



April 7, 2014

Onconova Development Programs Highlighted in Seven Presentations at AACR Annual Meeting

NEWTOWN, Pa., April 7, 2014 (GLOBE NEWSWIRE) -- Onconova Therapeutics, Inc. (Nasdaq:ONTX), a clinical-stage biopharmaceutical company focused on discovering and developing novel products to treat cancer, today announced the presentation of seven abstracts at the American Association for Cancer Research (AACR) Annual Meeting in San Diego, CA, being held April 5-9, 2014. The presentations focus on the mechanism of action of rigosertib, and two IND-track preclinical programs that target important cancer metabolism and cell division proteins.

"The presentations at the AACR Annual Meeting underscore our deep pipeline and the breadth of our research and development efforts," commented Ramesh Kumar, Ph.D., President and CEO of Onconova. "Notably, the novel findings reported on rigosertib's mechanism of action represent a long-sought advance in the field of cancer biology where past efforts at targeting the important Ras pathway have not been successful and the approach of targeting the Ras Binding Domain may suggest potential applications across many tumor types. Further, the preclinical data for our IND-track programs highlight our early pipeline as well as our ongoing collaboration with GVK Biosciences. This collaboration (GBO) was established to advance preclinical programs towards clinical development."

The schedule and meeting location for the sessions, together with the abstract information, are listed below by program:

Rigosertib

Title: Targeting the Ras-Binding domain of RAS effector proteins by a small molecule inhibitor, Rigosertib

Abstract #: **LB-108**

Date: Monday, April 7, 2014

Time: 8:00 AM - 12:00 PM

Session Title: Late-Breaking Research: Experimental and Molecular Therapeutics 1

Location: Hall A-E, Poster Section 42

Presenter: Saikrishna A. Divakar, Ph.D., Icahn School of Medicine at Mount Sinai, New York, NY

Title: Downstream effects of rigosertib (ON 01910.Na) in cancer cells involves impairment of protein translation via eIF2 and eIF4

Abstract #: **4554**

Date: Tuesday, April 8, 2014

Time: 1:00 PM - 5:00 PM

Session Title: Cell Cycle Mechanisms of Anticancer Drug Action

Location: Hall A-E, Poster Section 31

Presenter: Salim Merali, Ph.D., Temple University School of Pharmacy, Philadelphia, PA

Title: RPL18A as putative target of rigosertib

Abstract #: **4595**

Date: Tuesday, April 8, 2014

Time: 1:00 PM - 5:00 PM

Session Title: Novel Therapeutic Targets

Location: Hall A-E, Poster Section 34

Presenter: Irina Oussenko, Ph.D., Icahn School of Medicine at Mount Sinai, New York, NY

Title: The molecular basis of activity of rigosertib (ON 01910.Na) in head and neck cancer cell lines

Abstract #: **5465**

Date: Wednesday, April 9, 2014

Time: 8:00 AM - 12:00 PM

Session Title: Cellular Response to Anticancer Drugs 1

Location: Hall A-E, Poster Section 31

Presenter: Anil Prasad, Ph.D., Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA

ON 123300

Title: Dual targeting of CDK4 and ARK5 using a novel kinase inhibitor ON123300 is effective in vitro and in vivo in Multiple Myeloma

Abstract #: **1324**

Date: Monday, April 7, 2014

Time: 8:00 AM - 12:00 PM

Session Title: Cell Cycle 1

Location: Hall A-E, Poster Section 14

Presenter: Deepak Perumal, Ph.D., Icahn School of Medicine at Mount Sinai, New York, NY

Title: Targeting of cyclin D/Rb/E2F and PI3K/AKT/MTOR pathways with ON 123300 as a therapeutic strategy for mantle cell lymphoma

Abstract #: **4519**

Date: Tuesday, April 8, 2014

Time: 1:00 PM - 5:00 PM

Session Title: Cell Cycle and PI3K/AKT Inhibitors

Location: Hall A-E, Poster Section 30

Presenter: Saikrishna A. Divakar, Ph.D., Icahn School of Medicine at Mount Sinai, New York, NY

GBO-006-1 (ON 1231320)

Title: Pharmacokinetics of PLK2 inhibitor GBO-006-1, developed as a novel first-in-class molecule to treat triple negative breast cancer

Abstract #: **4537**

Date: Tuesday, April 8, 2014

Time: 1:00 PM - 5:00 PM

Session Title: Cell Cycle and PI3K/AKT Inhibitors

Location: Hall A-E, Poster Section 30

Presenter: Arnab Roy Chowdhury, Ph.D., GVK Biosciences Pvt. Ltd., Hyderabad, India

About Onconova Therapeutics, Inc.

Onconova Therapeutics is a clinical-stage biopharmaceutical company focused on discovering and developing novel products to treat cancer. Onconova's clinical and pre-clinical stage drug development candidates are derived from its extensive chemical library and are designed to work against specific cellular pathways that are important in cancer cells, while causing minimal damage to normal cells. In addition to rigosertib, the Company's most advanced product candidate, two other candidates are in clinical trials, and several candidates are in pre-clinical stages. For more information, please visit <http://www.onconova.com>.

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, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995, which 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, and Onconova's 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 those discussed under the heading "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2013, filed by Onconova with the Securities and Exchange Commission.

Any forward-looking statements contained in this release speak only as of its date. We undertake 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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