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): September 10, 2007

ZIOPHARM Oncology, Inc.
(Exact name of registrant as specified in its charter)

Delaware	0-32353	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)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing 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 September 10, 2007, ZIOPHARM Oncology, Inc. issued the press release attached hereto as Exhibit 99.1, which is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

99.1 Press Release dated September 10, 2007.

SIGNATURE

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.:
(Registrant)

Date: September 11, 2007

By: /s/ Jonathan Lewis

JONATHAN LEWIS,
Chief Executive Officer

Exhibit Index

Exhibit No.	Description
99.1	Press Release dated September 10, 2007.

ZIOPHARM Treats Patients in U.S. Phase I Trials of Oral Darinaparsin and Indibulin

Company Receives First Notice of Allowance for Oral Darinaparsin Patent

NEW YORK (September 10, 2007) - ZIOPHARM Oncology, Inc. (NASDAQ: ZIOP) announced today that the company has begun dosing patients in a U.S. phase I trial of its oral formulation of darinaparsin (ZIO-101) to treat solid tumors. The Company has also initiated patient treatment in a U.S. phase I trial of the oral formulation of indibulin (ZIO-301) in solid tumors. The Company's strategy is to pursue oral formulations for all of their compounds as oral formulations may offer considerable advantages over infusion formulations including patient convenience, cost savings, and commercial benefit.

Separately, the Company announced that Australia has determined that certain patent claims for darinaparsin (ZIO-101), the Company's proprietary organic arsenic, are in condition for allowance. These claims will cover treatment of cancer using organic arsenic, including darinaparsin, as single agents and in combination with other agents or therapies. Most importantly the claims will cover all oral formulations of organic arsenic.

The Company also announced the expansion of the intellectual property portfolio covering indibulin (ZIO-301) and its use in the treatment of cancer by the allowance of claims in India, Turkey and Iceland and the recent issuance of patents in Israel and Slovakia.

Jonathan Lewis, M.D., Ph.D., Chief Executive Officer of ZIOPHARM, commented, "We were especially pleased to initiate patient dosing in our two U.S. phase I trials of the oral formulations of darinaparsin and indibulin as we believe each compound may hold significant clinical and commercial potential as both single agents and in combination with other oncology therapies. "

"The new patents and allowances for both darinaparsin and indibulin add significantly to our growing intellectual property portfolio," concluded Dr. Lewis.

About Darinaparsin (ZIO-101)
Darinaparsin is a proprietary, small-molecule organic arsenic licensed exclusively to ZIOPHARM from The University of Texas M. D. Anderson Cancer Center and Texas A&M University. Darinaparsin induces cell-cycle arrest and cell death by targeting several cellular pathways essential for cell survival. Exposure to darinaparsin has a direct as well as indirect effect on mitochondrial functions, resulting in depletion of energy supply to the cell and induction of apoptosis (programmed cell death). Increase in intra-cellular Reactive Oxygen Species enhances this effect on mitochondrial functions and consequently the activation of the signal transduction pathways leading to apoptosis. In addition, darinaparsin arrests the cell cycle at the G2/M phase of tumor cells, causing cell death by this pathway also.

ZIOPHARM is enrolling patients in two ongoing phase II studies evaluating the preliminary efficacy and safety profile of different treatment schedules of darinaparsin (ZIO-101) in patients with advanced/progressive myeloma (patients to date have had a median of seven prior therapies). ZIOPHARM is also enrolling patients in phase II trials of darinaparsin for the treatment of primary liver cancer and diverse hematological cancers. Phase I trial with an oral form of darinaparsin has been initiated. For more details on these trials please see www.clinicaltrials.gov.

About Indibulin (ZIO-301)

Indibulin (ZIO-301) is a novel synthetic anti-mitotic agent that binds to tubulin, destabilizes microtubule polymerization, and arrests tumor cell growth at the G2/M phase. Microtubules are well-established targets for anti-cancer drug development and tubulin-binding drugs such as taxanes and *vinca* alkaloids are currently widely used to treat cancer. Indibulin is in a Phase I dose-ranging and safety study in Europe and the United States. The Company expects to begin Phase II trials in the U.S. soon.

About ZIOPHARM Oncology

ZIOPHARM Oncology, Inc. is a biopharmaceutical company engaged in the development and commercialization of a diverse, risk-sensitive portfolio of in-licensed cancer drugs to address unmet medical needs. The Company applies new insights from molecular and cancer biology to understand the efficacy and safety limitations of approved and developmental cancer therapies, and identifies proprietary and related molecules for better patient treatment. For more information, visit www.ziopharm.com.

Forward-Looking Statements

This news release contains forward-looking statements based on current expectations, forecasts and assumptions that are subject to risks and uncertainties that 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 that such product candidates will be successfully commercialized. Other risks that affect forward-looking information contained in this news 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, and risks related to the Company's ability to protect its intellectual property and its reliance on third parties to develop its product candidates. The Company assumes no obligation to update these forward-looking statements, except as required by law. For further risk factors see the Company's 10-KSB filed with the SEC.

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