TransCode Therapeutics CEO Letter to Shareholders

July 5, 2023

BOSTON, July 05, 2023 (GLOBE NEWSWIRE) --

Dear TransCode Therapeutics Shareholders,

I want to express the optimism that permeates the management, board, and staff of TransCode as we navigate the ever-evolving oncology field and venture into the clinic with our lead candidate to treat metastatic disease. This optimism is also reflected by the fact that members of management have purchased shares of the Company in the open market in the past two weeks. I am delighted to inform you about the accomplishments and advancements we have attained at TransCode following our initial public offering in July 2021. Your unwavering support and trust in our mission have been of immeasurable value, and I am grateful for your steadfast dedication.

In our dedicated pursuit to transform the treatment of cancer, we believe TransCode Therapeutics has made significant strides in research, innovation, and clinical development. Our team of scientists, researchers, and professionals have tirelessly worked towards this pursuit, and I am delighted to report that we have achieved several noteworthy milestones.

One of our achievements this year has been the successful advancement of our lead therapeutic candidate, TTX-MC138, utilizing our proprietary targeted therapeutic delivery platform. TTX-MC138 is focused on treating metastatic cancer, as characterized by the spread of a tumor from the organ of origin to other parts of the body, which is believed to be the cause of approximately 90% of all cancer deaths totaling over nine million per year worldwide. We believe that TTX-MC138 has the potential to produce regression without recurrence in a range of metastatic cancers, including breast, pancreatic, ovarian and colon cancer, glioblastomas and many others. We have observed significant tumor regression and durable responses in multiple animal models, which we believe support the therapeutic potential of TTX-MC138. In December 2022, we received approval from the FDA to proceed with our first-in-human clinical trial. In April 2023, we received institutional review board (IRB) approval from Dana Farber Cancer Center in Boston, MA, to enroll and dose patients in our Phase 0 trial, which we expect to commence shortly. In parallel, we are completing IND enabling studies for our planned Phase I/II clinical trial, for which we hope to file an IND application with FDA later this year to initiate our clinical trial to treat cancer patients.

We believe our proprietary therapeutic delivery platform has shown significant potential to address the unmet needs of oncology patients. Through our commitment of harnessing the power of RNA technology, we have created a pipeline of therapeutic candidates using our delivery platform that holds the potential to revolutionize cancer treatments once positive clinical results are achieved. These therapies aim to selectively target cancer cells, enabling precise and personalized approaches that are intended to minimize adverse effects and maximize therapeutic outcomes.

Building on our progress with TTX-MC138, we have focused research and development efforts designed to further optimize and de-risk the delivery platform, enhance the therapeutic profile, and expand our understanding of its mechanisms of action. These ongoing endeavors are crucial to advancing TTX-MC138 into later stages of clinical development and ultimately bringing it to cancer patients who urgently need effective treatment options specific to metastatic disease.

Encouraging progress has been made through additional research and development initiatives involving our diverse therapeutic candidates beyond our lead candidate. We have achieved positive preclinical results with our checkpoint inhibitor, TTX-siPDL1, in pancreatic cancer, as well as promising preclinical results in melanoma with our second immunotherapy candidate, TTX-RIGA, a potential cancer-agnostic therapy. Using our delivery technology, we have created a platform of drug candidates designed to target a variety of tumor types with the objective of significantly improving patient outcomes. In addition to the immunotherapy candidates, we have created TTX-CRISPR, a CRISPR/Cas9–based therapeutic platform for the repair or elimination of cancer-causing genes and TTX-mRNA, an mRNA-based platform for the development of cancer vaccines designed to activate cytotoxic immune responses against tumor cells. Furthermore, we have recently submitted a patent application that encompasses protein delivery, specifically incorporating nanobodies, utilizing our proprietary delivery system with the goal of reaching previously undruggable intra-cellular targets inside cancer cells.

Our dedication to innovation and collaboration has also resulted in expanded strategic partnership conversations with esteemed academic institutions and industry leaders. By developing these collaborations, we aim to leverage their complementary expertise and resources, accelerating the development of our targeted therapies using our targeted therapeutic delivery platform.

