

Xanthus Completes Enrollment of Phase 2 Trial of Xanafide for the Treatment of Secondary AML

CAMBRIDGE, Mass.--Dec. 4, 2006--Xanthus Pharmaceuticals, Inc., a privately-held oncology drug development company, today announced the completion of enrollment of its Phase 2 study of Xanafide(R) (amonafide malate) for the treatment of patients with secondary acute myeloid leukemia (AML).

"The completion of enrollment in this trial is another milestone Xanthus is pleased to announce as our pipeline of products continues to advance," stated Richard T. Dean, Ph.D., Chief Executive Officer at Xanthus. "The progression of this therapeutic candidate is an example of Xanthus' commitment to the development of products that address hematological malignancies that pose an unmet medical need."

"We are very pleased to announce the completion of enrollment to this Phase 2 study of Xanafide, and look forward to finishing the trial in due course," stated Robert L. Capizzi, M.D., Senior Vice President, and Chief Medical Officer at Xanthus. "Due to an excellent rate of accrual, we have accomplished full enrollment months earlier than we had anticipated."

About the Xanafide(R) Phase 2 study

The Phase 2 study is being conducted at multiple centers in North America and enrolled patients with secondary AML (patients with antecedent myelodysplastic syndrome or prior exposure to leukemogenic therapy). In this study, patients receive a daily dose of Xanafide for five days in combination with a standard dose of ara-C as a continuous infusion for 7 days. The primary endpoint of this study is the rate of complete remission, and secondary endpoints include duration of remission, overall survival and safety.

About Xanafide(R) and Secondary AML

Xanafide (amonafide malate) is an ATP-independent topoisomerase 2 inhibitor that the Company is developing for the treatment of secondary acute myeloid leukemia (AML) and related disorders. Patients with secondary AML represent a poor prognosis population in terms of response rates and duration of response to currently available therapies. While de novo AML is currently treated by approved drugs for this first-line indication, no effective therapies are approved specifically for patients with secondary AML. In a Phase 1 study conducted in patients with poor-risk AML, amonafide and ara-C exhibited particularly promising clinical results in patients with secondary AML and in some cases, resulted in complete or near-complete remissions.

About Xanthus Pharmaceuticals, Inc.

Xanthus Pharmaceuticals, Inc. is developing a portfolio of novel, clinical-stage, small-molecule oncology candidates through a management team whose accomplished track record encompasses all aspects of drug development, from discovery through regulatory approval and commercialization. The Company is applying its expertise both to

advance its current pipeline and expand it into indications of unmet medical need beyond oncology.

Xanthus is headquartered in Cambridge, Massachusetts with an additional facility in Montreal, Quebec. More information is available at www.xanthus.com.

This press release contains forward-looking statements concerning Xanthus that involve a number of risks and uncertainties. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words, "believes," "anticipates," "plans," "expects," "estimates," "intends," "should," "could," "will," "may," and similar expressions are intended to identify forward-looking statements. There are a number of important factors that could cause Xanthus' actual results to differ materially from those indicated by such forward-looking statements, including risks as to whether results obtained in early clinical studies or in preclinical studies such as the studies referred to above will be indicative of results obtained in future clinical trials or warrant additional trials; whether products based on Xanthus' technology will advance through the clinical trial process and receive approval from the United States Food and Drug Administration or equivalent foreign regulatory agencies; whether the company will have the cash resources to develop and commercialize its products; and whether the patent and patent applications owned or licensed by Xanthus will protect the Company's technology and prevent others from infringing it. Xanthus disclaims any intention or obligation to update any forward-looking statements.

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