ZIOPHARM Oncology Accomplishes Key Clinical Development Milestone

-- Receives FDA Clearance to Initiate ZIO-101 Phase I/II Myeloma Trial --

NEW YORK, NY - January 4, 2006 - ZIOPHARM Oncology, Inc. (OTC BB: ZIOP), announced today it received approval from the FDA (U.S. Food and Drug Administration) to initiate a Phase I/II trial with one of its two lead products, ZIO-101, a novel organic arsenic, in patients with advanced myeloma. This announcement follows a similar approval for a Phase I/II trial for ZIO-201, a novel alkylator, in patients with advanced sarcoma. Patient treatment in both trials is expected to start in early 2006 at leading cancer centers in the U.S., Canada, and U.K. Completion of enrollment is expected by the end of 2006, followed by pivotal trials beginning mid-2007.

These Phase I/II trials build from the Company's strategy of taking products that have shown activity in human cancer and re-engineering them for enhanced safety, improved efficacy, and expedited clinical development. Therefore, the initiation of these trials marks a key milestone in the Company's clinical development strategy.

The Company believes ZIO-101 has the potential to treat patients with myeloma at significantly higher doses compared to arsenic trioxide, an inorganic arsenic currently approved to treat APL (acute promyelogenous leukemia), which has also shown activity in myeloma. Currently in Phase I clinical trials, interim results on ZIO-101 were reported during a press conference at the AACR-NCI-EORTC International Conference in November 2005. As announced, dosing of ZIO-101 was approximately 25 times higher (presently 35 times higher) than the approved dose of arsenic trioxide. The interim data reported evidence of meaningful benefit in one patient, and no significant toxicity. The Company believes a higher dose coupled with less toxicity will provide a wider therapeutic window and an incremental benefit, or treatment alternative, for myeloma patients, as newly approved agents continue to be associated with significant toxicities and/or drug resistance at therapeutic doses.

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 in molecular and cancer biology to efficacious, but highly toxic therapies and re-engineers them 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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