



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