Onconova Affirms Planned Completion of Pivotal Phase 3 INSPIRE Study of Rigosertib in Myelodysplastic Syndromes by 1H20 And Provides Research & Development Update

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NEWTOWN, Pa., Oct. 24, 2019 (GLOBE NEWSWIRE) -- Onconova Therapeutics, Inc. (NASDAQ:ONTX), a Phase 3-stage biopharmaceutical company focused on discovering and developing novel products to treat cancer, with a focus on myelodysplastic syndromes (MDS), announced that the Company believes it remains on target to report top-line data from the global Phase 3 INSPIRE Trial with intravenous (IV) rigosertib in second-line, higher-risk MDS patients in the first half of 2020 following full enrollment and 288 death events. The Company anticipates completion of the INSPIRE Trial in the first half of 2020 based on approaching 90 percent or 324 randomized patients of the required 360 randomized patients, and the number of confirmed death events reached to date.

Steven M. Fruchtman, M.D., President and Chief Executive Officer, stated, “Enrollment in our global Phase 3 INSPIRE Trial with IV rigosertib in second-line, higher-risk MDS patients is progressing. We are approaching 90 percent of planned enrollment. Based on enrollment and the number of reported events reached, which exceeded 75% of the required 288 events at end of September 2019, we continue to anticipate reporting top-line data in the first half of 2020 following full enrollment and 288 death events. Enrollment in Brazil is expected to begin in November, and we look forward to the Brazilian Association of Hematology, Hemotherapy and Cellular Therapy Congress in Rio de Janeiro, November 6-9.”

Dr. Richard Woodman, Chief Medical Officer of Onconova, continued, “Prior to readout of the INSPIRE trial, the Company plans to focus Onconova’s research and development activities on completing the INSPIRE trial. After completion of the INSPIRE trial, based on recent feedback from the FDA, we plan to conduct a randomized Phase 2 Trial with a control arm of single agent azacitidine for the continued development of oral rigosertib plus azacitidine in first-line higher-risk MDS patients. We also plan to consult with key opinion leaders on the design of a Phase 2 controlled study for submission to the FDA as the next step in the development of oral rigosertib. The proposed Phase 2 Study does not require a Special Protocol Assessment (SPA).”

In addition to the pivotal Phase 3 INSPIRE study, a Phase 1 study of rigosertib in combination with a PD-1 inhibitor for patients with progressive K-Ras mutated non-small cell lung cancer is expected to commence by early 2020 as an investigator-initiated study. Ras-mutated cancers represent about a third of all human cancers. We recently participated in the RAS Drug Discovery Summit in Boston and plan to participate in the next RAS Drug Discovery Summit in Vienna, Austria in February 2020. We are also working toward filing an IND for a Phase 1 trial of ON 123300, our investigational dual inhibitor of CDK4/6 + ARK5, which we believe has the potential to treat various cancers including refractory metastatic breast cancer. The IND has been submitted in China by our corporate partner Han X.

About Onconova Therapeutics, Inc.

Onconova Therapeutics, Inc. is a Phase 3-stage biopharmaceutical company focused on discovering and developing novel small molecule drug candidates to treat cancer, with a focus on Myelodysplastic Syndromes (MDS). Using a proprietary chemistry platform, Onconova has created a pipeline of targeted agents designed to work against specific cellular pathways that are important in cancer cells. Advanced clinical trials with the Company’s lead compound, rigosertib, are aimed at what the Company believes are unmet medical needs of patients with MDS. Onconova has conducted trials with two other research compounds and has a pre-clinical program with a CDK4/6 and Ark5 inhibitor, ON 123300.

For more information, please visit http://www.onconova.com.

About Myelodysplastic Syndromes

Myelodysplastic syndromes (MDS) are conditions that can occur when the blood-forming cells in the bone marrow become dysfunctional and thus produce an inadequate number of circulating blood cells. It is frequently associated with the presence of blasts or leukemic cells in the marrow. This leads to low numbers of one or more types of circulating blood cells, and to the need for blood transfusions. In MDS, some of the cells in the bone marrow are abnormal (dysplastic) and may have genetic abnormalities associated with them. Different cell types can be affected, although the most common finding in MDS is a shortage of red blood cells (anemia). Patients with higher-risk MDS may progress to the development of acute leukemia.

