



TransCode Therapeutics Announces Publication of Study with Lead Therapeutic Candidate Revealing Mechanisms Behind Candidate's Preclinical Efficacy Against Metastatic Cancer

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Study demonstrates that TransCode's lead therapeutic candidate, TTX-MC138, reduces tumor cell capacity for self-renewal

BOSTON, Sept. 10, 2024 (GLOBE NEWSWIRE) -- TransCode Therapeutics, Inc. (NASDAQ: RNAZ), the RNA oncology company committed to more effectively treating cancer using RNA therapeutics, in collaboration with Michigan State University, published an article in the journal *Oncotarget* titled, [Inhibition of miR-10b treats metastatic breast cancer by targeting stem cell-like properties](#). The article was published on August 26, 2024. The study was led by Dr. Anna Moore, Professor, Director of the Precision Health Program, and Associate Dean of the School of Medicine at Michigan State University and scientific co-founder of TransCode.

In this study, the authors show that stem-like breast cancer cells increase expression of miR-10b, the molecule targeted by TTX-MC138. The study also demonstrates that treatment of breast cancer cells with TTX-MC138 reduces their stemness, confirming that these properties make metastatic cells susceptible to the therapeutic candidate's actions.

Cancer cell stemness, or capacity for self-renewal, is a critical component of metastasis, since specialized cancer stem cells are those cells uniquely capable of creating new tumors and seeding metastatic dissemination. Stemness is a property of a distinct population of cancer cells that possess developmental plasticity allowing them to self-renew and adapt to new microenvironments found at the metastatic organ where they lead to creation of metastatic tumors.

"These new findings improve our understanding of the mechanisms behind TTX-MC138's role in metastatic cancer," commented Dr. Zdravka Medarova, Chief Scientific Officer of TransCode and an author of the publication. "This knowledge is essential as we conduct our ongoing Phase 1 clinical trial with this candidate because it may help better predict clinical response in individual patients based on the unique molecular fingerprint of their cancer. In addition, this new information may help us define potential molecular biomarkers of therapeutic efficacy that can serve as early surrogate indicators of clinical success. Finally, this knowledge may help us better stratify patients for enrollment in our later-stage clinical trials based on these predictive biomarkers," added Dr. Medarova.

About TransCode Therapeutics

[TransCode Therapeutics](#) is a clinical-stage oncology company focused on treating metastatic disease. The company is committed to defeating cancer through the intelligent design and effective delivery of RNA therapeutics based on its proprietary TTX nanoparticle platform. The company's lead therapeutic candidate, TTX-MC138, is focused on treating metastatic tumors which overexpress microRNA-10b, a unique, well-documented biomarker of metastasis. In addition, TransCode is developing a portfolio of other first-in-class RNA therapeutic candidates designed to overcome the challenges of RNA delivery and thus unlock therapeutic access to a variety of novel genetic targets that could be relevant to treating a variety of cancers.

Forward-Looking Statements

This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including, without limitation, statements concerning the therapeutic potential of TransCode's TTX-MC138, statements concerning the conduct of and results from any of the company's clinical trials, and statements concerning the results of pre-clinical research. Any forward-looking statements in this press release are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to: the risk associated with drug discovery and development; the risk that the results of our clinical trials will not be consistent with our pre-clinical studies or expectations or with previous clinical trials; risks associated with the timing and outcome of TransCode's planned regulatory submissions; risks associated with TransCode's conduct of clinical trials; risks associated with obtaining, maintaining and protecting intellectual property; risks associated with TransCode's ability to enforce its patents against infringers and defend its patent portfolio against challenges from third parties; risks of competition from other companies developing products for similar uses; risks associated with TransCode's financial condition and its need to obtain additional funding to support its business activities, including TransCode's ability to continue as a going concern; risks associated with TransCode's dependence on third parties; and risks associated with geopolitical events and pandemics, including the COVID-19 coronavirus. For a discussion of these and other risks and uncertainties, and other important factors, any of which could cause TransCode's actual results to differ from those contained in or implied by the forward-looking statements, see the section entitled "Risk Factors" in TransCode's Annual Report on Form 10-K for the year ended December 31, 2023, as well as discussions of potential risks, uncertainties and other important factors in any subsequent TransCode filings with the Securities and Exchange Commission. All information in this press release is as of the date of the release; TransCode undertakes no duty to update this information unless required by law.

For more information, please contact:

TransCode Therapeutics, Inc.
Tania Montgomery-Hammon, VP of Business Development
tania.montgomery@transcodetherapeutics.com