UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): **June 21, 2010**

ZIOPHARM Oncology, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware	**001-33038**	**84-1475642**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

1180 Avenue of the Americas **19th Floor** **New York, NY**	**10036**
(Address of Principal Executive Offices)	(Zip Code)

(646) 214-0700
(Registrant's telephone number, including area code)

Not applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425).

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12).

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)).

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)).

Item 8.01 Other Events.

On June 21, 2010, the Company issued a press release providing guidance on its planned pivotal Phase III trial for palifosfamide in metastic soft tissue sarcoma. A copy of the above referenced press release is filed as Exhibit 99.1 to this Current Report on Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(d)Exhibits

Exhibit No.	Description
99.1	Press Release, dated June 21, 2010

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ZIOPHARM Oncology, Inc.

By: /s/ Richard Bagley

Date: June 21, 2010

Name: Richard Bagley
Title: President, Chief Operating Officer and Chief Financial Officer

INDEX OF EXHIBITS

Exhibit No.	Description
99.1	Press Release, dated June 21, 2010

Exhibit 99.1

ZIOPHARM Oncology, Inc.

ZIOPHARM Provides Guidance on Planned Pivotal Phase III Study of Palifosfamide in Metastatic Soft Tissue Sarcoma

New York, NY – June 21, 2010 - ZIOPHARM Oncology, Inc. (Nasdaq: ZIOP) announced guidance today regarding the Company's planned pivotal Phase III trial for palifosfamide in metastatic soft tissue sarcoma, including details of the proposed study's design, timing and regulatory review.

Following reporting of favorable interim results from its Phase II randomized controlled trial of palifosfamide plus doxorubicin vs. doxorubicin in patients with metastatic or unresectable soft tissue sarcoma (PICASSO), the Company obtained input on the protocol design for a pivotal Phase III trial from the U.S. Food and Drug Administration (FDA) in an end of Phase II meeting in January. In that meeting, the Company also discussed its intention to seek Special Protocol Assessment (SPA) in which the Company is currently engaged.

The Company has proposed that the pivotal trial, known as PICASSO III, be based upon PICASSO. The Company recently presented additional results from the PICASSO study at the 46th Annual American Society of Clinical Oncology Meeting. The additional results for the primary endpoint, progression-free survival (PFS), demonstrated that, in 62 evaluable patients, a hazard ratio of 0.43 favoring the palifosfamide combination (p=0.019) was achieved, along with a clinically meaningful 3.4 month difference in median PFS. For patients receiving 6 cycles or less in both arms (the standard treatment period for doxorubicin), the hazard ratio was 0.39 (p= 0.023). Updated safety data showed there was similarity between the arms of the study. The most common grade 3+ events were neutropenia and elevated creatinine and were observed with similar frequency between treatment groups. There was no encephalopathy, hemorrhagic cystitis, or Fanconi's Syndrome.

As designed, the Company's PICASSO III study is a randomized, double-blinded, placebo-controlled, pivotal Phase III trial. Patients with metastatic soft tissue sarcoma in the front-line setting will be randomized either to doxorubicin plus placebo or to doxorubicin in combination with palifosfamide. Progression-free survival is designated as the primary endpoint for accelerated approval, while overall survival is the primary endpoint for full approval.

In a recent communication, FDA has indicated that the Company could conduct the pivotal trial as designed without SPA and that approvability would be determined by the data, balanced with risks and benefits. FDA presently considers the endpoints as designated for the proposed pivotal trial as not supportive of SPA in this disease setting, although they would grant SPA with modified endpoints. The Company intends to request a meeting with FDA, regarding the proposed designation of study endpoints while it weighs the advisability of moving forward with the current design. Therefore the Company expects enrollment in PICASSO III to begin in the third quarter rather than this month, as previously disclosed.

About ZIOPHARM Oncology, Inc.:

ZIOPHARM Oncology is a biopharmaceutical company engaged in the development and commercialization of a diverse portfolio of cancer drugs. The Company is currently focused on three clinical programs.