About Rigosertib

Rigosertib, Onconova’s lead candidate, is a proprietary Phase 3 small molecule. A key publication in a preclinical model demonstrated rigosertib’s ability to block cellular signaling by targeting RAS effector pathways (Divakar, S.K., et al., 2016: "A Small Molecule RAS-Mimetic Disrupts RAS Association with Effector Proteins to Block Signaling." Cell 165, 643). Onconova is currently in the clinical development stage with oral and IV rigosertib, including clinical trials studying single agent IV rigosertib in second-line higher-risk MDS patients (pivotal Phase 3 INSPIRE trial) and oral rigosertib plus azacitidine in first-line and refractory higher-risk MDS patients (Phase 2). Patents covering oral and injectable rigosertib have been issued in the US and are expected to provide coverage until at least 2037.

About the INSPIRE Phase 3 Clinical Trial

The **IN**ternational **S**tudy of **P**hase 3 **I**V **R**igos**E**rtib, or **INSPIRE**, clinical trial was finalized following guidance received from the U.S. Food and Drug Administration and European Medicines Agency. INSPIRE is a global, multi-center, randomized, controlled study to assess the efficacy and safety of IV rigosertib in higher-risk MDS (HR-MDS) patients who had progressed on, failed to respond to, or relapsed after previous treatment with a

hypomethylating agent (HMA) within nine cycles over the course of one year after initiation of HMA treatment. This time frame optimizes the opportunity to respond to treatment with an HMA prior to declaring treatment failure, as per NCCN Guidelines. Patients are randomized at a 2:1 ratio into two study arms: IV rigosertib plus Best Supportive Care versus Physician's Choice plus Best Supportive Care. The primary endpoint of INSPIRE is overall survival. The trial continued beyond the pre-specified interim analysis and is nearing its conclusion. Full details of the INSPIRE trial, such as inclusion and exclusion criteria, as well as secondary endpoints, can be found on clinicaltrials.gov (NCT02562443).

About IV Rigosertib

The intravenous form of rigosertib has been studied in Phase 1, 2, and 3 clinical trials involving more than 1000 patients, and is currently being evaluated in a randomized Phase 3 international INSPIRE trial for patients with HR-MDS after failure of HMA therapy.

About Oral Rigosertib

The oral form of rigosertib was developed to provide a potentially more convenient dosage form for use where the duration of treatment may extend to multiple years. This dosage form may also support combination therapy modalities. To date, over 400 patients have been dosed with the oral formulation of rigosertib in clinical trials. Combination therapy of oral rigosertib with azacitidine, the standard of care in HR-MDS, has also been studied. Currently, oral rigosertib is being developed as a combination therapy together with azacitidine for patients with higher-risk MDS who require HMA therapy. A Phase 1/2 trial of the combination therapy has been fully enrolled, and the preliminary efficacy and safety data was presented at The American Society of Hematology (ASH) Annual Meeting in December 2018 and will be updated at the upcoming ASH Meeting in December 2019.

Forward-Looking Statements

Some of the statements in this release are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995, and involve risks and uncertainties. These statements relate to Onconova expectations regarding the INSPIRE Trial and Onconova's other development plans. Onconova has attempted to identify forward-looking statements by terminology including "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should," "approximately" or other words that convey uncertainty of future events or outcomes. Although Onconova believes that the expectations reflected in such forward-looking statements are reasonable as of the date made, expectations may prove to have been materially different from the results expressed or implied by such forward-looking statements. These statements are only predictions and involve known and unknown risks, uncertainties, and other factors, including Onconova's ability to continue as a going concern, the need for additional financing, the success and timing of Onconova's clinical trials and regulatory approval of protocols, our collaborations, and those discussed under the heading "Risk Factors" in Onconova's most recent Annual Report on Form 10-K and quarterly reports on Form 10-Q. Any forward-looking statements contained in this release speak only as of its date. Onconova undertakes no obligation to update any forward-looking statements contained in this release to reflect events or circumstances occurring after its date or to reflect the occurrence of unanticipated events.

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