



ONCONOVA
THERAPEUTICS

Onconova Therapeutics and Pangea Biomed Enter into Research Collaboration to Identify Biomarkers of Response to Rigosertib

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Collaboration builds off clinical data demonstrating rigosertib's activity against PLK1 and may inform a precision medicine approach towards rigosertib's evaluation in new indications

Collaboration will leverage ENLIGHT, a pan-cancer response predictor scalable to all cancer types and all targeted and immune checkpoint blockade (ICB) oncology drugs

NEWTOWN, Pa. & TEL AVIV, Israel, March 23, 2023 (GLOBE NEWSWIRE) -- [Onconova Therapeutics, Inc.](#) (NASDAQ: ONTX), ("Onconova"), a clinical-stage biopharmaceutical company focused on discovering and developing novel products for patients with cancer, and [Pangea Biomed](#), a company combining machine learning and deep RNA analysis to expand access to precision oncology, today announced a research collaboration between the companies. The collaboration will leverage Pangea Biomed's proprietary algorithmic platform, ENLIGHT, with the goal of identifying biomarkers of response to Onconova's proprietary investigational product candidate rigosertib.

Rigosertib has a multi-faceted mechanism of action targeting proteins containing the RAS binding domain, allowing it to modulate the PI3K and PLK1 pathways, as well as the tumor immune microenvironment. Clinical data have suggested the anti-cancer activity of rigosertib plus checkpoint inhibition in KRAS-mutated non-small cell lung cancer, and of rigosertib monotherapy in advanced squamous cell carcinoma complicating recessive dystrophic epidermolysis bullosa, an ultra-rare condition driven by PLK1 overexpression.

"Rigosertib's ability to potently inhibit PLK1 and modulate the tumor immune microenvironment confers broad potential to treat a range of solid cancers," said Steven M. Fruchtman, M.D., President and Chief Executive Officer of Onconova. "By leveraging Pangea's AI platform to identify predictive biomarkers of response to rigosertib, we aim to inform a precision medicine approach to selecting additional PLK1-dependent tumors and other indications for its potential evaluation. We believe this approach will increase the probability of success for rigosertib's future development programs."

"Precision medicine is the future of oncology, but gaps in the industry's current biomarker approaches overly narrow patient populations for promising drugs," said Pangea Biomed Chief Executive Officer Tuvik Beker, Ph.D. "ENLIGHT goes beyond standard biomarkers to expand patient populations for targeted therapies, in addition to surfacing new biomarkers for existing drugs. We're hopeful our platform can help Onconova accelerate rigosertib's successful development in a variety of difficult-to-treat cancers."

Pangea Biomed's ENLIGHT platform is a pan-cancer response predictor that evaluates in vitro, preclinical, and clinical datasets to build genetic interaction maps that infer functional relationships between gene pairs to reveal tumor vulnerabilities to specified therapies. Onconova and Pangea Biomed will chart genetic interactions related to PLK1 to identify a biomarker of response to rigosertib based on its inhibitory activity against this protein. The ENLIGHT platform will then be applied to generate additional genetic interaction maps around other pathways targeted by rigosertib. Per a collaboration agreement between the companies, Onconova retains all rights to rigosertib and will own intellectual property that may result from the research collaboration.

About Onconova Therapeutics, Inc.

Onconova Therapeutics is a clinical-stage biopharmaceutical company focused on discovering and developing novel products for patients with cancer. The Company has proprietary targeted anti-cancer agents designed to disrupt specific cellular pathways that are important for cancer cell proliferation.

Onconova's novel, proprietary multi-kinase inhibitor narazaciclub (formerly ON 123300) is being evaluated in two separate and complementary Phase 1 dose escalation and expansion studies. These trials are currently underway in the United States and China. Based on preclinical and clinical studies of CDK 4/6 inhibitors, Onconova is also planning a combination trial of narazaciclub with estrogen blockade in advanced endometrial cancer, as well as its clinical study in additional indications.

Onconova's product candidate rigosertib is being studied in multiple investigator-sponsored studies, including a dose-escalation and expansion Phase 1/2a study of oral rigosertib in combination with nivolumab in patients with KRAS+ non-small cell lung cancer, and a Phase 2 program evaluating rigosertib monotherapy in advanced squamous cell carcinoma complicating recessive dystrophic epidermolysis bullosa (RDEB-associated SCC).

For more information, please visit www.onconova.com.

About Pangea Biomed

Founded in 2018, Pangea Biomed developed ENLIGHT – the world's most advanced multi-cancer, multi-therapy response predictor. By combining machine learning and deep RNA analysis, the company is mapping tumor molecular signatures to dynamically and adaptively personalize cancer care for a healthier world. Pangea aims to bring effective precision oncology to cancer patients, improve oncology drug development and empower oncologists to treat patients with success. Pangea is backed by NFX, and its technology has been published in leading journals, including [Cell](#), [Med. Science Advances](#), [Cancer Cell](#), [Journal for ImmunoTherapy of Cancer](#) and [Nature Communications](#).

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's expectations regarding its clinical development and trials, its product candidates, its business and financial position. Onconova has attempted to identify forward-looking statements by terminology including "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should," "preliminary," "encouraging," "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 the success and timing of Onconova's clinical trials, investigator-initiated trials and regulatory agency and institutional review board approvals of protocols, Onconova's collaborations, market conditions 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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