

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

November 30, 2017

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

Re: Aytu Bioscience, Inc.
Registration Statement on Form S-3
Filed November 22, 2017
File No. 333-221735

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 Christine Westbrook at (202) 551-5019 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Marcelle S. Balcombe, Esq.