UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): **December 9, 2013**

Onconova Therapeutics, Inc.

(Exact name of Registrant as specified in its charter)

Delaware	**001-36020**	**22-3627252**
(State or Other Jurisdiction of Incorporation or Organization)	(Commission File Number)	(I.R.S. Employer Identification No.)

375 Pheasant Run
Newtown, PA 18940
(267) 759-3680
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events

On December 9, 2013, Onconova Therapeutics, Inc. issued a press release, a copy of which is attached hereto as Exhibit 99.1 and incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits.

99.1 Press release issued by Onconova Therapeutics, Inc. dated December 9, 2013.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: December 10, 2013

Onconova Therapeutics, Inc.

By: /s/ Ajay Bansal
Name: Ajay Bansal
Title: Chief Financial Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press release issued by Onconova Therapeutics, Inc., dated December 9, 2013.

ONCONOVA
TARGETING CANCER | PROTECTING HEALTHY CELLS

Onconova Announces Presentation of Positive Data from Clinical Trials of Rigosertib in Myelodysplastic Syndromes (MDS) at the 2013 ASH Annual Meeting

NEWTOWN, PA, December 9, 2013 — Onconova Therapeutics, Inc. (NASDAQ: ONTX), a clinical-stage biopharmaceutical company focused on discovering and developing novel products to treat cancer, today announced two presentations relating to clinical trials of its most advanced product candidate, rigosertib, at the 55th American Society of Hematology (ASH) Annual Meeting in New Orleans, Louisiana, December 7-10, 2013. The presentations included data on efficacy, tolerability, and dosing regimen from the Phase 2 ONTARGET study of oral rigosertib in transfusion-dependent, lower risk MDS patients and response, overall survival, and longer-term follow-up data from a Phase 1/2 trial of intravenous (IV) rigosertib in higher risk post-hypomethylating agent-treated MDS and acute myeloid leukemia (AML) patients.

“The presentations at ASH reinforce the emerging therapeutic and safety/tolerability profiles of rigosertib, our small-molecule inhibitor of PI3K and PLK pathways, and underscore our commitment to develop rigosertib as a novel treatment for patients with MDS,” commented Ramesh Kumar, Ph.D., President and Chief Executive Officer of Onconova. “We look forward to the design of an approval-track trial of oral rigosertib in transfusion-dependent, lower risk MDS and top-line data from our Phase 3 pivotal trial in higher risk MDS.”

Data from oral rigosertib trials in lower risk MDS patients:

Azra Raza, M.D., Director, MDS Center, Columbia University Medical Center et al., presented a poster entitled “Oral Rigosertib (ON 01910.Na) Treatment Produces An Encouraging Rate Of Transfusion Independence In Lower Risk Myelodysplastic Syndromes (MDS) Patients; A Genomic Methylation Profile Is Associated With Responses.” The poster summarized data from the Phase 2 ONTARGET trial of oral rigosertib in transfusion-dependent, lower risk MDS patients.

- A combined response rate of 53% according to International Working Group criteria (IWG) was observed in 36 evaluable patients receiving the intermittent dosing schedule.
- Overall, transfusion independence was observed in 39% (14 of 36) of patients receiving at least eight weeks of intermittent rigosertib.
- In these patients, rigosertib induced transfusion independence when employed as a single agent or when used in combination with erythropoiesis-stimulating agents (ESA).
- The dose of 560 mg twice a day (BID) given for two weeks of a three-week cycle was found to be better tolerated than a continuous BID dosing schedule (three weeks of a three-week cycle). Nine patients received continuous dosing and the remainder (51 patients) received the intermittent dosing. The major adverse events were related to bladder toxicity and included dysuria, frequency of urination, and hematuria/cystitis. No treatment emergent myelosuppression was noted in this study.
- To address urinary adverse events, a modified dosing regimen with 560 mg in the morning and 280 mg in the afternoon was tested in a cohort. Although the follow-up of this cohort is still limited, of the 13 patients receiving the new regimen only one patient reported a Grade 2+ urinary event (8%).

