

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

January 24, 2024

John Beaver President and Chief Executive Officer BIOLASE, INC 27042 Towne Centre Drive, Suite 270 Lake Forest, California 92610

> Re: BIOLASE, INC Registration Statement on Form S-1 Filed January 19, 2024 File No. 333-276596

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: Leslie Marlow