Onconova Therapeutics Announces Publication of Results from Phase 1/2 Study of Rigosertib in Patients with Myelodysplastic Syndromes (MDS) and MDS Progressed to Acute Myeloid Leukemia

November 15, 2017

- Rigosertib reduced or stabilized bone marrow blasts and improved peripheral blood counts
- Patients with response or stable disease had one year longer survival than non-responders
- Rigosertib was well tolerated and a recommended dose for further evaluation was established

NEWTOWN, Pa., Nov. 15, 2017 (GLOBE NEWSWIRE) -- Onconova Therapeutics, Inc. (Nasdaq:ONTX), a Phase 3 stage biopharmaceutical company focused on discovering and developing small molecule drug candidates to treat cancer, with a primary focus on Myelodysplastic Syndromes (MDS), today announced the publication of results from a Phase 1/2 study of rigosertib intravenous in patients with MDS and MDS which progressed to Acute Myeloid Leukemia (AML) in the journal, Leukemia Research. In the study, rigosertib reduced or stabilized bone marrow blasts and improved peripheral blood counts, and patients with response or stable disease had one year longer survival than non-responders. This study was conducted at the Mount Sinai School of Medicine, under the guidance of Dr. Lewis Silverman, a pioneer in developing treatments for patients with Higher-risk MDS.

This Phase 1/2, dose-escalating study of rigosertib enrolled 22 patients with higher-risk MDS and AML who had relapsed or were refractory to standard therapy and for whom no second-line therapies are FDA approved. Patients received 3 to 7-day continuous intravenous infusions of rigosertib, an inhibitor of Ras-effector pathways that interacts with the Ras Binding Domains (RBDs), common to several signaling proteins including Raf and PI3 kinase. Rigosertib was administered at doses of 650–1700 mg/m2/day intravenously in 14-day cycles.

Rigosertib was well tolerated for up to 23 cycles, with no treatment-related deaths. Only 18% of patients experienced treatment related serious adverse events (AEs). Common AEs were fatigue, diarrhea, pyrexia, dyspnea, insomnia, and anemia. Rigosertib exhibited biologic activity, with reduction or stabilization of bone marrow blasts and improved peripheral blood counts in a subset of patients. Ten of 19 evaluable patients (53%) demonstrated bone marrow and/or peripheral blood responses (n=4 MDS, n=1 AML) or stable disease (n=3 MDS, n=2 AML). Median survival was 15.7 and 2.0 months for responders and non-responders, respectively.

“The publication of results from this historical study provides support of the relationship between bone marrow blast response and improvement in overall survival in this group of patients with MDS and Acute Myeloid Leukemia, for whom no FDA approved treatments are currently available,” commented Ramesh Kumar, President and CEO of Onconova. “These data are fundamental to the rationale of the ongoing clinical studies in HR-MDS, including INSPIRE, where we are positioned for key milestones, beginning with a pre-planned interim analysis of our INSPIRE pivotal trial in the coming months.”

The publication can be accessed here.

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 primary focus on Myelodysplastic Syndromes (MDS). Rigosertib, Onconova's lead candidate, is a proprietary Phase 3 small molecule agent, which the Company believes blocks cellular signaling by targeting RAS effector pathways. 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. Onconova has three product candidates in the clinical stage and several pre-clinical programs. The advanced clinical trial with the Company’s lead compound, rigosertib, is aimed at what the Company believes are unmet medical needs of patients with MDS. For more information, please visit http://www.onconova.com.

About IV Rigosertib

The intravenous form of rigosertib has been employed in Phase 1, 2, and 3 clinical trials involving more than 800 patients, and is currently being evaluated in the randomized Phase 3 international INSPIRE trial for patients with higher-risk (HR) MDS, after failure of hypomethylating agent, or HMA, therapy.

About INSPIRE

The **IN**ternational **S**tudy of **P**hase III **I**V **R**igos**E**rtib, or INSPIRE, trial design was finalized following guidance received from the U.S. Food and Drug Administration and European Medicines Agency. INSPIRE is a multi-center, randomized controlled study to assess the efficacy and safety of IV rigosertib in HR-MDS patients who had progressed on, failed to respond to, or relapsed after previous treatment with an HMA within the first 9 months or 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 the National Comprehensive Cancer Network (NCCN) Guidelines. The trial will enroll approximately 225 patients randomized at a 2:1 ratio into two treatment arms: IV rigosertib plus Best Supportive Care versus Physician's Choice plus Best Supportive Care. The primary endpoint of INSPIRE is overall survival and an interim analysis is anticipated. 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 Oral Rigosertib

The oral form of rigosertib was developed to provide more convenient dosing for use where the duration of treatment may extend to multiple years. This dosage form also supports many combination therapy modalities. To date, 368 patients have been treated with the oral formulation of rigosertib. Initial studies with single-agent oral rigosertib were conducted in hematological malignancies, lower-risk MDS, and solid tumors. Combination therapy of oral rigosertib with azacitidine and chemoradiotherapy has also been explored. 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 results were presented in 2016. This novel combination is the subject of an issued US patent with earliest expiration in 2028.

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 future events or Onconova Therapeutics, Inc.'s future operations, clinical development of Onconova's product candidates and presentation of data with respect thereto, regulatory approvals, expectations regarding the sufficiency of Onconova's cash and other resources to fund operating expenses and capital expenditures, Onconova's anticipated milestones and future expectations and plans and prospects. 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. 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. 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 and current plans and future needs to scale back operations if adequate financing is not obtained, the success and timing of Onconova's clinical trials and regulatory approval of protocols, 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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Source: Onconova Therapeutics, Inc.