

BIOLASE, INC
Form S-3/A
September 16, 2014
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As filed with the Securities and Exchange Commission on September 16, 2014

Registration No. 333-198291

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

AMENDMENT NO. 1
TO
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

BIOLASE, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

87-0442441
(I.R.S. Employer
Identification No.)

4 Cromwell, Irvine, California 92618

(949) 361-1200

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Jeffrey M. Nugent

President and Chief Executive Officer

Biolase, Inc.

4 Cromwell

Irvine, California 92618

(949) 361-1200

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Michael A. Gordon

Beth E. Flaming

Sidley Austin LLP

One South Dearborn

Chicago, Illinois 60603

(312) 853-7000

Approximate date of commencement of proposed sale to the public: From time to time on or after the effective date of the registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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 the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. The selling stockholders may not resell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities, nor is it a solicitation of offers to buy these securities, in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED SEPTEMBER 16, 2014

PROSPECTUS

6,250,000 Shares

BIOLASE, INC.

Common Stock

This prospectus relates to the possible resale, from time to time, of up to 6,250,000 shares of our common stock, \$0.001 par value per share, and associated preferred stock purchase rights, by the selling stockholders identified in this prospectus or in supplements to this prospectus. The shares were issued to the selling stockholders in connection with a previously disclosed July 22, 2014 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.

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 20, 2014, the closing price for our common stock, as reported on the NASDAQ Capital Market, was \$2.19 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 , 2014

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PROSPECTUS SUMMARY

About this Prospectus

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 6,250,000 shares of our common stock and associated preferred stock purchase rights 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.

Our Company

We are a biomedical device company that develops, manufactures, and markets lasers in dentistry and medicine and also markets and distributes dental imaging equipment, including cone beam digital x-rays and CAD/CAM intra-oral scanners, and in-office, chair-side milling machines and three-dimensional printers; products that are focused on technologies that advance the practice of dentistry and medicine and offer benefits and value to healthcare professionals and their patients. Our proprietary dental laser systems allow dentists, periodontists, endodontists, oral surgeons, and other specialists to perform a broad range of dental procedures, including cosmetic, restorative, and complex surgical applications. Our systems are designed to provide clinically superior performance for many types of dental procedures with less pain and faster recovery times than are generally achieved with drills, scalpels, and other conventional instruments. We have clearance from the U.S. Food and Drug Administration to sell our laser systems in the United States and also have the necessary registration to sell our laser systems in Canada, the European Union, and various other international markets. Our licensed dental imaging equipment and other related products are designed to improve diagnoses, applications, and procedures in dentistry and medicine.

We offer two categories of laser system products: WaterLase systems and Diode systems. Our flagship product category, the WaterLase system, uses a patented combination of water and laser energy to perform most procedures currently performed using dental 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 currently have approximately 185 issued and 115 pending U.S. and international patents, the majority of which are related to our core WaterLase technology and dental and medical

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lasers. From 1998 through June 30, 2014, we have sold over 26,200 laser systems in over 80 countries around the world. Contained in this total is over 10,400 WaterLase systems, which includes more than 6,400 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.

The Offering

Securities Offered by the Selling Stockholders	Up to 6,250,000 shares of common stock and associated preferred stock purchase rights
Common Stock Outstanding	43,899,035 shares (as of August 14, 2014)
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. 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.

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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 annual reports on Form 10-K, 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 CAPITAL STOCK

The following summary description sets forth some of the general terms and provisions of our capital 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 capital stock, you should refer to the provisions of our Restated Certificate of Incorporation, as amended (our "charter"), and our Sixth Amended and Restated Bylaws (our "bylaws").

General

Under our charter, we are authorized to issue 50,000,000 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 August 14, 2014, there were 43,899,035 shares of our common stock issued and outstanding and no shares of our preferred stock issued and outstanding.

Common Stock

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 and by an affirmative vote of a plurality of the votes cast for such director in a contested election. 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.

Preferred 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 Delaware

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General Corporation Law (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.

