

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

DIVISION OF CORPORATION FINANCE

September 16, 2019

Todd A. Norbe President and Chief Executive Officer BIOLASE, Inc. 4 Cromwell Irvine, CA 92618

> Re: BIOLASE, Inc. Registration Statement on Form S-1 Filed September 5, 2019 File No. 333-233629

Dear Mr. Norbe:

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 Michael Fay at 202-551-3812 with any questions.

Sincerely,

Division of Corporation Finance Office of Electronics and Machinery

cc: Michael Carroll, Esq.