# CYTOIMMUNE PRESENTS NEW PRECLINICAL DATA DEMONSTRATING POTENTIAL OF ITS NOVEL, OFF-THE-SHELF NATURAL KILLER CELL-BASED THERAPIES FOR THE TREATMENT OF HEMATOLOGIC AND SOLID TUMOR CANCERS AT AACR

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MONROVIA, Calif, April 11, 2022--CytoImmune Therapeutics, a clinical-stage immunotherapy company developing a novel class of natural killer (NK) cell-based cancer therapies, announced new preclinical data supporting the therapeutic potential of its CYTO-102 and CYTO-201 programs as treatments for patients with cancer. New findings demonstrate the utility of its NK cell platform to generate off-the-shelf, tumor-reactive NK cell (TRACK-NK™) and chimeric antigen receptor (CAR) engineered NK cell (CAR-NK) therapies, that result in effective tumor cell killing with favorable tolerability for both solid and liquid tumors. The data are being presented at the American Association for Cancer Research (AACR) Annual Meeting, being held April 8-13, 2022, in New Orleans.

CytoImmune's unique approach aims to engineer NK cells into therapies that can both directly kill cancer cells, while also broadly stimulating the body's own endogenous immune system to drive cancer cell death. The company is developing two co-lead NK cell therapies: (1) CYTO-102, a TRACK-NK cell therapy engineered to secrete high levels of soluble IL-15 being developed for the treatment of non-small cell lung cancer (NSCLC) and (2) CYTO-202, a FLT3-directed TRACK-CAR-NK cell therapy that the company is developing for the treatment of acute myeloid leukemia (AML).

"We are very excited to present these new data from two of our proprietary NK cell-based programs, both of which have demonstrated meaningful potential in addressing challenging to treat cancers, including NSCLC and AML," said Michael Caligiuri, MD co-founder and chief scientific officer. "For cancers such as NSCLC, we've seen advancements in the field with the emergence of checkpoint inhibitors, but the disease remains incredibly difficult to treat and a major cause of cancer-related mortality worldwide. With our TRACK-NK cells, we believe we may be able to enhance tumor destruction in patients, leading to improved and durable outcomes."

Christina Coughlin, chief executive officer, added "For aggressive cancers like AML, we believe there are certain advantages that an off-the-shelf targeted cell therapy could offer patients compared to autologous CAR T cell therapy, which has a long preparation time – a challenging approach in the face of such a fast-progressing disease. Taken together, findings from our preclinical research validate our novel approach to leveraging NK cells to create treatments for both solid and liquid tumors and support their continued advancement toward the clinic."

**Abstract Title:** *LB211. Tumor-reactive and anti-PD-L1 co-stimulated killer cells (TRACK-NK) for immunotherapy of non-small cell lung cancer*
**Session:** Late-Breaking Research: Immunology 2
**Session Date & Time:** Wednesday, April 13, 2022, from 9:00 a.m. to 12:30 p.m. ET
**Location:** New Orleans Convention Center, Exhibit Halls D-H, Poster Section 18
**Summary of Findings:** CytoImmune is advancing its CYTO-102 program, an anti-PD-L1 co-stimulated TRACK-NK therapy for the potential treatment of non-small cell lung cancer (NSCLC). The novel therapy was generated by genetically modifying NK cells to express soluble IL-15 (sIL15), an immune signaling molecule crucial for optimal antitumor response and primed with cytokines IL-12

and IL-18 to induce PD-L1 expression. *In vitro* and *in vivo* evaluation of the TRACK-NK cells showed:

- Following cryopreservation, thawed sIL15-PDL1 NK (TRACK-NK) cell product demonstrated high recovery and viability
- Significant cytotoxicity against a human NSCLC cell line when compared to NK cells without expression of sIL-15, NK cells without expression PD-L1, or NK cells without expression of both
- Repeated infusions of human TRACK-NK cells resulted in a significant tumor suppression compared to cells only expressing sIL15, PD-L1 or neither of both, in a mouse model
- Treatment was well tolerated in mice, with no changes in bodyweight or body temperature and no significant changes in liver and kidney functions observed

**Abstract Title:** *LB102. Off-the-shelf cord blood FLT3 CAR-NK cells for immunotherapy of acute myeloid leukemia*
**Session:** Late-Breaking Research: Immunology 1
**Session Date & Time:** Monday, April 11, 2022, from 1:30 p.m. to 5:00 p.m. ET
**Location:** New Orleans Convention Center, Exhibit Halls D-H, Poster Section 18
**Summary of Findings:** CytoImmune's CYTO-201 product candidate is a novel, off-the-shelf CAR-NK cell therapy designed to express a specific anti-FLT3-CAR with a secretory soluble form of IL-15. CYTO NK-201 is being investigated as a potential treatment for acute myeloid leukemia (AML), an aggressive hematologic malignancy in which FLT3 expression is present on approximately 20-30% of patients. *In vitro* and *in vivo* evaluation of the company's FLT3 CAR NK cells showed:

- Enhanced cytotoxicity in FLT-3 positive human AML cells
- Reduced tumor burden and prolonged survival in an aggressive AML mouse model when compared to cells only expressing IL-15 or to the control group
- Good tolerability with no signs of toxicity against normal hematopoietic stem cells that also express the FLT-3 marker

**About CytoImmune**
CytoImmune Therapeutics is a clinical-stage biopharmaceutical company focused on the development and commercialization of novel cancer immunotherapy products designed to utilize the power of the patient's immune system to eliminate cancer cells. The company is advancing a differentiated pipeline of "off-the-shelf" natural killer (NK) cell therapies, using proprietary, robust and well-characterized NK cell expansion and engineering technologies that are designed to provide effector cell therapy with broad immune stimulation, to enable effective tumor killing in both solid tumors and hematologic malignancies. For more information, please visit Cytoimmune.com.

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