

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

November 29, 2022

John Beaver President & Chief Executive Officer BIOLASE, Inc. 27042 Towne Centre Drive, Suite 270 Lake Forest, CA 92610

> Re: BIOLASE, Inc. Registration Statement on Form S-1 Filed November 22, 2022 File No. 333-268528

Dear John Beaver:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Jessica Ansart at 202-551-4511 with any questions.

Sincerely,

Division of Corporation Finance Office of Industrial Applications and Services

cc: Istvan Hajdu