- Employing a whole genome scan, a methylation signature comprising 50 loci was identified. This signature helped to relate transfusion independence with methylation profile in the 32 patients analyzed. A confirmation cohort of 20 additional patients is now being enrolled to further explore this potential prognostic tool.

A second Phase 2 clinical trial, the 09-07 study, is open to further explore the safety and the possible effects of oral rigosertib in transfusion-dependent, lower risk MDS patients who have failed ESA treatment.

Data from IV rigosertib trials in higher risk MDS patients:

Shyamala Navada, M.D., Assistant Professor, Icahn School of Medicine at Mount Sinai et al., presented a poster entitled, “Predictors of Response to Rigosertib In Patients with a Myelodysplastic Syndrome (MDS) or Acute Myeloid Leukemia (AML) Relapsed or Refractory to Hypomethylating Agents.” The poster summarized results from a Phase 1/2 study of IV rigosertib in patients with MDS and AML who had failed treatment with hypomethylating agents.

- All 22 patients enrolled in this study had been previously treated with hypomethylating agents. Thirteen had AML, eight had MDS, and one had chronic myelomonocytic leukemia (CMML).
- Patients were treated with IV rigosertib employing a small ambulatory pump.
- Of the 19 evaluable patients in this trial, 10 (53%) demonstrated either a reduction/stabilization in bone marrow blasts or improvement in their peripheral blood counts. Further, the median overall survival of these patients was 9.6 months versus 1.7 months for non-responders (p=0.001), thus suggesting a clear correlation between bone marrow blast response and increased overall survival following treatment with rigosertib.
- Employing the IWG criteria for response, 4 of 8 evaluable MDS patients in this study had a complete response (bone marrow CR), one had a partial response (bone marrow PR), one patient had stable disease, and two did not respond.
- Evaluation of bone marrow response or stable disease was found to be an early indicator of overall survival benefit. Among 21 patients, 10 who had a bone marrow response or stable disease had a median survival of 9.6 months, and the 11 patients who did not have a response or stable disease or were not assessed had a median survival of 1.7 months (HR= 0.29; P = 0.001).
- On an intent-to-treat (ITT) basis, the overall median survival of the eight MDS patients and the 14 AML/CMML patients in the study were 15 months and 2 months, respectively.
- Overall, IV rigosertib was well tolerated with urinary events reported in 9 of 19 patients.

Onconova recently completed enrollment in the Phase 3 ONTIME study in higher risk MDS patients who have failed treatment with hypomethylating agents. Top-line survival results from this trial are anticipated in the first quarter of 2014.

ASH 2012 Presentations Relating to Rigosertib

Abstract #2745

Oral Rigosertib (ON 01910.Na) Treatment Produces An Encouraging Rate Of Transfusion Independence In Lower Risk Myelodysplastic Syndromes (MDS) Patients; A Genomic Methylation Profile Is Associated With Responses

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Date: Sunday, December 8, 2013
Time: 6:30 PM - 8:30 PM
Session: 633. Myelodysplastic Syndromes: Poster II
Location: Ernest N. Morial Convention Center, Hall E
Presenter: Azra Raza, M.D., MDS Center, Columbia University Medical Center, New York, NY

Abstract #1527

Predictors Of Response To Rigosertib In Patients With a Myelodysplastic Syndrome (MDS) Or Acute Myeloid Leukemia (AML) Relapsing After Or Refractory To Hypomethylating Agents

Date: Saturday, December 7, 2013
Time: 5:30 PM - 7:30 PM
Session: 633. Myelodysplastic Syndromes: Poster I
Location: Ernest N. Morial Convention Center, Hall E
Presenter: Shyamala C. Navada, M.D., Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, New York, NY

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 as amended, Section 21E of the Securities Exchange Act of 1934 as amended, 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, 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 those discussed under the heading "Risk Factors" in our Registration Statement on Form S-1 originally filed with the Securities and Exchange Commission on June 14, 2013, as amended (Registration No. 333-189358).

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.

Contact:

Onconova Therapeutics
Benjamin Hoffman, 267-759-3680
bhoffman@onconova.us

or

MacDougall Biomedical Communications
Doug MacDougall, 781-235-3060
dmacdougall@macbiocom.com
