



ZiOPHARM Presents ZIO-201 Preclinical Kidney Toxicity Data at Bone Marrow Transplant Meetings

NEW YORK, NY - February 21, 2006 - ZiOPHARM Oncology, Inc. (OTC BB: ZIOP) presented preclinical data showing ZIO-201, the active metabolite of ifosfamide, may be less likely to kill normal kidney cells than the other metabolites of both cyclophosphamide and ifosfamide. Consequently, the Company believes it may be possible to substitute ZIO-201 for these drugs in blood cell and bone marrow transplant conditioning regimens. The data were presented by Mary Taub, Ph.D. of the State University of New York at Buffalo, and colleagues at the 2006 Bone Marrow Transplant Meetings in Honolulu, HI.

Cyclophosphamide and ifosfamide are widely used anti-cancer pro-drugs that have to be metabolized to be active. Both have a special role in bone marrow transplants. Unfortunately their use is associated with substantial kidney, bladder and central nervous system toxicities. These effects are caused by metabolites of cyclophosphamide and ifosfamide, especially chloroacetaldehyde and acrolein. ZIO-201 is the active metabolite of ifosfamide. Dr. Taub studied the effects of chloroacetaldehyde, acrolein and ZIO-201 on rabbit kidney proximal tubule cells grown in a test tube.

Dr. Taub's study indicated that chloroacetaldehyde and acrolein, but not ZIO-201, killed the proximal tubule cells. These data suggest ZIO-201 is less likely to cause irreversible kidney damage than cyclophosphamide and ifosfamide. Furthermore, the data suggest that it should be possible to give ZIO-201 without giving the bladder protective agent mesna or intravenous hydration, which are often needed when high-dose cyclophosphamide and ifosfamide are used. These data suggest a possible role for ZIO-201 in conditioning regimens for blood cell and bone marrow transplants.

ZIO-201 is currently in phase I and one subject has stable disease for more than one year. The maximum tolerated dose has not yet been reached and the study is ongoing. A phase I/II study in advanced sarcoma is expected to begin patient enrollment in the near future.

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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