



DIVISION OF
CORPORATION FINANCE

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

May 23, 2018

Carl O'Connell
Chief Executive Officer
Xtant Medical Holdings, Inc.
664 Cruiser Lane
Belgrade, MT 59714

Re: Xtant Medical Holdings, Inc.
Registration Statement on Form S-1
Filed May 15, 2018
Amendment No. 1 to Registration Statement on Form S-1
Filed May 16, 2018
File No. 333-224940

Dear Mr. O'Connell:

We have limited our review of your registration statement to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Amendment No. 1 to Registration Statement on Form S-1

Incorporation of Certain Documents by Reference, page 24

1. Please incorporate by reference your Definitive Proxy Statement on Schedule 14A filed on January 22, 2018, the amendment to your Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2017 filed on March 30, 2018 and the amendment to your Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2017 filed on March 30, 2018.

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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.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Ada D. Sarmento at 202-551-3798 or Erin Jaskot at 202-551-3442 with any questions.

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Amy E. Culbert, Esq.