Of the 1,000,000 authorized shares of preferred stock, 100 shares have been designated as Series A 6% Redeemable Cumulative Convertible Preferred Stock ("Series A Preferred Stock"). Holders of shares of Series A Preferred Stock are entitled to one vote per share of Series A Preferred Stock held. All of the votes of holders of shares of Series A Preferred Stock are counted together with all other shares of our stock and not separately as a class. The holders of Series A Preferred Stock are entitled to receive cash dividends at the quarterly rate of \$750 per share. In the event of the Company's liquidation (subject to the rights of any senior-ranking stock), the holders of shares of our Series A Preferred Stock shall be entitled to receive, per share of Series A Preferred Stock held, a liquidation payment in an amount equal to the sum of (i) \$50,000 and (ii) an amount equal to the difference calculated by subtracting all dividends paid on such share of Series A Preferred Stock since the issuance of such share through the date of liquidation from 6% per annum return on \$50,000 for the period from the date of issuance of the shares through the date of liquidation. Shares of our Series A Preferred Stock are subject to redemption at any time on or after the 180th day following the initial issuance of shares of Series A Preferred Stock. At the option of the holder, each share of our Series A Preferred Stock is convertible into 18,182 shares of our common stock for the first 30 days following the initial issuance. Shares of our Series A Preferred Stock are also convertible into shares of our common stock after 90 days following such initial issuance at a conversion price determined by formula. Shares of our Series A Preferred Stock automatically convert into shares of our common stock on the second anniversary of initial issuance at the conversion price then in effect.

Of the 1,000,000 authorized shares of preferred stock, 500,000 shares have been designated as Series B Junior Participating Cumulative Preferred Stock ("Series B Preferred Stock"). Holders of shares of Series B Preferred Stock are entitled to 100 votes per share of Series B Preferred Stock held. Subject to the rights of any senior-ranking stock, commencing upon the first quarterly dividend payment date after the first issuance of shares of Series B Preferred Stock, holders of our Series B Preferred Stock are entitled to receive quarterly dividends in an amount per share equal to the greater of (i) \$0.25 per share or (ii) subject to certain provisions, 100 times the aggregate per share amount of all cash dividends and 100 times the aggregate per share amount of all non-cash dividends or other distributions (other than a dividend payable in shares of common stock) declared on our common stock since the immediately preceding quarterly dividend payment date or, with respect to the first quarterly dividend payment date, since the first issuance of any shares of Series B Preferred Stock, all subject to adjustment in the event of a subdivision or combination of the outstanding shares of our common stock. In the event of the Company's liquidation, the holders of shares of our Series B Preferred Stock shall be entitled to receive a liquidation payment in an amount equal to the greater of (1) \$1.00 per Share of Series B Preferred Stock, plus all accrued and unpaid dividends and distributions on the shares of our Series B Preferred Stock, or (2) an amount equal to 100 times the aggregate amount to be distributed per share of our common stock. The charter may not be amended in any manner that would materially alter the powers, preferences or special rights of the Series B Preferred Stock without the affirmative vote of the holders of at least two-thirds of the outstanding shares of Series B Preferred Stock, voting together as a single class. For additional information about the Series B Preferred Stock, see "Rights Plan" below.

As of the date hereof, no shares of our Series A Preferred Stock or Series B Preferred Stock are outstanding.

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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 $\frac{2}{3}$ % 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.

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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.

Rights Plan

We are a party to a rights agreement, dated December 31, 1998, with Computershare Trust Company, N.A. (as successor to U.S. Stock Transfer Corporation), as amended on December 19, 2008 and March 17, 2014 (the Rights Agreement). Under the Rights Agreement, holders of our common stock are entitled to one preferred stock purchase

right (a right) per share of our common stock held. The Rights Agreement defines a 20% Ownership Date as the first date of public announcement that a person has become the beneficial owner of 20%

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or more of our then outstanding shares of common stock (any such beneficial owner, a 20% stockholder), and the Rights Agreement provides that if a 20% Ownership Date has occurred and neither the Rights Agreement has expired nor the rights are redeemed within 10 business days after such 20% Ownership Date, each right will entitle the holder thereof (other than a 20% stockholder or affiliate or associate thereof), upon payment of the then current exercise price:

to purchase shares of our common stock at a 50% discount; or

to purchase shares of common stock of the acquiring person at a 50% discount, if the Company (a) sells more than 50% of its assets or earning power or (b) the Company consolidates or merges with and into any other person and either the Company is not the surviving corporation or if the Company is the surviving corporation, Company common stock is changed into or exchanged for cash, securities or other property in connection with such consolidation or merger (any event described in clause (a) or (b) being a flip-over event).

