

One First Avenue, Parris Building 34, Navy Yard Plaza Boston, Massachusetts 02129

February 19, 2019

VIA EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, DC 20549

Attention: Sonia Bednarowski

Re: Ziopharm Oncology, Inc. Registration Statement on Form S-3 Filed February 7, 2019 File No. 333-229555

> Acceleration Request Requested Date: February 21, 2019 Requested Time: 4:00 p.m. Eastern Time

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, the undersigned registrant hereby requests that the Securities and Exchange Commission take appropriate action to cause the above-referenced Registration Statement on Form S-3 (File No. 333-229555) (the "*Registration Statement*") to become effective at 4:00 p.m. Eastern Time on February 21, 2019, or as soon thereafter as is practicable.

Once the Registration Statement has been declared effective, please orally confirm that event with Courtney Thorne of Cooley LLP, counsel to the undersigned registrant, at (617) 937-2318.

[Signature page follows]

Very truly yours,

ZIOPHARM ONCOLOGY, INC.

By: /s/ Robert Hadfield Robert Hadfield General Counsel and Secretary

 Laurence J.N. Cooper, M.D., Ph.D., Ziopharm Oncology, Inc. Kevin G. Lafond, Ziopharm Oncology, Inc. Joshua D. Rottner, Cooley LLP Marc A. Recht, Cooley LLP Courtney T. Thorne, Cooley LLP