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): **May 21, 2010**

ZIOPHARM Oncology, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware	**001-33038**	**84-1475672**
(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 May 21, 2010, the Company issued a press release announcing that Dr. Claire Verschraegen of the University of New Mexico, Albuquerque, lead author on the abstract for the Company's palifosfamide study entitled, "A phase II randomized controlled trial of palifosfamide plus doxorubicin vs. doxorubicin in patients with soft tissue sarcoma (PICASSO)", will present in an oral session at the American Society of Clinical Oncology (ASCO) Annual Meeting on Monday, June 7, 2010.

A copy of the above referenced press release is filed as Exhibit 99.1 to this Current Report of Form 8-K.

Item 9.01 **Financial Statements and Exhibits**

(d) Exhibits

Exhibit No.	Description
99.1	Press Release of the Company dated May 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: May 21, 2010

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

INDEX OF EXHIBITS

Exhibit No.	Description
99.1	Press Release of the Company dated May 21, 2010

Exhibit 99.1

ZIOPHARM Oncology, Inc.

ZIOPHARM to Present Further Palifosfamide PICASSO Phase II Results in Oral Session at ASCO
-- Abstracts Released on ASCO.org --

New York, NY – May 21, 2010 - ZIOPHARM Oncology, Inc. (Nasdaq: ZIOP) announced today that Dr. Claire Verschraegen of the University of New Mexico, Albuquerque, lead author of the abstract on the palifosfamide study entitled, "A phase II randomized controlled trial of palifosfamide plus doxorubicin vs. doxorubicin in patients with soft tissue sarcoma (PICASSO)", will present in an oral session at the American Society of Clinical Oncology (ASCO) Annual Meeting on Monday, June 7th at 2:15 pm in the Vista Room (location S 406). The abstract has been selected as part of the 2010 Best of ASCO® educational program. Best of ASCO® sessions will be held in both San Francisco and Boston in the United States and in several countries around the world in the months following the ASCO Annual meeting. Best of ASCO® features high-impact abstracts from the ASCO Annual Meeting that represent the most relevant, cutting-edge science in oncology today.

The abstract (# 10004) released on the www.ASCO.org website states, "A total of sixty-seven patients with STS were randomized with 66 treated and 62 eligible. Enrollment was stopped early because of positive efficacy. Sixty-two patients were evaluated for progression-free survival (PFS) with 28 documented PFS events (doxorubicin alone = 18 events; palifosfamide + doxorubicin = 10 events). With this interim analysis of all randomized and eligible patients, the hazard ratio is 0.43 favoring palifosfamide + doxorubicin (two-sided Wilcoxon-Gehan p-value = 0.019). The median PFS was 4.4 months for doxorubicin and 7.8 months for palifosfamide + doxorubicin. No significant difference in toxicities between the arms was noted, and the combination of palifosfamide + doxorubicin has been well tolerated as an outpatient treatment."

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 (Zymafos™ 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 in late 2009; a registration trial in the same setting is expected to initiate following U.S. Food and Drug Administration (FDA) review in the first half of this year. An oral form of palifosfamide has been developed preclinically to the investigational new drug application stage.

Darinaparsin (Zinapar™ 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 (Zybulin™ 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®) 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 the results of clinical trials 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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