%
Schuler Family Foundation (3)	9,582,065	12.6%	3,698,600	1,800,535	5,883,465	7.6%
Oracle Partners, L.P. (4)	13,199,673	17.4%	2,663,000	1,296,385	10,536,673	13.6%
Oracle Ten Fund Master, L.P. (4)	3,105,542	4.1%	591,800	288,086	2,513,742	3.3%
Oracle Institutional Partners, L.P. (4)	2,574,807	3.4%	443,800	216,064	2,131,007	2.8%
CAC, LLC (5)	904,820	1.2%	96,100	46,759	808,720	1.1%
DRD Family Partnership, LP (5)	595,881	*	96,000	46,758	499,881	*
Frederic H. Moll (6)	637,517	*	192,100	93,517	445,417	*
Paul and Carolyn Clark Revocable Trust of 2009 (7)	1,625,466	2.1%	156,300	76,089	1,469,166	1.9%
Jonathan T. Lord (8)	893,648	1.2%	76,800	37,387	816,848	1.1%
Flynn Living Trust dated September 3, 2014, Harold and Treva Flynn Trustees (9)	74,242	*	30,700	14,945	43,542	*
Mark J. Nelson (10)	19,200	*	19,200	9,346	--	--
Total			8,064,400	3,925,871		

* Represents less than 1%.

(1) Based on 75,976,779 shares of our common stock outstanding as of July 21, 2017. In addition, shares underlying options and restricted stock units vesting within 60 days of July 21, 2017 and shares underlying warrants

exercisable within 60 days of July 21, 2017 are deemed outstanding for the purpose of computing the percentage ownership of the person or persons holding such options, restricted stock units or warrants, but are not deemed outstanding for computing the percentage ownership of other persons. Shares issuable upon the exercise of the warrants issued in the April 18, 2017 private placement are not deemed outstanding because selling stockholders do not have the right to acquire beneficial ownership of the shares issuable upon exercise of the warrants within 60 days of July 21, 2017. The warrants become exercisable on October 18, 2017.

- (2) Assumes that the selling stockholders will sell all of the shares of common stock saleable pursuant to this prospectus, including the shares of common stock that may be issued upon the exercise of the warrants. Also assumes for each selling stockholder that (a) such selling stockholder's warrants were exercised despite the fact that they do not become exercisable until October 18, 2017, (b) only such selling stockholder's warrants were exercised and (c) as a consequence, the number of issued and outstanding shares has increased by the number of such selling stockholder's warrant shares. The registration of these shares does not necessarily mean that the selling stockholders will sell all or any portion of the shares covered by this prospectus.