In addition, on the tenth business day (or such later day as designated by the Board of Directors) (the Tender Offer Trigger Date) following the commencement of, or the first public announcement of the intent of any person to commence, a tender or exchange offer, the consummation of which would cause any person to become a 20% stockholder, holders of rights (other than rights that were beneficially owned by a 20% stockholder or any affiliate or associate thereof at any time after the Tender Offer Trigger Date) are entitled to purchase one one-hundredth of a share of Series B Preferred Stock upon payment of the then current exercise price. The rights are subject to redemption at \$0.001 per right at any time prior to the earliest of (a) a flip-over event, (b) the tenth business day after the 20% Ownership Date and (c) December 31, 2018. The Rights Agreement sets the initial exercise price of the rights at \$30.00 per right. The exercise price, number of rights outstanding and the number and kind of securities that may be purchased upon exercise of a right are subject to adjustment, as specified in the Rights Agreement. The Rights Agreement expires on December 31, 2018.

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.

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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 6,250,000 shares of common stock and associated preferred stock purchase rights issued to the selling stockholders named in this prospectus in connection with our previously disclosed July 22, 2014 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, 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 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 of 1933, as amended (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 August 14, 2014:

Name of Selling Stockholder	Shares Owned Prior to Resale (1)		Maximum Number of Shares Offered for Resale	Shares Owned After Resale (2)	
	Number	%		Number	%
Alexander K. Arrow (3)	261,977	*	7,812	254,165	*
Frederick D. Furry (4)	225,857	*	13,020	212,837	*
Jeffrey M. Nugent (5)	130,892	*	52,083	78,809	*
Birchview Fund, LLC (6)	781,250	1.8%	781,250		
Jack W. Schuler Living Trust (7)	2,604,166	5.9%	2,604,166		
Paul and Carolyn Clark Revocable Trust of 2009 (8)	605,954	1.4%	520,833	85,121	*
Oracle Partners, L.P. (9)	5,857,251	13.3%	1,641,036	4,216,215	9.6%
Oracle Ten Fund Master, L.P. (9)	1,686,550	3.8%	369,044	1,317,506	3.0%
Oracle Institutional Partners, L.P. (9)	862,945	2.0%	260,756	602,189	1.4%
Total			6,250,000		

* Represents less than 1%.

(1) Based on 43,899,035 shares of our common stock outstanding as of August 14, 2014. In addition, shares underlying options and restricted stock units vesting within 60 days of August 14, 2014 are deemed outstanding for the purpose of computing the percentage ownership of the person or persons holding such options or restricted

- stock units, but are not deemed outstanding for computing the percentage ownership of any other persons.
- (2) Assumes that the selling stockholders will sell all of the shares of common stock saleable pursuant to this prospectus. We cannot assure you that the selling stockholders will sell all or any of these shares.
 - (3) Mr. Arrow is our Chief Medical Officer and a former member of our Board of Directors. Beneficial ownership includes 146,375 shares underlying options.

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- (4) Mr. Furry is our Chief Financial Officer. Beneficial ownership includes 207,656 shares underlying options.
- (5) Mr. Nugent is our President and Chief Executive Officer and a member of our Board of Directors. Beneficial ownership includes 64,606 shares underlying options and 14,203 restricted stock units.
- (6) Birchview Capital, LP, a Delaware limited partnership, serves as the investment manager of the selling stockholder (the Investment Manager). Birchview Capital GP, LLC, a Delaware limited liability company, is the general partner of the Investment Manager (the General Partner). Matthew Strobeck is the sole member of the General Partner.
- (7) Jack W. Schuler is the trustee and the beneficiary of the selling stockholder.
- (8) Paul N. Clark, the Chairman of our Board of Directors, is the trustee of the selling stockholder.
- (9) Based on the information provided in Amendment No. 8 to Schedule 13D filed with the SEC on July 23, 2014 by Oracle Partners, L.P. (Oracle Partners) with respect to itself, Oracle Institutional Partners, L.P. (Institutional Partners), Oracle Ten Fund Master, L.P. (Ten Fund), Oracle Associates, LLC (Oracle Associates), Oracle Investment Management, Inc. (Oracle Investment) and Larry N. Feinberg (Mr. Feinberg, together with Oracle Partners, Institutional Partners, Ten Fund, Oracle Associates and Oracle Investment, the Reporting Persons). The Reporting Persons reported that Oracle Partners beneficially owns and has shared voting and dispositive power with respect to 5,857,251 shares of our common stock, Institutional Partners beneficially owns and has shared voting and dispositive power with respect to 862,945 shares of our common stock, each of Ten Fund and Oracle Investment beneficially owns and has shared voting and dispositive power with respect to 1,686,550 shares of our common stock, Oracle Associates beneficially owns and has shared voting and dispositive power with respect to 6,720,196 shares of our common stock and Larry N. Feinberg beneficially owns and has shared voting and dispositive power with respect to 8,406,746 shares of our common stock.

