ZIOPHARM Oncology, Inc.

1180 Avenue of the Americas, 19th Floor New York, New York 10036

April 12, 2006

TRANSMITTED VIA EDGAR

U.S. Securities and Exchange Commission Judiciary Plaza 450 5th Street, N.W. Washington, D.C. 20549

Attention: Mr. Jeffrey P. Riedler, Assistant Director

Re: ZIOPHARM Oncology, Inc. (the "Company") Post-effective amendment to Form SB-2 Filed April 3, 2006 File No. 333-129680

Dear Mr. Riedler:

The undersigned respectfully requests that the Post-effective amendment to the Registration Statement on Form SB-2 of ZIOPHARM Oncology, Inc. (SEC File No. 333-129680) be declared effective at 9:00 a.m., Washington, D.C. time, on Friday, April 14, 2006, or as soon thereafter as is practicable.

In connection with this request, the Company hereby acknowledges that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, such declaration 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 Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Company may not assert the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any other person under the federal securities laws of the United States.

Sincerely,

ZIOPHARM ONCOLOGY, INC.

By: /s/ Richard E. Bagley

Richard E. Bagley, *President, Treasurer and Chief Operating Officer*