

Synta Pharmaceuticals Announces Encouraging Results for Elesclomol in AML In Vitro and Patient Ex-Vivo Studies Presented at ASH

December 7, 2009

- Data demonstrate elesclomol activity against AML patient primary blast cells and cell lines
- Results support clinical evaluation in AML

LEXINGTON, Mass.--(BUSINESS WIRE)--Dec. 7, 2009-- Synta Pharmaceuticals Corp. (NASDAQ: SNTA), a biopharmaceutical company focused on discovering, developing, and commercializing small molecule drugs to treat severe medical conditions, today announced the results of a study evaluating the activity of elesclomol against acute myeloid leukemia (AML) cell lines and primary leukemic blast cells from AML patients, presented at the Annual Meeting of the American Society of Hematology (ASH) in New Orleans.

Elesclomol is a first-in-class oxidative stress inducer that triggers apoptosis (programmed cell death) in cancer cells. In laboratory studies, elesclomol has been shown to bind copper in plasma, facilitate its uptake into cells, and enable a transition between copper oxidation states once inside cancer cells. These reactions lead ultimately to the initiation of programmed cell death via the mitochondrial apoptosis pathway.

"Oxidative stress induction is a validated therapeutic approach in hematological malignancies. The results presented at ASH provide encouraging signs of activity by elesclomol, a first-in-class oxidative stress inducer, in a range of AML cell lines," said David Hedley, M.D., Senior Scientist, Division of Applied Molecular Oncology, Ontario Cancer Institute, and Department of Medical Oncology, Princess Margaret Hospital, Toronto. "These experiments evaluated the mechanism of action and activity of elesclomol as a single agent against cell lines representing common genetic aberrations seen in AML as well as primary blast cells from ten AML patients. Together, these results provide a strong rationale to evaluate elesclomol in this often difficult-to-treat patient population."

"The experiments conducted at the University of Toronto showed elesclomol was highly active against AML cell lines and primary blast cells from AML patients at concentrations substantially lower than those already achieved in cancer patients in clinical trials," said Vojo Vukovic, M.D., Ph.D., Senior Vice President and Chief Medical Officer, Synta. "Of particular interest were the ex vivo studies of primary AML blast cells from patients recently treated at Toronto, where all 10 samples of leukemic cells responded to exposure to elesclomol. These results provide a strong rationale for further exploring the potential of elesclomol in AML, a disease with high medical need and limited options for patients."

About Acute Myeloid Leukemia

Acute Myeloid Leukemia (AML) is a cancer of the blood and bone marrow that can progress quickly

if not treated. It is the most common acute leukemia affecting adults. The American Cancer Society (ACS) estimates that in 2009 about 12,810 new cases and about 9,000 deaths will occur from AML in the United States.

About Synta Pharmaceuticals

Synta Pharmaceuticals Corp. is a biopharmaceutical company focused on discovering, developing, and commercializing small molecule drugs to extend and enhance the lives of patients with severe medical conditions, including cancer and chronic inflammatory diseases. Synta has a unique chemical compound library, an integrated discovery engine, and a diverse pipeline of clinical- and preclinical-stage drug candidates with distinct mechanisms of action and novel chemical structures. All Synta drug candidates were invented by Synta scientists using our compound library and discovery capabilities. For more information, please visit www.syntapharma.com.

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Source: Synta Pharmaceuticals Corp.

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