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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 accounts. We will not receive any of the proceeds from these sales, if any. 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 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 and associated preferred stock purchase rights 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).

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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.

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 (iv) other facts material to the transaction.

We have agreed to use commercially reasonable efforts to keep this prospectus 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) July 22, 2016. 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.

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LEGAL MATTERS

The legality of the issuance of the shares of our common stock and associated preferred stock purchase rights offered hereby is being passed upon by Carroll & Carroll, P.C. Michael C. Carroll, Esq., General Counsel and Secretary of the Company, is a principal of Carroll & Carroll, P.C. 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, 2013 and 2012 and for each of the three years in the period ended December 31, 2013, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2013 incorporated by reference into this prospectus from our Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed with the SEC on March 17, 2014 and Amendment No. 1 to the Form 10-K filed with the SEC on April 30, 2014, 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, 2013, filed with the SEC on March 17, 2014, as amended by Amendment No. 1 to our Annual Report on Form 10-K, filed with the SEC on April 30, 2014;
2. Our Quarterly Reports on Form 10-Q filed with the SEC on May 12, 2014 and August 8, 2014;
4. Our Current Reports on Form 8-K, filed with the SEC on February 10, 2014, February 13, 2014 (Items 1.01 and 3.02 only), March 6, 2014 (Items 1.01 and 5.02 only), March 14, 2014 (Item 5.02 only), March 17, 2014 (Items 5.02 and 8.01 only), March 21, 2014 (Item 5.02 only), April 22, 2014, June 12, 2014, June 17, 2014 (Item 5.02 only), June 30, 2014, July 17, 2014, July 22, 2014, August 7, 2014 (only that Current Report filed on such date containing Item 5.02), August 14, 2014 and September 2, 2014 (Items 5.02 and 5.07 only);

5. The description of the common stock contained in our Registration Statement on Form 8-A as filed with the SEC on October 30, 1991; and

6. The description of the preferred stock purchase rights contained in our Registration Statements on Form 8-A as filed with the SEC on December 29, 1998 and March 28, 2014.

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.

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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.

Table of Contents**PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. *Other Expenses of Issuance and Distribution.***

The following table sets forth various expenses in connection with the sale and distribution of the shares of our common stock being registered. All of the amounts shown are estimates except for the SEC Registration Fee.

SEC Registration Fee	\$ 1,819.30
Accounting Fees and Expenses	16,000.00
Legal Fees and Expenses	50,000.00
Miscellaneous	15,000.00
Total:	\$ 82,819.30

Item 15. *Indemnification of Officers and Directors.*

Section 145 of the Delaware General Corporation Law (the "DGCL") authorizes and empowers a Delaware corporation to indemnify its directors, officers, employees and agents against liabilities incurred in connection with, and related expenses resulting from, any claim, action or suit brought against any such person as a result of his or her relationship with the corporation, provided that such persons acted in good faith and in a manner such person reasonably believed to be in, and not opposed to, the best interests of the corporation in connection with the acts or events on which such claim, action or suit is based. Section 145 of the DGCL also authorizes corporations to purchase and maintain insurance on behalf of such persons so indemnified. The finding of either civil or criminal liability on the part of such person in connection with such acts or events is not necessarily determinative of the question of whether such person has met the required standard of conduct and is, accordingly, entitled to be indemnified.

Section 102(b)(7) of the DGCL enables a corporation in its certificate of incorporation or an amendment thereto to eliminate or limit the personal liability of a director to the corporation or its stockholders of monetary damages for violations of the director's fiduciary duty of care, except (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the DGCL (providing for liability of directors for unlawful payment of dividends or unlawful stock purchases or redemptions) or (iv) for any transaction from which a director derived an improper personal benefit.

Our Restated Certificate of Incorporation, as amended (the "charter") provides that, to the extent permitted by applicable law, the registrant's directors shall not be personally liable to the registrant or its stockholders for monetary damages for any breach of fiduciary duty as directors of the registrant. The charter eliminates the personal liability of directors to the fullest extent permitted by the DGCL. Our bylaws provide that each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director or officer of the registrant shall be indemnified and held harmless by the registrant to the fullest extent authorized by the DGCL, against all costs, charges, expenses, liabilities and losses (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such person in connection therewith, and such indemnification shall continue as to a person who has ceased to be a director or officer and shall inure to the benefit of his or her heirs, executors and personal or legal

representatives. The registrant has also obtained liability insurance for its officers and directors and has entered into indemnification agreements with its directors and officers.

