

THERAPEUTICS[™]

TransCode Therapeutics Acquires Option for Radiotheranostic Technology

May 19, 2022

BOSTON, May 19, 2022 (GLOBE NEWSWIRE) -- TransCode Therapeutics, Inc. (NASDAQ: RNAZ), the RNA oncology company committed to defeating cancer using RNA therapeutics, is pleased to announce its execution of an option agreement giving TransCode the right to negotiate an exclusive, worldwide, royalty-bearing license related to a radiotheranostic technology disclosed in patent application PCT/US2021/057912 entitled THERAPEUTIC, RADIOLABLED NANOPARTICLES AND METHODS OF USE THEREOF. Invented by TransCode Co-Founder and CTO, Dr. Zdravka Medarova, and her colleagues at Massachusetts General Hospital, the technology represents another potential advancement in the diagnosis and treatment of cancer.

"We are excited by the potential of radiolabeled therapeutics not just to augment the capabilities of our TTX delivery system, but also to enhance the activity of our existing and future RNA-based therapeutics in the treatment of multiple types and stages of cancer," commented Michael Dudley, TransCode CEO.

The use of radioisotopes is a (re)emerging approach for many drug development companies in the treatment of cancer. There are a range of carriers from antibodies to small molecules that can be used to localize, penetrate and persist in tumors. TransCode is prosecuting the continued development of its iron-oxide based nanoparticle RNA delivery platform, dubbed TTX. Just as TTX has the potential to improve on the intracellular delivery of RNA therapeutics over existing lipid-based systems, TransCode believes TTX has the potential for efficient localized penetration of radioisotopes inside tumor cells.

Dr. Medarova added, "Our preclinical results demonstrated that PET–MRI following a microdose injection of the radiolabeled therapeutic accurately reflected the innate biodistribution of the therapeutic. The tools developed in the published study set the groundwork for the clinical testing of TTX-MC138Cu⁶⁴ and other similar therapeutics in patients with cancer."

Future demonstration of these tools could enable multimodal approaches to the diagnosis and treatment of cancer. TransCode expects to submit an exploratory investigational new drug, or eIND, application to conduct a Phase 0 First-in-Human clinical trial with radiolabeled TTX-MC138 in patients with Stage IV solid tumors in the second half of 2022.

About TransCode Therapeutics

TransCode is an RNA oncology company created on the belief that cancer can be defeated using RNA therapeutics. The Company has created a platform of drug candidates designed to target a variety of tumor types with the objective of significantly improving patient outcomes. The Company's lead therapeutic candidate, TTX-MC138, is focused on treating metastatic cancer, which is believed to cause approximately 90% of all cancer deaths totaling over nine million per year worldwide. The Company believes that TTX-MC138 has the potential to produce regression without recurrence in a range of cancers, including breast, pancreatic, ovarian and colon cancer, glioblastomas and others. Two of the Company's other drug candidates, TTX-siPDL1 and TTX-siLIN28B, focus on treating tumors by targeting PD-L1 and LIN28B, respectively. TransCode also has three cancer-agnostic programs—TTX-RIGA, an RNA-based agonist of the retinoic acid-inducible gene I, or RIG-I, approach designed to drive an immune response in the tumor microenvironment; TTX-CRISPR, a CRISPR/Cas9-based therapy platform for the repair or elimination of cancer-causing genes inside tumor cells; and TTX-mRNA, an mRNA-based platform for the development of cancer vaccines designed to activate cytotoxic immune responses against

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 potential for treating cancer with RNA therapeutics, statements concerning agreements with Massachusetts General Hospital, statements concerning the timing and outcome of expected regulatory filings and clinical trials, including the filing of an eIND for the planned first-in-human study of TTX-MC138, statements concerning the timing and outcome of this study, including whether this study will demonstrate proof-of-mechanism, statements concerning patent applications, and statements concerning TransCode's development programs and TTX technology platform generally. 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 planned clinical trials will not be consistent with our pre-clinical studies or expectations; risks associated with the timing and outcome of TransCode's planned regulatory submissions; risks associated with TransCode's planned clinical trials for its product candidates; 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; the risk 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 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, 2021, 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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