Synta Announces STA-9090 ResultsDemonstrating Potent in vitro and in vivo Activity in AML

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- Results presented at hematologic malignancies conference in Singapore -
- STA-9090 inhibits WT1, a key driver of leukemias -
- STA-9090 currently being studied in two AML clinical trials -

LEXINGTON, Mass., Feb 08, 2010 (BUSINESS WIRE) -- Synta Pharmaceuticals Corp. (NASDAQ: SNTA) today announced that preclinical results presented at the "Bridging the Gap 2010" Hematologic Conference, held in Singapore City, Singapore, February 5-7, 2010, shows that STA-9090, a potent inhibitor of heat shock protein 90 (Hsp90), inhibits the Wilms' tumor 1 (WT1) protein, a key transcription factor that drives disease progression in acute myeloid leukemia (AML) as well as certain other leukemias. STA-9090 is currently enrolling patients in two clinical trials in AML and other hematologic cancers.

"There is no established therapy that durably inhibits WT1 oncogenic functions, which means there is a tremendous urgency to develop new therapeutic options for patients whose cancer is driven by this transcription factor," said Swaminathan Padmanabhan, M.D., Cancer Therapy and Research Center at the University of Texas Health Science Center at San Antonio. "In these studies, STA-9090 potently inhibited WT1 expression and demonstrated greater potency than the first generation Hsp90 inhibitor 17-AAG. Targeting WT1 expression by Hsp90 inhibitors such as STA-9090 may offer new strategies to limit the survival promoting effects of WT1 in myeloid leukemias including AML."

In *in vitro* experiments, STA-9090 reduced the expression of WT1 in a dose-dependent manner in myeloid leukemic cells. *In vivo* results demonstrated inhibition of Hsp90 blocked tumor growth in a xenograft tumor model using leukemia cells expressing WT1. WT1 down-regulation by STA-9090 was also observed in primary myeloid leukemic blast cells isolated from AML patients.

"There is a very high need for new treatment options for patients with AML," said Vojo Vukovic, M.D., Ph.D., Senior Vice President and Chief Medical Officer, Synta Pharmaceuticals. "The results presented today provide insight both into the underlying biology of what drives AML and into the potential role that STA-9090 could play in treating this disease. We are very encouraged with the ongoing clinical studies in hematologic malignancies, where STA-9090 has shown preliminary signs of clinical activity in patients and has been well tolerated to date."

About STA-9090

STA-9090 is a potent, synthetic, small-molecule Hsp90 inhibitor, with a chemical structure unrelated to the first-generation, ansamycin family of Hsp90 inhibitors including 17-AAG and IPI-504. In preclinical studies, STA-9090 has shown potency up to 100 times greater than the first-generation Hsp90 inhibitors as well as activity against a wider range of kinases. In *in vitro* and *in vivo* models,

STA-9090 has shown potent activity against a wide range of cancer types, including lung, prostate, colon, breast, gastric, pancreatic, melanoma and certain hematologic cancers - as well as potent activity against cancers resistant to imatinib (Gleevec(R)), sunitinib (Sutent(R)), erlotinib (Tarceva(R)), and dasatanib (Sprycel(R)).

Synta is currently conducting Phase 2 trials in non-small cell lung cancer (NSCLC) and gastrointestinal stromal tumors (GIST), two Phase 1/2 clinical trials of STA-9090 in hematologic cancers and two Phase 1 trials of STA-9090 in solid tumor cancers. The most common adverse events observed to date have been fatigue and gastrointestinal toxicities, which were manageable and reversible. Information on clinical trials with STA-9090 can be found at http://www.clinicaltrials.gov (AML trial identifiers: NCT00964873 and NCT00858572).

About Hsp90

Hsp90 is a chaperone protein required for the proper folding and activation of other cellular proteins, particularly kinases. Many of these "client proteins" of Hsp90 - such as AKT, BCR-ABL, BRAF, KIT, MET, EGFR, FLT3, HER2, PDGFRA, VEGFR - have been shown to be critical to cancer cell growth, proliferation, and survival and are the targets of clinically validated cancer drugs. In preclinical studies, inhibiting Hsp90 causes the degradation of multiple client proteins and leads to cancer cell death. Because mutated kinases which no longer respond to treatment with kinase inhibitors remain dependent on Hsp90 for their activity, inhibiting Hsp90 offers the potential for treating cancers that have become resistant to targeted therapies such as kinase inhibitors.

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 http://www.syntapharma.com.

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SOURCE: Synta Pharmaceuticals Corp.

Synta Pharmaceuticals Corp.
Rob Kloppenburg, 781-541-7125
fax: 781-274-8228
http://www.syntapharma.com