The foregoing statements are subject to the provisions of Sections 145 and 102(b)(7) of the DGCL, our bylaws and the charter, which bylaws and charter have been filed as exhibits to this registration statement.

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Table of Contents**Item 16. Exhibits.**

The following documents are filed herewith (unless otherwise indicated) and made a part of this registration statement.

Exhibit Number	Description of Exhibit
3.1*	Restated Certificate of Incorporation (1)
3.2*	Amendment to Restated Certificate of Incorporation (2)
3.3*	Sixth Amended and Restated Bylaws (3)
4.1*	Form of Common Stock Certificate (4)
4.2*	Rights Agreement, dated as of December 31, 1998, by and between Biolase Technology, Inc. and U.S. Stock Transfer Corporation, as rights agent, and Form of Rights Certificate (5)
4.3*	Amendment to Rights Agreement, dated as of December 19, 2008, by and between Biolase Technology, Inc. and Computershare Trust Company, N.A., as rights agent (6)
4.4*	Amended and Restated Second Amendment to Rights Agreement, dated as of March 17, 2014, by and between Biolase, Inc. and Computershare Trust Company, N.A., as rights agent (7)
5.1**	Opinion of Carroll & Carroll, P.C.
23.1**	Consent of Carroll & Carroll, P.C. (filed as part of Exhibit 5.1)
23.2**	Consent of BDO USA, LLP, Independent Registered Public Accounting Firm
24.1*	Power of Attorney (included on signature page to the Registration Statement as initially filed)

* Filed previously.

** Filed herewith.

- (1) Incorporated by reference to Exhibit 3.1 of the registrant's Amendment No. 1 to Registration Statement on Form S-1 (File No. 333-129995), filed with the SEC on December 23, 2005.
- (2) Incorporated by reference to Exhibit 3.1 of the registrant's Current Report on Form 8-K (File No. 000-19627), filed with the SEC on May 16, 2012.
- (3) Incorporated by reference to Exhibit 3.1 of the registrant's Current Report on Form 8-K (File No. 001-36385), filed with the SEC on June 30, 2014.
- (4) Incorporated by reference to Exhibit 4.1 of the registrant's Registration Statement on Form S-3 (File No. 333-89692), filed with the SEC on June 3, 2002.
- (5) Incorporated by reference to Exhibit 1 of the registrant's Registration Statement on Form 8-A (File No. 000-19627), filed with the SEC on December 29, 1998.
- (6) Incorporated by reference to Exhibit 4.1 of the registrant's Current Report on Form 8-K (File No. 000-19627), filed with the SEC on December 22, 2008.
- (7) Incorporated by reference to Exhibit 4.1 of the registrant's Registration Statement on Form 8-A (File No. 001-36385), filed with the SEC on March 28, 2014.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate,

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represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in this registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; *provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of this registration statement or made in any such document immediately prior to such effective date.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities

at that time shall be deemed to be the initial *bona fide* offering thereof.

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Insofar as indemnification for liabilities arising under the Securities Act of 1933, may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4), or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Table of Contents**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Irvine, State of California, on September 16, 2014.

BIOLASE, INC.

By: /s/ Jeffrey M. Nugent
 Jeffrey M. Nugent
 President, Chief Executive Officer and
 Director

By: /s/ Frederick D. Furry
 Frederick D. Furry
 Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-3 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Jeffrey M. Nugent		September 16, 2014
Jeffrey M. Nugent	President and Chief Executive Officer (Principal Executive Officer) and Director	
/s/ Frederick D. Furry		
Frederick D. Furry	Chief Financial Officer (Principal Financial and Accounting Officer)	September 16, 2014
*		
	Director and Chairman of the Board	
Paul Clark		September 16, 2014
*		
	Director	
Frederic H. Moll		September 16, 2014
*		
	Director	
		September 16, 2014

James R. Talevich

*By: /s/ Jeffrey M. Nugent
Jeffrey M. Nugent
Attorney-in-Fact

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BIOLASE, INC.

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- (5) Incorporated by reference to Exhibit 1 of the registrant's Registration Statement on Form 8-A (File No. 000-19627), filed with the SEC on December 29, 1998.
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- (7) Incorporated by reference to Exhibit 4.1 of the registrant's Registration Statement on Form 8-A (File No. 001-36385), filed with the SEC on March 28, 2014.