Our first alliance is with MD Anderson Cancer Center at the University of Texas Medical Center announced in August 2022. Through this alliance, TransCode and MD Anderson scientists are collaborating on preclinical studies to further validate TransCode's therapeutic and diagnostic candidates and to expand the reach of TransCode's discovery engine. The results of these studies will inform future clinical trials with these agents, including trials we intend to conduct at MD Anderson. This alliance could present an opportunity to access a wealth of knowledge and further fortify the scientific groundwork of our therapeutic programs.

In June 2022, we received Orphan Drug Designation (ODD) from the FDA for our TTX-siPDL1 checkpoint inhibitor, a candidate for treatment of pancreatic cancer. The designation was granted based on positive results achieved in in vivo studies treating human pancreatic tumors implanted in animals. In addition, we conducted preclinical in vivo studies with TTX-MC138 in a pancreatic cancer model and we received ODD status on February 27, 2023 from the FDA. We intend to conduct additional in vivo studies to support filings of other TTX-based therapeutic candidates in other orphan disease indications including osteosarcoma, glioblastoma, and small cell lung cancer. Along with the filing for ODD status in osteosarcoma, we also intend to file for Rare Pediatric Disease Designation (RPDD) with the goal of receiving a Priority Review Voucher (PRV) if the preclinical study results are positive and are accepted by FDA. A sponsor of a drug with RPDD may request a Rare Pediatric Disease Priority Review Voucher (PRV) at the time of a marketing application to FDA. In effect, the PRV has the potential to shorten the FDA review period for a future marketing application of any

drug from 12 months to 6 months. When a company introduces a potential transformative therapy, the six-month acceleration in regulatory review can yield significant economic advantages. As a result, PRVs have been considered highly valued assets for companies, and we anticipate that PRVs will continue to be highly valued assets in the future due to their potential for significant economic benefits for companies.

Over the past two years, the biotech sector has faced a substantial downturn that industry experts consider the most significant in the last two decades. Our success in raising capital from institutional investors against this backdrop further encourages us that we are on the right track. Major pharmaceutical companies are compelled to actively seek fresh drug candidates to renew their pipelines ahead of impending patent expirations. Development stage biotech companies, such as TransCode Therapeutics, play a crucial role as the sources from which these large companies discover their next potential candidates.

As we look ahead, we remain steadfast in our commitment to advancing our pipeline, expanding collaborations, and exploring new therapeutic avenues. Our goal is to continue pushing the boundaries of what is possible in the field of oncology, bringing hope to patients and transforming the treatment landscape. We are hopeful that our targeted therapeutic delivery platform, exemplified by the progress of TTX-MC138, will play a pivotal role in realizing this vision.

We are filled with anticipation for the future as we strive to establish ourselves as a leading oncology company, potentially offering millions of patients a viable treatment solution for metastatic disease. Our aim is to alleviate the fear that cancer patients experience when facing the possibility of their cancer spreading without a treatment solution. We firmly believe that we have the potential to emerge as the pioneering company that delivers this crucial and much-needed solution.

Thank you for your investment in TransCode. We are excited about the future and look forward to sharing further updates on our progress in the coming months.

Sincerely,

R. Michael Dudley
Chief Executive Officer and Co-Founder
TransCode Therapeutics Inc.

About TransCode Therapeutics

TransCode is an RNA oncology company created on the belief that cancer can be more effectively treated 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 dramatically improve clinical outcomes 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 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 tumor cells.

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 results of a preclinical study of TTX-MC138 in breast cancer and other tumor types, statements concerning expected clinical results of TransCode's therapeutic candidates, statements concerning the results of RNA research, statements concerning the potential for treating cancer with RNA therapeutics, statements concerning the timing and outcome of expected regulatory filings and clinical trials, including 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, and statements concerning TransCode's development programs and TTX technology platform generally. Of note, a Phase 0 clinical trial is an exploratory study, conducted under an exploratory Investigational New Drug (eIND) 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 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, 2022, 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:

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