

Synta Announces Presentation of Results from an Investigator-Sponsored Phase 1 Trial of Ganetespib in HER2+ Metastatic Breast Cancer at the 2014 San Antonio Breast Cancer Symposium

December 12, 2014

SAN ANTONIO--(BUSINESS WIRE)--Dec. 12, 2014-- Synta Pharmaceuticals Corp. (NASDAQ: SNTA) today announced presentation of preliminary results from an investigator-sponsored phase 1 trial, designed to evaluate ganetespib in combination with paclitaxel and trastuzumab in women with HER2+ metastatic breast cancer (MBC) refractory to other HER2 inhibitors. The results are being presented during a poster session at the 2014 San Antonio Breast Cancer Symposium in San Antonio, Texas.

The phase 1 trial, conducted by physicians at New York University Langone Medical Center and Memorial Sloan Kettering Cancer Center, enrolled six heavily pretreated patients who received prior to entering the trial a median of 3.5 anti-HER2 treatments in the metastatic setting (range 3-4), including trastuzumab, pertuzumab, and ado-trastuzumab emtansine (T-DM1).

Of the five patients evaluable for efficacy, partial tumor response was observed in one patient who remains on study, and four patients achieved stable disease ranging in duration from 11 to 29 weeks. Median Progression Free Survival was 19.4 weeks and the observed Clinical Benefit Rate (proportion of patients achieving objective response or stable disease greater than 24 weeks) was 60%.

Consistent with previously reported results for ganetespib, diarrhea, and fatigue were the most common adverse events associated with the combination treatment and were mostly Grade 1 or 2 in severity.

"Ganetespib targets the heat shock protein 90 (HSP90), a molecular chaperone critical to the activity of multiple oncoproteins of which HER2 is one of the most sensitive to HSP90 inhibition," said Dr. Komal Jhaveri, New York University Langone Medical Hospital, Principal Investigator of the trial. "We are encouraged by the ganetespib combination safety and preliminary activity observed in this phase 1 trial in HER2 patients who are refractory to currently available HER2 therapies."

"Our findings showing safety and activity of ganetespib combination therapy in refractory HER2+ breast cancer are consistent with ganetespib single agent activity demonstrated previously in heavily pretreated HER2+ patients as well as in the first-line setting (ENCHANT trial)," said Shanu Modi, Memorial Sloan-Kettering Cancer Center, Co-Investigator of the trial. "We therefore plan to further evaluate ganetespib in combination with trastuzumab and pertuzumab for HER2+ MBC."

Dr. Vojo Vukovic, Chief Medical Officer, Synta added: "We look forward to working with the investigators on ganetespib combination trials in patients with metastatic breast cancer as well as the ongoing I-SPY 2 trial in the neoadjuvant setting."

A copy of this poster presentation may be found in the Ganetespib Presentations section of the Company's website, www.syntapharma.com.

About Ganetespib

Ganetespib, an investigational drug candidate, is a selective inhibitor of heat shock protein 90 (Hsp90), a molecular chaperone which controls the folding and activation of a number of client proteins that drive tumor development and progression. Many solid and hematologic tumors are dependent on Hsp90 client proteins including proteins involved in "oncogene addiction" (ALK, HER2, mutant BRAF and EGFR, androgen receptor, estrogen receptor, and JAK2); proteins involved in resistance to chemotherapy and radiation therapy (ATR, BCL2, BRCA1/2, CDK1/4, CHK1, survivin, and WEE1); proteins involved in angiogenesis (HIF-1alpha, VEGFR, PDFGR, and VEGF); and proteins involved in metastasis (MET, RAF, AKT, MMPs, HIF-1alpha, and IGF-1R). In preclinical models, inhibition of Hsp90 by ganetespib results in the inactivation, destabilization, and eventual degradation of these cancer-promoting proteins. Ganetespib is being evaluated in trials in lung cancer, breast cancer, and other tumor types. The most common adverse event seen to date has been transient, mild or moderate diarrhea, which has been manageable with standard supportive care. Information on these trials can be found at www.clinicaltrials.gov. Ganetespib has received Fast Track designation from FDA for second-line treatment of non-small cell lung adenocarcinoma in combination with docetaxel.

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 its compound library and discovery capabilities. For more information, please visit www.syntapharma.com.

Safe Harbor Statement

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", "continues", "projects", or similar expressions intended to identify forward-looking statements. Such statements, including statements relating to, the efficacy of the combination of ganetespib plus paclitaxel with trastuzumab as measured by objective response rate, duration of response, progression free survival, and clinical benefit rate, the encouraging activity of the combination of ganetespib plus paclitaxel plus trastuzumab in HER2+ breast cancer which is refractory to other HER2 targeting agents, the plan to study ganetespib in combinations for HER2+ MBC, the association of ganetespib monotherapy with clinical activity in refractory or first-line HER2+ MBC treatment settings, the feasibility of combination with ganetespib in HER2+ MBC, the intent to work with these and other investigators on additional ganetespib combination trials for

HER2+ MBC, the I-SPY 2 treatment plan for ganetespib, reflect Synta's 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, 2013 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.

Synta Pharmaceuticals Corp. Investors: Daniel Cole, 781-541-7250 dcole@syntapharma.com or Argot Partners Andrea Rabney, 212-600-1494 andrea@argotpartners.com or

Media: Argot Partners Eliza Schleifstein, 917-763-8106 eliza@argotpartners.com