



DIVISION OF
CORPORATION FINANCE

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

July 28, 2014

Via E-Mail

Michael A. Gordon, Esq.
Sidley Austin LLP
One South Dearborn Street
Chicago, Illinois 60603

RE: BIOLASE, Inc.
Preliminary Proxy Statement
Filed July 18, 2014
File No. 001-36385

Dear Mr. Gordon:

We have reviewed your response letter dated July 25, 2014 and have the following comments.

1. We note your response to prior comment 3. If you need the additional shares you are seeking to have authorized under proposal three to complete the July 2014 private placement, please revise to state so directly. We note, in this regard, the disclosure that as of July 1, 2014, approximately 4.5 million shares remained available for issuance, while the terms of the July 2014 private placement require the issuance of 6.25 million shares.

Recent Developments, page 7

2. Please expand your response to prior comment 8 to clarify the nature and extent of Oracle's involvement in the dispute you mention, including its nomination of directors and the lawsuit it filed in March 2014.

Election of Directors, page 8

3. Please clarify how your response to prior comment 9 in relation to Mr. Pignatelli is consistent with Exchange Act Rule 14d-4(d). Also, we note the "Company does not know if Mr. Pignatelli" would provide his consent to be named. Please tell us what steps the Company has taken to determine whether Mr. Pignatelli would provide such consent.

Michael A. Gordon, Esq.
Sidley Austin LLP
July 28, 2014
Page 2

Please direct any questions to Daniel F. Duchovny, Special Counsel, at (202) 551-3619 or me at (202) 551-3641.

Sincerely,

/s/ Geoff Kruczek

Geoff Kruczek
Attorney-Advisor
Office of Mergers & Acquisitions

cc: Michael C. Carroll, Esq.
Beth Flaming, Esq.