Synta Announces First Patient Treated in Clinical Trial of STA-9090 in Combination with Docetaxel in Solid Tumors

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First combination trial of potent second-generation Hsp90 inhibitor

LEXINGTON, Mass., Aug 24, 2010 (BUSINESS WIRE) -- Synta Pharmaceuticals Corp. (NASDAQ: SNTA), a biopharmaceutical company focused on discovering, developing, and commercializing small molecule drugs to treat severe medical conditions, today announced that the first patient has been treated in its clinical trial of STA-9090 in combination with docetaxel for the treatment of advanced solid tumor malignancies. This is the first clinical trial of STA-9090, a potent second-generation, small-molecule Hsp90 inhibitor with a chemical structure unrelated to the first-generation, ansamycin family of Hsp90 inhibitors (e.g., 17-AAG or IPI-504), in combination with another anti-cancer agent. Recent studies support synergistic anti-cancer activity of taxanes and Hsp90 inhibitors[1-9].

"The scientific rationale for combining an Hsp90 inhibitor with taxanes is well established based on preclinical and prior clinical studies," said Suresh Ramalingam, M.D., Associate Professor, Department of Hematology/Medical Oncology and Chief of Medical Oncology, Winship Cancer Institute of Emory University. "STA-9090 has demonstrated high potency, early signs of clinical activity, and a favorable safety profile that make it ideal for combinations with docetaxel and other cytotoxic agents."

"The broad range of anti-cancer activity of docetaxel will make this combination an attractive option for several organ site malignancies including non-small cell lung, breast, prostate, head and neck, and gastric cancers," said R. Donald Harvey, Pharm.D., Assistant Professor of Hematology and Medical Oncology and Director of the Phase I Clinical Trials Program at Emory University. "The combination of STA-9090 and docetaxel could possibly expand the therapeutic potential of both agents." Docetaxel is also known to be active in ovarian, bladder, esophageal cancers, small cell lung cancer and sarcoma.

STA-9090 is currently being studied in 11 clinical trials including trials in non-small cell lung cancer (NSCLC), gastrointestinal stromal tumors (GIST), colorectal cancer, gastric cancer, small cell lung cancer (SCLC), acute myeloid leukemia (AML), and hepatocellular carcinoma. Additional trials will be initiated this year with a total of up to 15 trials expected by the end of 2010.

"We believe that STA-9090 is the leading Hsp90 inhibitor in clinical development today based on the encouraging safety profile and clinical activity seen to date, as well as the breadth of our clinical program," said Vojo Vukovic, M.D., Ph.D., Senior Vice President and Chief Medical Officer, Synta Pharmaceuticals. "Combining STA-9090 with established anti-cancer drugs begins a second stage of exploring the ability of this compound to unlock the true potential of Hsp90 inhibition."

Study Design

The Phase 1, open-label, dose escalation study is designed to determine the recommended doses for the combination of STA-9090 and docetaxel in subjects with solid tumor malignancies. Patients must have histologically confirmed malignancy (ECOG Performance Status less-than or equal to 2) that is metastatic or unresectable and evidence of disease progression prior to study entry. If patients have received prior treatment with docetaxel, there must be evidence of persistent or progressive disease. Secondary objectives will be to define the dose-limiting toxicities (DLT), pharmacokinetics, safety and tolerability as well as anti-tumor activity of the combination of STA-9090 and docetaxel. Dose escalation will continue until recommended doses are defined and then an additional cohort of 12-18 subjects will be enrolled to obtain additional safety and pharmacokinetic data. Subjects tolerating STA-9090 in combination with docetaxel can continue treatment until disease progression.

About STA-9090

STA-9090 is a potent second-generation, small-molecule Hsp90 inhibitor, with a chemical structure unrelated to the first-generation, ansamycin family of Hsp90 inhibitors (e.g., 17-AAG or 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, gastrointestinal stromal tumors (GIST), melanoma, AML, chronic myeloid leukemia, Burkitt's lymphoma, diffuse large B-cell lymphoma, and multiple myeloma - as well as potent activity against cancers resistant to imatinib (Gleevec$^{(R)}$), sunitinib (Sutent$^{(R)}$), erlotinib (Tarceva$^{(R)}$), and dasatinib (Sprycel$^{(R)}$).

In addition to the docetaxel combination trial announced today, STA-9090 is currently being evaluated in 10 clinical trials: six Phase 2 trials in solid tumor cancers - non-small cell lung cancer, gastrointestinal stromal tumors, colon cancer, gastric cancer, hepatic cancer and small cell lung cancer; two trials in hematologic cancers; and two Phase 1 solid tumor trials. Trials in colon, gastric, hepatic, and small cell lung cancer are investigator-sponsored. Information on clinical trials with STA-9090 can be found at www.clinicaltrials.gov.

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.

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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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statements. Such statements, including statements relating to the timing, developments and progress of our STA-9090 development program, reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such forward-looking statements, including those described in "Risk Factors" of our Form 10-K for the year ended December 31, 2009 as filed with the Securities and Exchange Commission. Synta undertakes no obligation to publicly update forward-looking statements, whether because of new information, future events or otherwise, except as required by law.

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