

Xtant Medical Holdings, Inc.
664 Cruiser Lane
Belgrade, Montana 59714
(406) 388-0480

By EDGAR Transmission

April 29, 2016

Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-4631
Attention: Suzanne Hayes, Assistant Director

Re: Acceleration Request
Xtant Medical Holdings, Inc.
Post-Effective Amendment No. 2 to Registration Statement on Form S-1
File No. 333-203492

Dear Ms. Hayes,

In accordance with Rule 461 under the Securities Act, the undersigned registrant (the "Registrant") hereby requests that the Securities and Exchange Commission (the "Commission") take appropriate action to cause the above-referenced Registration Statement on Form S-1 to become effective on May 2, 2016 at 9:00 a.m., Eastern Time, or as soon thereafter as is practicable. The Registrant also hereby requests a copy of the written order verifying the effective date.

In connection with this request, the Registrant acknowledges that:

- should the Commission or the staff of the Commission (the "Staff"), acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Registrant from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Registrant may not assert Staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Very truly yours,

/s/ John Gandolfo

John Gandolfo
Chief Financial Officer
