



DIVISION OF
CORPORATION FINANCE

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

May 4, 2018

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

Re: Aytu BioScience, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed April 27, 2018
File No. 001-38247

Dear Mr. Disbrow:

We have limited our review of your filing to the issues raised in the comment below.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

[Preliminary Proxy Statement on Schedule 14A filed April 27, 2018](#)

[Proposal No. 3 - Approval of an Amendment... to Effect a Reverse Stock Split, page 7](#)

1. Please revise your disclosure to be consistent regarding the effect of the reverse stock split on the authorized shares of common stock. For example, you state on page 10 that the reverse split will also have a corresponding decrease in the number of authorized shares of your common stock. However, the Certificate of Amendment of the Certificate of Incorporation attached as Appendix B does not amend the number of authorized shares of common stock. Please also revise your disclosure to be consistent regarding your treatment of fractional shares. For example, on page 10, it states that fractional shares will be rounded up to the next whole number. However, on page 11, you state that the board will have discretion to determine whether to arrange for the disposition of fractional interests, pay cash for the fair value of fractions of a share or provide a number of shares rounded up to the next whole number in lieu of any fractional shares. Also, to the extent the board retains discretion as to whether it will arrange for the disposition of

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the fractional interests, please tell us what consideration you have given to the registration requirements of the Securities Act of 1933 as to any such disposition.

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.

You may contact Irene Paik at 202-551-6553 or Mary Beth Breslin at 202-551-3625 with any questions.

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Marcelle S. Balcombe, Esq.