

April 17, 2018

By Electronic Filing

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street N.E.
Washington D.C. 20549
Attention: Jeffrey Gabor and Irene Paik

Re: Xtant Medical Holdings, Inc.
Registration Statement on Form S-1
Filed February 7, 2018
Comment Letter dated April 13, 2018
File No. 333-222918

Ladies and Gentlemen:

On behalf of Xtant Medical Holdings, Inc. (the "Company"), we respond as follows to the letter from the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission"), dated April 13, 2018, regarding the above-referenced Registration Statement on Form S-1 (the "Registration Statement"). For your convenience, the Staff's comments have been reproduced in bold type below, followed by the Company's response.

Material U.S. Federal Income Tax Consequences, page 30

- 1. We note that you have elected to use a short-form tax opinion in response to our prior comment one. Please revise your prospectus to state clearly that the disclosure in this section is the opinion of counsel and to clearly identify and articulate the opinion being rendered. For guidance, refer to Sections III.B.2 of Staff Legal Bulletin No. 19 (October 2011).**

RESPONSE: The Company respectfully acknowledges the Staff's comment and, in response thereto, the Company has revised the prospectus to clearly state that the disclosure in the section entitled "Material U.S. Federal Income Tax Consequences" is the opinion of Ballard Spahr LLP.

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If you have any questions, please do not hesitate to contact me at (406) 388-0480, or our counsel, Travis J. Leach of Ballard Spahr LLP, at (602) 798-5444 or Peter W. Hennessey of Ballard Spahr LLP, at (215) 864-8354.

Very truly yours,

XTANT MEDICAL HOLDINGS, INC.

/s/ Carl O'Connell

Carl O'Connell

Chief Executive Officer

cc: Travis J. Leach, Ballard Spahr LLP
Peter W. Hennessey, Ballard Spahr LLP
