



ZiOPHARM Initiates ZIO-101 Phase I/II Myeloma Study

- Company Meets Milestone for Treatment of First Patient -

NEW YORK, NY - January 31, 2006 - ZiOPHARM Oncology, Inc. (OTC BB: ZIOP), announced today that ZIO-101, a novel and proprietary form of organic arsenic, has been administered to the first patient in a phase I/II trial in advanced myeloma. Interim data from an ongoing phase I trial suggest ZIO-101 can be given at significantly higher doses, with no significant toxicity, compared to arsenic trioxide, an inorganic arsenic currently approved to treat APL (acute promyelogenous leukemia). Arsenic trioxide has also shown activity in myeloma. The ongoing phase I study is currently in cohort five with dosing about 45 times higher than the approved dose of arsenic trioxide.

"Phase I study results to date are encouraging with signals of drug activity and safety," said Bart Barlogie, M.D., Ph.D., Director, Myeloma Institute for Research Therapy, University of Arkansas for Medical Sciences. "We look forward to participating in the next phase of development in patients with advanced myeloma where treatment alternatives remain an unmet medical need."

"I am optimistic about ZIO-101 as a potential new treatment option for our myeloma patients since much higher doses of this new arsenical can be safely administered compared to other older arsenic-based agent," commented James Berenson M.D. of Berenson Oncology. "Given that these other arsenic agents have shown anti-myeloma effects clinically at much lower doses, the hope is that this new drug with its much higher dose will show greater benefits for patients with this disease."

"Patients with myeloma often experience significant treatment side effects and eventually become drug resistant at therapeutic doses," said Mohamad Hussein M.D., Director, Cleveland Clinic Myeloma Research Program. "Arsenical compounds when given at therapeutic doses may have several mechanisms of action and may also modulate the immune system and control the disease. With this trial we hope to identify the doses associated with ZIO-101 that are most therapeutic for patients with multiple myeloma."

Investigators and centers expected to participate in this study include:

- Bart Barlogie, M.D., Ph.D., University of Arkansas for Medical Sciences
- Andrew Belch, M.D., Cross Cancer Institute, Canada
- James Berenson M.D., Berenson Oncology, Los Angeles
- Mohamad Hussein M.D., Cleveland Clinic Myeloma Research Program
- Sundar Jagannath, M.D., St. Vincent's Comprehensive Cancer Center, New York
- Kelvin Lee, M.D., University of Miami Miller School of Medicine
- Amin Rahemtulla, M.D., Ph.D., Imperial Myeloma Group and Hammersmith Hospital, U.K.
- Donna Reece, B.A., M.D., FRCPC, Princess Margaret Hospital, Canada

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 of molecular and cancer biology to the understandings of efficacious, but highly toxic cancer therapies and identifies proprietary and related drugs to provide more effective and safer cancer therapy for patients. 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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