

April 9, 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
Response dated April 3, 2018
File No. 333-222918

Ladies and Gentlemen:

On behalf of Xtant Medical Holdings, Inc. (the "Company"), we respond as follows to the comment letter from the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission"), dated February 27, 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 your belief that the receipt of subscription rights pursuant to the rights offering should not be treated as a taxable distribution for U.S. federal income tax purposes. A tax opinion must be filed whenever the tax consequences of a transaction are material to an investor and a representation as to tax consequences is set forth in the filing. Please file a tax opinion as an exhibit to the filing pursuant to Item 601(b)(8) of Regulation SK. For guidance, please refer to Section III.A.2, including footnote 39, of Staff Legal Bulletin No. 19 (October 14, 2011).**

RESPONSE: The Company respectfully acknowledges the Staff's comment and, in response thereto, the Company will file a tax opinion of Ballard Spahr LLP in the form attached hereto as Exhibit A as Exhibit 8.1 to Amendment No. 1 to the Registration Statement.

Incorporation of Certain Information by Reference, page 38

- 2. Since you have not yet filed your Form 10-K for the fiscal year ended December 31, 2017, you are not eligible to incorporate by reference. See General Instruction VII.C to Form S-1. Please amend the registration statement to include all disclosure required by Form S-1, or, in the alternative, file your Form 10-K for the fiscal year ended December 31, 2017 and revise this section accordingly.**

RESPONSE: The Company filed its annual report on Form 10-K for the fiscal year ended December 31, 2017 with the Commission on April 2, 2018 and will incorporate disclosure therefrom into Amendment No. 1 to the Registration Statement.

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

Exhibit A
Form of Tax Opinion



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_____, 2018

Xtant Medical Holdings, Inc.
664 Cruiser Lane
Belgrade, Montana 59714

Re: Distribution of Subscription Rights to Purchase Shares of Common Stock, as Described
in the Registration Statement on Form S-1 (File No. 333-222918)

Ladies and Gentlemen:

We have acted as counsel to Xtant Medical Holdings, Inc., a Delaware corporation (the “**Company**”), in connection with the preparation of the above referenced Registration Statement on Form S-1 (the “**Registration Statement**”), including the preliminary prospectus forming a part thereof (the “**Prospectus**”), and you have asked for our opinion as to the accuracy of the statements of law contained in the section of the Prospectus entitled “Material U.S. Federal Income Tax Consequences.”

For purposes of rendering our opinion, we have examined copies of all such documents as we have deemed relevant and necessary, including the Registration Statement, the Prospectus and, with your approval, assumed the conformity to original documents of all documents submitted to us as copies; and we have assumed that the terms and conditions of the subscription rights being distributed by the Company are as described in the Registration Statement. In connection with the opinion rendered below, we also have relied on the correctness, without regard to any qualification as to knowledge or belief, of the statements of fact in the Registration Statement and the Prospectus, and certain written representations of the Company contained in an Officer’s Certificate dated on or about the date hereof.

Based upon the foregoing and the further qualifications set forth below, the legal conclusions as to matters of federal income tax law included in the Prospectus under the caption “Material U.S. Federal Income Tax Consequences,” constitute our opinion.

This opinion represents our best legal judgment, but it has no binding effect or official status of any kind, and no assurance can be given that contrary positions may not be taken by the Internal Revenue Service or a court considering the issues. We express no opinion regarding tax consequences under foreign, state or local laws, or as to any non-income tax consequences. In issuing our opinion, we have relied solely upon existing provisions of the Internal Revenue Code of 1986, as amended, existing and proposed regulations under it, and current administrative positions and judicial decisions. Those laws, regulations, administrative positions and judicial decisions are subject to change at any time. Any such changes could affect the validity of the opinion set forth above. Also, future changes in federal tax laws and the interpretation thereof can have retroactive effect. We undertake no obligation to update the opinion expressed herein after the date of this letter.

Xtant Medical Holdings, Inc.

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We consent to the filing of this opinion as an exhibit to the Registration Statement on Form S-1 in which the Prospectus is included and the use of our name in the caption "Legal Matters."

Very truly yours,

****DRAFT****

Ballard Spahr LLP
SA/