Palifosfamide (ZymafosTM or ZIO-201) references a novel composition (tris formulation) that comprises the functional active metabolite of ifosfamide, a standard of care for treating sarcoma, lymphoma, testicular, and other cancers. Palifosfamide delivers only the cancer fighting component of ifosfamide. It is expected to overcome the resistance seen with ifosfamide and cyclophosphamide, two of the most commonly used DNA-alkylating drugs used to treat cancers. Palifosfamide does not have the toxic metabolites of ifosfamide that cause the debilitating side effects of "fuzzy brain" (encephalopathy) and severe bladder inflammation. It may also have other advantages. Intravenous palifosfamide is currently in a randomized Phase II trial to treat unresectable or metastatic soft tissue sarcoma in the front- and second-line setting with the Company having reported interim positive results at the 2010 ASCO Annual Meeting; a registration trial in the same setting is expected to initiate following U.S. Food and Drug Administration (FDA) review. An oral form of palifosfamide has been developed preclinically to the investigational new drug application stage.

Darinaparsin (ZinaparTM or ZIO-101) is a novel mitochondrial-targeted agent (organic arsenic) being developed for the treatment of various hematologic and solid cancers. Preclinical and clinical studies to date have demonstrated that darinaparsin is considerably less toxic than inorganic arsenic, particularly with regard to cardiac toxicity. The Company has reported favorable results from a Phase II trial with IV-administered darinaparsin in lymphoma, particularly peripheral T-cell lymphoma ("PTCL"), at the American Society of Clinical Oncology (ASCO) in May of 2009 which would serve as the basis for ongoing clinical study in PTCL following regulatory review and available financial resources. Phase I trials with the oral form are ongoing in both hematological malignancies and solid tumors.

Indibulin (ZybulinTM or ZIO-301) is a novel, oral tubulin binding agent that targets both mitosis and cancer cell migration. In addition, indibulin is expected to have several potential benefits, including oral dosing, application in multi-drug resistant tumors, no neuropathy and minimal overall toxicity. In multiple Phase I trials in cancer patients, oral indibulin has been administered both as a single agent and in combination with favorable activity and a promising safety profile that does not include the neurotoxicity seen with all of the other classes of tubulin binding agents. Most recently, results of oral indibulin in combination with oral capecitabine (Xeloda(R)) were presented at last year's American Society of Clinical Oncology (ASCO) along with the preclinical findings of a novel dosing schedule conducted under the direction of Dr. Larry Norton; employing this dosage schedule, the Company has initiated a Phase I study in breast cancer patients with the Breast Cancer Medicine Service at Memorial Sloan-Kettering Cancer Center.

ZIOPHARM's operations are located in Boston, MA with an executive office in New York City. Further information about ZIOPHARM may be found at www.ziopharm.com.

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Forward-Looking Safe Harbor Statement:
This press release contains forward-looking statements for ZIOPHARM Oncology, Inc. that involve risks and uncertainties that could cause the Company's actual results to differ materially from the anticipated results and expectations expressed in these forward-looking statements. These statements are based on current expectations, forecasts and assumptions that are subject to risks and uncertainties, which could cause actual outcomes and results to differ materially from these statements. Among other things, there can be no assurance that any of the Company's development efforts relating to its product candidates will be successful, or such product candidates will be successfully commercialized. Other risks that affect forward-looking information contained in this press release include the possibility of being unable to obtain regulatory approval of the Company's product candidates, the risk that final trial data may not support interim analysis and that the results of clinical trials in general may not support the Company's claims, the risk that pre-clinical or clinical trials will proceed on schedules that are consistent with the Company's current expectations or at all, risks related to the Company's ability to protect its intellectual property and its reliance on third parties to develop its product candidates, risks related to the sufficiency of existing capital reserves to fund continued operations for a particular amount of time and uncertainties regarding the Company's ability to obtain additional financing to support its operations thereafter. The Company assumes no obligation to update these forward-looking statements, except as required by law.

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