



DIVISION OF
CORPORATION FINANCE

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

September 17, 2018

Joshua R. Disbrow
Chairman and Chief Executive Officer
Aytu Bioscience, Inc.
373 Inverness Parkway, Suite 206
Englewood, Colorado 80112

Re: Aytu Bioscience, Inc.
Registration Statement on Form S-1
Filed September 7, 2018
File No. 333-227243

Dear Mr. Disbrow:

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 Irene Paik at 202-551-6553 with any questions.

Sincerely,

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Michael R. Newton - Dorsey & Whitney LLP