Synta Pharmaceuticals Names Dr. Vojo Vukovic, Vice President, Clinical Research

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Appointment Brings Expertise in Oxidative Stress Induction in the Treatment of Cancer

LEXINGTON, Mass.--(BUSINESS WIRE)--Feb. 9, 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 appointment of Vojo Vukovic M.D., Ph.D. as Vice President, Clinical Research. Reporting to Eric Jacobson, M.D., Senior Vice President and Chief Medical Officer, Dr. Vukovic will be the Synta medical lead for the Company's most advanced oncology product candidate, elesclomol, and will support the implementation of a broad development strategy for elesclomol.

"Dr. Vukovic has a unique combination of scientific and clinical experience that will benefit Synta. His research into the biology of oxidative stress induction, the mechanism by which our lead cancer drug candidate, elesclomol, acts, and his experience in developing Sutent(R) and other anti-cancer success stories, make him a terrific addition to our oncology team," said Safi R. Bahcall, Ph.D., President and CEO. "We are excited to have Dr. Vukovic join Synta at this critical time, as we prepare for substantial growth in our elesclomol and other cancer programs."

Vojo Vukovic M.D., Ph.D. has over 15 years of experience in oncology drug development. He joins Synta from Pfizer Inc. where he was Global Medical Lead for Sutent(R) and axitinib in a number of cancer indications. Prior to Pfizer, he served in key medical and regulatory roles at Aventis Pasteur, Ortho Biotech, ILEX Oncology, and BioNumerik Pharmaceuticals. Over the course of his career, Dr. Vukovic has been responsible for over 100 Phase 1 to Phase 4 clinical studies in cancer indications including melanoma, breast, ovarian, lung, pancreatic, renal, brain, NHL, and certain leukemias. Dr. Vukovic was a post-doctoral fellow at Ontario Cancer Institute, Toronto in Ontario and Institute for Cell Biology in Essen, Germany where he studied, among other topics, oxidative stress and the tumor microenvironment.

"This is a tremendously exciting time to be joining Synta. I believe we are at the cusp of establishing oxidative stress induction as a new therapeutic approach in oncology," said Dr. Vukovic. "This treatment approach, if confirmed with the lead indication of metastatic melanoma, has great potential in other high-oxidative-stress tumor types such as breast, prostate, ovarian, and pancreatic cancers. It is a very rare opportunity to join a team that is developing a potential new therapeutic class of drugs in oncology; it is rarer still to be able to do so in an environment that combines a dynamic, high-energy, entrepreneurial culture; multiple first-in-class programs, all internally developed; a proven discovery platform; and a strong financial position. I am very pleased to join Synta and to be able to contribute to realizing the potential of these programs to benefit patients around the world."

About Elesclomol

Elesclomol is an investigational first-in-class oxidative stress inducer that triggers apoptosis (programmed cell death) in cancer cells. Cancer cells operate at high levels of reactive oxygen species, or oxidative stress. Elesclomol acts by increasing the level of oxidative stress in cancer cells even further, beyond sustainable levels, inducing apoptosis. This mechanism of action, called oxidative stress induction, represents a novel way of selectively targeting and killing cancer cells.

In a double-blind, randomized, controlled Phase 2b clinical trial in 81 patients with stage IV metastatic melanoma, elesclomol in combination with paclitaxel met the primary endpoint, doubling the median time patients survived without their disease progressing, compared to paclitaxel alone ($p = 0.035$). The most common adverse events in the elesclomol plus paclitaxel group included fatigue, alopecia, constipation, nausea, hypoaesthesia, arthralgia, insomnia, diarrhea, and anemia.

A pivotal Phase 3 clinical trial of elesclomol in combination with paclitaxel in patients with stage IV metastatic melanoma (the SYMMETRY trial) has completed enrollment; a Phase 1/2 trial in hormone-refractory prostate cancer, in combination with docetaxel, is ongoing. Phase 2 trials in other indications, and in combination with other agents, are planned.

About Oxidative Stress

Oxidative stress in cells is the presence of elevated levels of reactive oxygen species (ROS) such as oxygen radicals and hydrogen peroxide. ROS can be generated by many processes and stimuli, including ordinary cell metabolism, exposure to heat or radiation, or attack by bacteria or viruses. Because ROS can react chemically with different proteins and other elements of a cell, altering their normal function, prolonged exposure to elevated levels of ROS can cause serious damage to a cell. To protect against this damage, cells have natural defense mechanisms – anti-oxidant abilities – to clear excessive levels of ROS and to repair the disruption they cause.

Normal, non-cancer cells typically function at a low, steady-state level of oxidative stress. Their strong anti-oxidant capacity guards against prolonged, excessive levels of ROS. Cancer cells, however, typically operate at a much higher level of oxidative stress than normal cells, and have a greatly diminished anti-oxidant capacity. This diminished capacity to clear ROS leaves them vulnerable to further increases in oxidative stress. In particular, when ROS levels exceed a natural breaking point, continued survival of the cell becomes unsustainable. At levels of ROS above this breaking point, a switch inside the mitochondria is triggered that causes the cell to initiate programmed cell death, also known as apoptosis.

By elevating ROS, an oxidative stress inducer such as elesclomol exploits this difference between cancer cells and normal cells. Elesclomol has been observed to have little to no effect *in vitro* on most normal cells. In contrast, elesclomol has been observed to potently induce apoptosis in cancer cells. In preclinical models elesclomol showed potent anti-cancer activity against a broad range of cancer cell types, as well as an ability to enhance the efficacy of certain chemotherapy agents with minimal additional toxicity.

Oxidative stress induction represents a novel approach to treating cancer. It is distinct from chemotherapy, from "targeted" agents such as kinase inhibitors and antibodies, and from angiogenesis inhibitors in that OS inducers exploit a fundamentally different vulnerability of cancer cells – the elevated levels of reactive oxygen species.

For more on oxidative stress and cancer see for example J. Fruehauf et al, Clin Cancer Res 2007;13

(3) and references therein; for more on oxidative stress in melanoma see for example H. Wittgen et al, Melanoma Research 2007;17 (400) and references therein.

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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This media release may contain forward-looking statements about Synta Pharmaceuticals Corp. Such forward-looking statements can be identified by the use of forward-looking terminology such as "will," "would," "should," "expects," "anticipates," "intends," "plans," "believes," "may," "estimates," "predicts," "projects," or similar expressions intended to identify forward-looking statements. Such statements, including statements relating to the potential therapeutic indications for elesclomol and our other oncology drug candidates, 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, 2007 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.

Source: Synta Pharmaceuticals Corp.

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