6

- (3) Based on the information provided in Amendment No. 11 to Schedule 13D filed with the SEC on July 6, 2017 by Jack W. Schuler with respect to himself, Renate Schuler, the Jack W. Schuler Living Trust (the “Schuler Trust”) and the Schuler Family Foundation (the “Schuler Foundation” and, together with Mr. Schuler, Ms. Schuler and the Schuler Trust, the “Schuler Reporting Persons”). The Schuler Reporting Persons reported that Mr. Schuler beneficially owns and has shared voting and dispositive power with respect to 22,572,152 shares of our common stock, the Schuler Trust beneficially owns and has shared voting and dispositive power with respect to 11,089,552 shares of our common stock, Ms. Schuler beneficially owns and has shared voting and dispositive power with respect to 11,482,600 shares of our common stock and the Schuler Foundation beneficially owns and has shared voting and dispositive power with respect to 11,382,600 shares of our common stock. All such amounts include shares issuable upon the exercise of the warrants issued in the April 18, 2017 private placement. Jack W. Schuler is the trustee of the Schuler Trust and the President and Secretary of the Schuler Foundation. Certain of the warrants held by the Schuler Reporting Persons may not be exercised to the extent that such exercise would cause the holder of such warrant (together with the holder’s affiliates and any other persons acting as a group together with the holder or any of the holder’s affiliates) to beneficially own more than 19.99% of our common stock then outstanding.
- (4) Based on the information provided in Amendment No. 15 to Schedule 13D filed with the SEC on July 5, 2017 by Larry N. Feinberg with respect to himself, Oracle Partners, L.P. (“Oracle Partners”), Oracle Institutional Partners, L.P. (“Institutional Partners”), Oracle Ten Fund Master, L.P. (“Ten Fund”), Oracle Investment Management, Inc. Employees’ Retirement Plan (“Oracle Plan”), the Feinberg Family Foundation (“Feinberg Foundation”), Oracle Associates, LLC (“Oracle Associates”) and Oracle Investment Management, Inc. (“Oracle Investment” and, together with Mr. Feinberg, Oracle Partners, Institutional Partners, Ten Fund, Oracle Plan, Feinberg Foundation and Oracle Associates, the “Oracle Reporting Persons”). The Oracle Reporting Persons reported that Mr. Feinberg beneficially owns and has shared voting and dispositive power with respect to 19,171,447 shares of our common stock, Oracle Partners beneficially owns and has shared voting and dispositive power with respect to 13,199,673 shares of our common stock, Institutional Partners beneficially owns and has shared voting and dispositive power with respect to 2,574,807 shares of our common stock, Ten Fund beneficially owns and has shared voting and dispositive power with respect to 3,105,542 shares of our common stock, Oracle Plan beneficially owns and has shared voting and dispositive power with respect to 239,425 shares of our common stock, Feinberg Foundation beneficially owns and has shared voting and dispositive power with respect to 52,000 shares of our common stock, Oracle Associates beneficially owns and has shared voting and dispositive power with respect to 18,880,022 shares of our common stock and Oracle Investment beneficially owns and has shared voting and dispositive power with respect to 3,344,967 shares of our common stock. Oracle Partners also nominated one of the members of our Board of Directors, Jonathan T. Lord. Oracle Associates, LLC (the “General Partner”) is the general partner of each of Oracle Partners, Ten Fund and Institutional Partners. Mr. Feinberg is the managing member of the General Partner. Oracle Investment is the investment manager of Ten Fund and Oracle Plan. Mr. Feinberg is the sole stockholder and president of Oracle Investment. Mr. Feinberg is the trustee of the Feinberg Foundation. Certain of the warrants held by the Oracle Reporting Persons may not be exercised to the extent that such exercise would cause the holder of such warrant (together with the holder’s affiliates and any other persons acting as a group together with the holder or any of the holder’s affiliates) to beneficially own more than 19.99% of our common stock then outstanding.
- (5) Rod Dammeyer is the managing member of CAC, LLC and the general partner of DRD Family Partnership, LP. Mr. Dammeyer is also the trustee of the Dammeyer Family Trust, which owns 120,000 shares of our common stock.
- (6) Mr. Moll is a member of our Board of Directors. Beneficial ownership includes 368,595 shares of our common stock underlying vested options and 17,605 shares of our common stock underlying options that vest within 60 days of July 21, 2017.
- (7) Paul N. Clark is the trustee of the Paul and Carolyn Clark Revocable Trust of 2009 and the Chairman of our Board of Directors. In addition to the shares beneficially owned by the Paul and Carolyn Clark Revocable Trust of 2009 and reflected in the table above, which include 263,024 shares underlying warrants issued in a November 2014

private placement, Mr. Clark also beneficially owns 96,250 shares of our common stock held by Mr. Clark, 221,200 shares of our common stock held by PNC Investments LLC, of which Mr. Clark is the manager, 584,767 shares of our common stock underlying vested options held by Mr. Clark, 33,891 shares of our common stock underlying options held by Mr. Clark that vest within 60 days of July 21, 2017, and 50,885 shares underlying warrants issued in a September 2016 private placement held by PNC Investments LLC.

(8) Mr. Lord is a member of our Board of Directors. Beneficial ownership includes 339,090 shares of our common stock underlying vested options, 17,605 shares of our common stock underlying options that vest within 60 days of July 21, 2017, 65,755 shares of our common stock underlying warrants issued in a November 2014 private placement, and 40,708 shares of our common stock underlying warrants issued in a September 2016 private placement.

(9) Harold C. Flynn, Jr. is co-trustee of the Flynn Living Trust dated September 3, 2014, Harold and Treva Flynn Trustees, the President and Chief Executive Officer of the Company and also a director. In addition to the shares beneficially owned by the Flynn Living Trust and reflected in the table above, which include 8,142 shares of our common stock underlying warrants issued in a September 2016 private placement, Mr. Flynn also beneficially owns 96,720 shares of our common stock held by Mr. Flynn, 518,330 shares of our common stock underlying vested options held by Mr. Flynn, and 52,916 shares of our common stock underlying options held by Mr. Flynn that vest within 60 days of July 21, 2017.

(10) Mr. Nelson was formerly the Chief Financial Officer of the Company.

7

USE OF PROCEEDS

All of the shares of common stock offered by the selling stockholders pursuant to this prospectus will be sold by the selling stockholders for their respective accounts. We will not receive any of the proceeds from these sales, if any. A portion of the shares covered by this prospectus may be issued upon exercise of warrants to purchase our common stock. Upon any exercise of the warrants, the selling stockholder would pay us the exercise price of the warrants. Any such proceeds would be used for working capital, including but not limited to new product development, launch and subsequent scale-up, as well as general corporate purposes. We will pay all of the fees and expenses incurred by us in connection with this registration. We will not be responsible for fees and expenses incurred by the selling stockholders or any underwriting discounts or agent's commissions.

