ZIOPHARM Oncology Announces ZIO-101 Phase I Data Presented at AACR-NCI-EORTC International Conference

Novel Organic Arsenic Evidences Both Safety and Activity

PHILADELPHIA, PA - November 16, 2005 - ZIOPHARM Oncology, Inc. (OTC BB: ZIOP) announced today that ZIO-101, a novel organic arsenic, has demonstrated safety at doses approximately 25 times higher than the currently approved dose for arsenic trioxide, an inorganic arsenic, in an ongoing Phase I trial that has treated 11 patients to date at The University of Texas M. D. Anderson Cancer Center. In addition, one patient with metastatic renal cell cancer responded with complete resolution of brain metastasis and overall stable disease.

Luis Camacho, M.D. of The University of Texas M. D. Anderson Cancer Center will present the data from the Phase I trial at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics in Philadelphia, PA. The presentation was selected by the conference organizers for special coverage with the news media.

The Phase I clinical trial was designed to determine the maximum tolerated dose (MTD) of ZIO-101. The dose escalation study has completed dose cohort three, at which a significantly higher dose is administered as compared to the approved dose for arsenic trioxide. The MTD for ZIO-101 has not yet been reached.

"ZIO-101 is a novel organic arsenic molecule that preclinical data suggest would be less toxic at significantly higher doses as compared to arsenic trioxide, an inorganic arsenic currently approved for acute promyelocytic leukemia (APL)," said Dr. Camacho. "At a dosing level already much higher than arsenic trioxide, with provocative hints of a clinical signal, these preliminary Phase I data suggest we are on the right track with what may be a new, less toxic therapy in treating patients with cancer."

ZIO-101 is the lead product candidate from a "family" of compounds licensed from The University of Texas M. D. Anderson Cancer Center and Texas A&M University. A second organic arsenic from the same licensing arrangement, ZIO-102, is the subject of further preclinical study.

A Phase I/II trial and a Phase II trial for ZIO-101 in advanced myeloma are in the advanced planning stage and will likely be followed with exploratory Phase II trials in other cancers. A pivotal registration trial is expected to begin in the first half of 2007.

"These findings suggest ZIO-101 has the potential to treat patients with solid tumors, in addition to hematologic cancers," said Jonathan Lewis, M.D., Ph.D., chief executive officer of ZIOPHARM. "While it is early in clinical development, we are excited by the possibility that ZIO-101 may be useful in a variety of cancer settings."

About ZIOPHARM Oncology, Inc.

ZIOPHARM Oncology, Inc. is a biopharmaceutical company seeking to acquire, develop and commercialize a diverse, risk-sensitive portfolio of in-licensed cancer drugs that address unmet medical needs. Currently, the Company is in U.S. Phase I studies for its two product candidates, ZIO-101 and ZIO-201. For more information, visit www.ziopharm.com.

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, and the Company's 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.

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