



ZiOPHARM Announces Preliminary ZIO-101 Phase I Leukemia Data

-- Encouraging Signs of Clinical Activity in Patients with Leukemia --

ATLANTA, GA - June 2, 2006 - ZiOPHARM Oncology, Inc. (OTC BB: ZIOP) announced today publication of an abstract on its lead product candidate, ZIO-101, a novel organic arsenic. Preliminary results from a phase I hematology study are published in the 2006 American Society of Clinical Oncology Annual Meeting Proceedings and available online.

In abstract #16503 "A Phase-1 Trial of a Novel Organic Arsenic S-dimethylarsino-glutathione (ZIO-101) in Hematological Malignancies" by Steven Kornblau, M.D. and colleagues at The University of Texas M. D. Anderson Cancer Center, the data show evidence of anti-leukemia activity in persons with advanced acute myelogenous leukemia (AML). An anti-leukemia effect was seen in 4 of 8 patients who had received extensive prior therapies. Blood leukemia cells disappeared in 2 patients and were substantially decreased in a third. The fourth patient stopped requiring frequent red blood cell (RBC) transfusions and had a marked improvement in functional ability. The trial is ongoing and dose-escalation continues.

"We are encouraged by these results as they suggest ZIO-101 may have a role in treating patients with leukemia," said Dr. Kornblau. "Arsenic trioxide (Trisenox(R)) is a very effective drug in acute promyelocytic leukemia, a rare form of AML, but ineffective in the far more common types of AML. ZIO-101, which can be given at more than 50-fold higher doses than arsenic trioxide because of a greater safety margin, may have broader applicability in leukemia and other blood and bone marrow cancers."

ZIO-101 is a small molecule licensed from The University of Texas M. D. Anderson Cancer Center and Texas A&M University. ZIO-101 is also in phase I/II studies in patients with advanced myeloma. The Company expects to initiate an additional phase II study in other blood and bone marrow cancers and to explore alternative dosing schedules in the near future. The Company anticipates reporting final data from the study reported here at upcoming medical meetings.

About ZiOPHARM Oncology, Inc.

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 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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