MiNK Therapeutics and Autonomous Therapeutics Announce Collaboration to Develop Novel Therapies Targeting Metastatic Tumors

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NEW YORK, Oct. 08, 2024 (GLOBE NEWSWIRE) -- MiNK Therapeutics (MiNK, NASDAQ: INKT) a clinical-stage company pioneering the development of allogeneic off-the-shelf, invariant natural killer T (iNKT) cell therapies and Autonomous Therapeutics, Inc. (Autonomous), a leader developing first-in-class, disease-activated RNA medicines, announced a research collaboration aimed at effectively targeting and treating metastatic tumors.

This collaboration will leverage Autonomous' precision encrypted RNA™ (encRNA) technology and MiNK's innovative iNKT cell therapies, MiNK-215 and agenT-797. The companies will evaluate these technologies in state-of-the-art metastatic solid tumor models. The goal is to develop novel therapies that effectively target metastatic cancer cells in patients while avoiding healthy cells—a challenge that existing cancer medicines have not been able to overcome. Based on the results, the companies plan to launch a Phase 1 clinical trial in patients with treatment-refractory metastatic solid tumors, including microsatellite stable (MSS) colorectal cancers.

"This collaboration underscores the unique potential of both native and engineered iNKT cells, allowing us to explore cutting-edge approaches that could significantly enhance clinical responses and deliver better outcomes for patients," said Dr. Jennifer Buell, President and Chief Executive Officer at MiNK. "MiNK-215 and agenT-797 are novel cell therapies designed to overcome the limitations of traditional immune checkpoint inhibitors. Recent preclinical models of MSS colorectal cancer with metastatic liver disease demonstrated that these iNKT cells have the potential to eliminate tumor cells effectively. By combining them with Autonomous Therapeutics' engineered RNA technology, we are confident that we can unlock even greater therapeutic possibilities and continue advancing our mission to transform the landscape of cell therapy."

Dr. Ariel Weinberger, Chief Executive Officer of Autonomous, added: "This exciting collaboration leverages the platform capabilities of our next-generation encrypted RNA technology and MiNK's unique allogeneic cell therapy platform. AT313 is a preclinical encRNA candidate developed at Autonomous to enable the precision targeting of solid tumors, via cancer-activated therapeutic protein translation. Our aim is to develop novel medicines that pinpoint tumor cells in patients—by sensing and targeting the aberrant molecular signatures that define cancer replication. This would enable us to eliminate cancer cells in patients while sparing healthy and immune cells. It would also eliminate dose-limiting toxicities common to existing oncology medicines while significantly enhancing therapeutic efficacy—to dramatically improve Stage IV patient outcomes."

About MiNK-215

MiNK-215 is an investigational, off-the-shelf cellular immunotherapy, specifically designed to target immune resistance mechanisms and promote a potent anti-cancer immune response. Engineered to express CAR targeting the Fibroblast Activating Protein (FAP) protein prevalent in stromal cells within the tumor microenvironment, MiNK-215 also integrates soluble IL-15 for enhanced persistence (Michelet X et al, SITC 2022; Shan K et al, AACR 2023; Dijk MV et al, CICON 2023). In preclinical models resistant to immune checkpoint inhibitors, MiNK-215 has demonstrated remarkable efficacy, not only in eliminating tumor cells and FAP+ immune-suppressive cells but also facilitating the infiltration and persistence of proinflammatory cytotoxic T cells crucial for effective tumor elimination.

About agenT-797

AgenT-797 is an investigational, off-the-shelf immune cell therapy product by MiNK Therapeutics, possessing anti-viral and immune-modulating properties. In a Phase 1 trial involving 54 patients with heavily pre-treated solid tumors, agenT-797 appears to overcome resistance to immune checkpoint inhibitors, with durable disease stabilization in multiple solid tumors and a confirmed response in chemotherapy and anti-PD-1 refractory gastric cancer (Carneiro et al, 2024 Oncogene). agenT-797 is being evaluated in an investigator sponsored Phase 2 trial in 2L gastric cancer, led by Dr. Yelena Janjigian, Chief of GI Oncology at Memorial Sloan-Kettering Cancer Center and supported by Stand Up to Cancer.

About MiNK Therapeutics

MiNK Therapeutics is a clinical-stage biopharmaceutical company pioneering the discovery, development, and commercialization of allogeneic invariant natural killer T (iNKT) cell therapies to treat cancer and other immune-mediated diseases. MiNK is advancing a pipeline of both native and next generation engineered iNKT programs, with a platform designed to facilitate scalable and reproducible manufacturing for off-the-shelf delivery. The company is headquartered in New York, NY. For more information, visit https://minktherapeutics.com/ or @MiNK_iNKT. Information that may be important to investors will be routinely posted on our website and social media channels.

About Autonomous Therapeutics, Inc.

Autonomous Therapeutics is pioneering a new class of RNA medicines (encRNA) for difficult-to-treat indications in oncology and infectious disease. Autonomous has developed a proprietary pipeline of more than 10 encRNA candidates targeting indications from pandemic influenza to metastatic cancers. The company's encRNA pipeline includes next-generation immunotherapies such as AT313, a cancer-activated RNA prodrug designed to precisely eliminate solid tumor cells. Autonomous' partners and funders have included: the Defense Advanced Research Projects Agency (DARPA), the National Institutes of Health (NIH), the Office of the Secretary of Defense (OSD), Third Kind Venture Capital (3kVC), and BLUE KNIGHT™, a joint initiative between the Biomedical Advanced Research and Development Authority (BARDA) and Johnson & Johnson Innovation – JLABS.

About encrypted RNA™

encRNA is a new class of RNA invented at Autonomous to enable the development of precision medicines against virtually any disease driven by aberrant nucleic acid expression or protein translation. Autonomous' encRNA therapeutics leverage the molecular signatures of a targeted disease as intracellular logic gates—to drive precision therapeutic protein translation in targeted cells. Each encRNA candidate is designed to differentiate between healthy and diseased cells across a patient and to translate therapeutic proteins solely in diseased cells. encRNA candidates are modular and can be programmed with multiple logic gates for potential patient-specific sensitivity and specificity. In proof-of-concept studies, Autonomous has demonstrated the preclinical safety and efficacy of encRNA candidates in animal models, with the potential to completely eradicate immunologically "cold" solid tumors via precision immunotherapy.

Forward Looking Statements

This press release contains forward-looking statements that are made pursuant to the safe harbor provisions of the federal securities laws, including statements regarding the therapeutic potential, anticipated benefit, plans and timelines of iNKT cells and encrypted RNA, as well as the collaboration between MiNK and Autonomous Therapeutics. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially. These forward-looking statements are subject to risks and uncertainties, including the factors described under the Risk Factors section of the most recent Form 10-K, Form 10-Q and the S-1 Registration Statement filed with the SEC. MiNK cautions investors not to place considerable reliance on the forward-looking statements contained in this release. These statements speak only as of the date of this press release, and MiNK and Autonomous undertake no obligation to update or revise the statements, other than to the extent required by law. All forward-looking statements are expressly qualified in their entirety by this cautionary statement.

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