PLAN OF DISTRIBUTION

The selling stockholders and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of the shares of our common stock beneficially owned by them and offered hereby directly or through one or more underwriters, broker-dealers or agents. The selling stockholders will be responsible for any underwriting discounts or agent's commissions. The common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- on NASDAQ or any other national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise;
- through ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- through block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- in an exchange distribution in accordance with the rules of the applicable exchange;
- in privately negotiated transactions;
- through the settlement of short sales;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders also may sell shares under Rule 144 promulgated under the Securities Act rather than under this prospectus or any related prospectus supplement.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of our common stock in the course of hedging the positions they assume. The selling stockholders may also sell our common stock short and deliver these shares of our common stock to close out their short positions, or loan or pledge our common stock to broker-dealers that in turn may sell our common stock. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of the shares of our common stock covered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any compensation

received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. While neither we nor any selling stockholder can presently estimate the amount of such compensation, in compliance with the guidelines of the Financial Industry Regulatory Authority, Inc. ("FINRA"), the aggregate maximum discount, commission, agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any related prospectus supplement. However, it is anticipated that the maximum commission or discount to be received in any particular offering of securities will be less than this amount.

8

Because selling stockholders may be deemed to be “underwriters” within the meaning of Section 2(a)(11) of the Securities Act, the selling stockholders will be subject to the prospectus delivery requirements of the Securities Act, which may include delivery through the facilities of NASDAQ pursuant to Rule 153 under the Securities Act.

We have agreed to indemnify certain of the selling stockholders against certain liabilities, including liabilities arising under the Securities Act. The selling stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of shares of common stock against certain liabilities, including liabilities arising under the Securities Act.

The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

Each selling stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the shares of our common stock covered by this prospectus. Upon being notified by a selling stockholder that any material arrangement has been entered into with a broker-dealer or underwriter for the sale of shares of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling stockholder and of the participating broker-dealer(s) or underwriter(s), (ii) the number of shares of common stock involved, (iii) the price at which such shares were or will be sold, (iv) the commissions paid or to be paid or discounts or concessions allowed to such broker-dealer(s) or underwriter(s), where applicable, (v) that, as applicable, such broker-dealer(s) or underwriter(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus and (vi) other facts material to the transaction.

With certain limited exceptions, we have agreed to use commercially reasonable efforts to keep the registration statement of which this prospectus forms a part effective until the later of (i) the date by which all of the shares of common stock covered by this prospectus may be sold without volume or manner of sale restrictions which may be applicable to affiliates under Rule 144, (ii) all of the shares covered by this prospectus have been sold, or (iii) April 18, 2019. There can be no assurance that the selling stockholders will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus or any related prospectus supplement forms a part.

LEGAL MATTERS

The legality of the issuance of the shares of our common stock offered hereby is being passed upon by Sidley Austin LLP, Chicago, Illinois. If counsel for any selling stockholder or underwriter passes on legal matters in connection with an offering of the common stock described in this prospectus, we will name that counsel in the prospectus supplement to that offering.

EXPERTS

The consolidated financial statements of Biolase, Inc. as of December 31, 2016 and 2015 and for each of the three years in the period ended December 31, 2016 incorporated by reference into this prospectus from our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the SEC on March 10, 2017, which contains an explanatory paragraph regarding the Company's ability to continue as a going concern, have been so incorporated in reliance upon the reports of BDO USA, LLP, an independent registered accounting firm, incorporated herein by reference, given upon the authority of said firm as experts in accounting and auditing.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus the information contained in other documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded, for purposes of this prospectus, to the extent that a statement contained in or omitted from this prospectus, or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus. We incorporate by reference the documents listed below which have been filed by us and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until the offering is completed:

1. Our Annual Report on Form 10-K, for the year ended December 31, 2016, filed with the SEC on March 10, 2017;
2. Our Quarterly Reports on Form 10-Q filed with the SEC on May 4, 2017 and August 7, 2017;
3. Our Current Reports on Form 8-K, filed with the SEC on January 6, 2017, January 13, 2017, March 1, 2017, April 14, 2017 (Items 1.01 and 3.02 only), April 20, 2017, May 16, 2017, July 10, 2017 and August 14, 2017; and
4. The description of the common stock contained in our Registration Statement on Form 8-A as filed with the SEC on October 30, 1991.

Upon written or oral request, we will provide without charge to each person to whom a copy of the prospectus is delivered a copy of the documents incorporated by reference herein (other than exhibits to such documents unless such exhibits are specifically incorporated by reference herein). You may request a copy of these filings, at no cost, by writing or telephoning us at the following address: Biolase, Inc., 4 Cromwell, Irvine, California 92618, Attention: Investor Relations, telephone: (949) 361-1200.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act and in accordance therewith file reports, proxy statements and other information with the SEC. Our filings are available to the public over the Internet at the SEC's website at www.sec.gov, as well as at our website at www.biolase.com.

You may also read and copy, at prescribed rates, any document we file with the SEC at the Public Reference Room of the SEC located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at (800) SEC-0330 for further

information on the SEC's Public Reference Room.