



ZIOPHARM Presents Data Highlighting Oral ZIO-101 at AACR

-- Multi-targeted Drug with Anti-angiogenic Activity --

LOS ANGELES, Apr 17, 2007 (BUSINESS WIRE) -- ZIOPHARM Oncology, Inc. (NASDAQ: ZIOP) announced today the presentation of preclinical data strongly supportive of the development of an oral form of ZIO-101. Specifically, ZIO-101 demonstrates very high bioavailability when administered orally; in addition it evidences anti-angiogenic activity that is particularly well suited to oral administration. These data were presented in two separate posters today at the American Association of Cancer Research (AACR) meeting being held in Los Angeles.

Philip Komarnitsky, M.D., Ph.D., of ZIOPHARM, and colleagues presented data showing that the administration of ZIO-101 results in dramatically reduced new blood vessel formation in a mouse model of angiogenesis. Anti-angiogenic therapy that utilizes lower doses of the administered drug given over sustained periods of time is particularly well suited to drugs that can be orally administered. Data from pharmacokinetic analysis of orally administered ZIO-101 in animals showed very high bioavailability.

Lawrence Boise, Ph.D., from the University of Miami, and colleagues also presented additional data supporting a ZIO-101 mechanism of action that is distinct from that of arsenic trioxide, an inorganic arsenic that is currently approved for the treatment of a rare form of leukemia and used in the treatment of advanced multiple myeloma. Differences in the way the two drugs activate genes and in their mechanisms of action suggest that ZIO-101 is likely to be active against cancer cells that are resistant to arsenic trioxide.

"These preclinical data are strongly supportive of the Company's development strategy for both oral and IV ZIO-101," commented Jonathan Lewis, M.D., Ph.D., Chief Executive Officer. "ZIO-101 is currently in three separate phase II trials in blood and solid cancers and we expect to initiate clinical study with an oral form in the second half of 2007."

About ZIO-101

ZIO-101 is a proprietary small molecule organic arsenic licensed from The University of Texas M. D. Anderson Cancer Center and Texas A&M University. ZIO-101 induces cell cycle arrest and cell death by targeting several cellular pathways essential for cell survival. Exposure to ZIO-101 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 pathway leading to apoptosis. In addition, ZIO-101 interrupts the cell cycle at the G2/M phase of tumor cells inducing cell death through this pathway as well.

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 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.

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