

March 5, 2020

Alison Lawton
Chief Executive Officer
Kaleido Biosciences, Inc.
65 Hayden Avenue
Lexington, MA 02421

Re: Kaleido Biosciences, Inc.
Registration Statement on Form S-3
Filed March 2, 2020
File No. 333-236804

Dear Ms. Lawton:

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 Ada D. Sarmento at 202-551-3798 with any questions.

Sincerely,

Division of

Office of Life

Corporation Finance

Sciences

cc: Laurie A. Burlingame, Esq.