SYNDAX ANNOUNCES PUBLICATION OF ENTINOSTAT NSCLC DATA IN *CANCER RESEARCH*

--Entinostat plus Vidaza reduced tumor burden in animal models—

--Results have been replicated in phase 2 trial--

Waltham, Mass. - January 11, 2011 - Syndax, a clinical-stage epigenetics oncology company, announced publication of data of entinostat combined with the demethylating agent Vidaza® (azacitidine) showing effect in reducing tumor burden in differentiated tumor cells in animal tumor models of non-small cell lung cancer (NSCLC). The data is being published in the January 15, 2011 issue of *Cancer Research*.

"These findings demonstrate the promise for epigenetic therapy in cancer management and provide us with important new insights to guide further development of human treatments for lung cancer," said Steven Belinsky, Ph.D., vice president for academic research, director, lung cancer program, Lovelace Respiratory Research Institute. "Epigenetic therapy may circumvent the problem of tumor heterogeneity by inducing the re-expression of multiple tumor suppressor genes essential for abrogating cancer cell survival and proliferation."

The purpose of the study was to determine the efficacy of a demethylating agent, Vidaza, alone or in combination with a histone deacetylase inhibitor (HDACi), entinostat, on the growth of tumors engrafted in the lungs of the nude rat and on reprogramming of the epigenome. Researchers developed an orthotopic lung cancer model in which xenografts of human lung cancer-derived cell lines are efficiently engrafted throughout the lungs of the nude rat. The study showed that combining the HDACi entinostat with the demethylating agent Vidaza profoundly affected growth of K-ras/p53 mutant lung adenocarcinomas engrafted orthotopically in immunocompromised nude rats by targeting and ablating pleomorphic cells that occupied up to 75% of the tumor masses.

"These exciting findings of entinostat combined with Vidaza in a validated animal model of lung cancer support ongoing clinical efforts with epigenetic therapy in solid tumors and provide a foundation for identification and development of patient selection tools for this novel therapeutic approach," said Joanna Horobin, M.D., president and chief executive officer of Syndax. "These results have been confirmed in a phase 2 clinical trial of entinostat and Vidaza in patients with advanced NSCLC who had progressed after a median of three prior therapies giving us hope that this combination could become a much needed treatment option in the future for this patient population."

Similar results to the response seen in this orthotopic model were seen in a phase 2 trial of Vidaza and entinostat in heavily pretreated patients with relapsed advanced NSCLC. Progressive disease was controlled in 10 of 28 evaluable patients, including one complete response, one partial response and eight patients with disease stabilization of at least four months. These results were presented by Dr. Rosalyn Juergens from Johns Hopkins University School of Medicine at the 13th World Conference on Lung Cancer in 2009.

About Non-Small Cell Lung Cancer (NSCLC)

Non-small cell lung cancer, a disease in which malignant cells form in the tissues of the lungs, is the most common type of lung cancer. The three main types of non-small cell lung cancer are squamous cell carcinoma, large cell carcinoma, and adenocarcinoma. Each year there are more than 200,000 cases of newly diagnosed advanced NSCLC. About 60% of patients present with advanced NSCLC, meaning it has spread beyond the lung, when they are seen by a doctor. The five-year survival rate is less than 10 percent for patients with advanced NSCLC.

About Entinostat

Entinostat is an orally bioavailable, highly selective, class I histone deacetylase (HDAC) inhibitor with a long half-life that allows for weekly or every-other-week dosing. Entinostat has shown promise in phase two randomized clinical trials and is being studied in numerous phase 2 clinical trials including a trial in advanced breast cancer patients in combination with aromatase inhibitors and in a Hodgkin's lymphoma trial as a single agent. Under a Cooperative Research and Development Agreement (CRADA) with the NCI, entinostat also is being studied in multiple types of solid tumors and hematologic cancers.

Research has shown that HDACs are involved in the expression of various genes that regulate cell growth, differentiation and apoptosis. Such genes are frequently silenced in cancer cells through the over-expression of enzymes including HDACs. HDACs are therefore recognized as promising targets for cancer treatment. Further, studies have demonstrated that HDAC inhibition can significantly enhance anti-cancer activity when used in combination with a broad range of anti-cancer agents. The potential therefore exists to overcome tumor resistance to targeted agents.

About Syndax

Syndax Pharmaceuticals, Inc. is a Waltham, MA-based, oncology-focused pharmaceutical company. Syndax is building a portfolio of new oncology products to extend and improve the lives of patients by developing and commercializing novel cancer therapies in optimized, mechanistically driven combination regimens. Formed in 2005, the company's intellectual property is based on work from scientific founder Ronald Evans, Ph.D., recipient of the 2004 Albert Lasker Prize for Basic Medical Research, a Member of the National Academy of Sciences, a professor at the Salk Institute for Biological Studies and a Howard Hughes Medical Institute Investigator. Syndax has worldwide rights to develop and commercialize entinostat and is backed by top-tier Venture Capital firms: Domain Associates, MPM Capital, Avalon, Pappas and Forward Ventures. For more information please visit www.syndax.com.

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