TransCode Therapeutics Reports Positive Data from First-in-Human Clinical Study Using Novel Lead Therapeutic Candidate, TTX-MC138

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BOSTON, May 29, 2024 (GLOBE NEWSWIRE) -- TransCode Therapeutics, Inc. (NASDAQ: RNAZ), the RNA oncology company committed to more effectively treating cancer using RNA therapeutics, today announced new preliminary data from its Phase 0 clinical trial with radiolabeled TTX-MC138 suggesting anti-tumor activity.

New results from the patient dosed in this trial indicate that a microdose of radiolabeled TTX-MC138 resulted in significant inhibition of the drug candidate's molecular target, miRNA-10b, in the patient's blood. Specifically, after injection, the amount of miR-10b in the patient's blood was significantly reduced compared to levels prior to administration of radiolabeled TTX-MC138, reaching a reduction of 66% at 24 hours following dosing. "We believe these data are important given that in several animal models, miRNA-10b inhibition by TTX-MC138 resulted in complete regressions of metastatic disease," stated Zdravka Medarova, PhD, Chief Scientific Officer at TransCode. These data support TransCode's belief that clinical development of TTX-MC138 has the potential for clinical benefit in patients with metastatic cancer.

In addition, the study also quantified the amount of drug candidate delivered to metastatic lesions, providing further evidence that TTX-MC138 accumulated in metastatic tumors. The increase of radioactive lesion-to-blood ratios suggests that circulating TTX-MC138 is actively taken up by the cancerous tissue.

The microdose of radiolabeled TTX-MC138 was well tolerated with no adverse events observed.

"These new data suggest that TTX-MC138 not only inhibits the miRNA-10b target but is pharmacodynamically active at a single microdose in the patient's serum, supporting continued clinical development of TTX-MC138 for the treatment of multiple metastatic cancers in the planned Phase 1 clinical study. This could indicate a much broader therapeutic window than had previously been expected," said Dr. Daniel Vlock, TransCode's Chief Medical Officer.

Full data analysis is ongoing and will be included in the final study report.

About TransCode Therapeutics

TransCode 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 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 initial results from the Phase 0 clinical study with our lead therapeutic candidate, TTX-MC138, in metastatic cancer, statements concerning expected preclinical and clinical results of TransCode's other therapeutic candidates, statements concerning the potential for treating cancer with RNA therapeutics, statements concerning the timing and outcome of expected regulatory filings and clinical studies and statements concerning TransCode's portfolio of drug candidates and TTX technology platform generally. Of note, a Phase 0 clinical study is an exploratory study, conducted under an exploratory Investigational New Drug application. Exploratory IND studies usually involve very limited human exposure to a therapeutic candidate to evaluate mechanism of action in order to inform potential clinical evaluation in future clinical studies, but otherwise have no therapeutic intent. 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 studies will not be consistent with our pre-clinical studies or expectations or with preceding clinical studies; risks associated with the timing and outcome of TransCode's planned regulatory submissions; risks associated with TransCode's conduct of clinical studies; 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.

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