



DIVISION OF  
CORPORATION FINANCE

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

July 27, 2023

John Beaver  
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 July 21, 2023**  
**File No. 333-273372**

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 Jane Park at 202-551-7439 with any questions.

Sincerely,

Division of Corporation Finance  
Office of Industrial Applications and  
Services

cc: Leslie Marlow, Esq.