

June 1, 2018

**VIA EDGAR**

United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549

Attn: Ada D. Sarmiento  
Erin Jaskot

**Re: Xtant Medical Holdings, Inc.  
Amendment No. 2 to Registration Statement on Form S-1  
Filed May 30, 2018  
File No. 333-224940  
Request for Acceleration**

Ladies and Gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended, the undersigned, on behalf of Xtant Medical Holdings, Inc. (Company), respectfully requests that the effective date for the above-referenced Registration Statement be accelerated so that it will be declared effective at 4:30 p.m., Eastern Daylight Savings time, on June 4, 2018, or as soon thereafter as is practicable. or at such later time as the Company or its counsel may request via telephone call to the Staff.

Please call Amy Culbert of Fox Rothschild LLP at (612) 607-7287 to provide notice of effectiveness or if you have any questions or concerns regarding this matter.

We understand that the Staff of the United States Securities and Exchange Commission will consider this request as confirmation by the Company that it is aware of its responsibilities under the federal securities laws as they relate to the issuance of the securities covered by the Registration Statement.

Thank you for your assistance in this matter.

Very truly yours,

XTANT MEDICAL HOLDINGS, INC.



Carl O'Connell  
Chief Executive Officer

cc: Amy E. Culbert, Fox Rothschild LLP