

**FIRST EVER PHASE 1B TRIAL OF NK CELLS WITH IL-2 & VACTOSERTIB**

- First ever trial of NK cells in combination with IL-2 and Vactosertib is being undertaken with Chimeric's CORE NK Platform cells
- The trial has been approved by the US Food and Drug Administration and will shortly be initiated as an investigator-initiated trial at UH Seidman Cancer Center in Ohio
- Building upon the initial safety and efficacy signal with the CORE NK platform, this trial aims to improve disease responses in patients through the coadministration of IL-2 and Vactosertib with CORE NK platform cells
- IL-2 is an approved therapeutic that is known to activate NK cells. Vactosertib is a clinical drug candidate that inhibits TGF- $\beta$  signaling, a pathway that is known to inhibit the therapeutic effect of immunotherapy.
- This study adds to CHM's already deep clinical pipeline with now four clinical trials in progress or planned within 9 months

Chimeric Therapeutics (ASX:CHM, "Chimeric"), a clinical-stage cell therapy company and an Australian leader in cell therapy, is pleased to announce that the first ever trial studying NK cells in combination with IL-2 and Vactosertib is being undertaken with Chimeric's CORE NK platform cells.

The phase 1B investigator-initiated trial has received approval by the U.S. Food and Drug Administration (<https://clinicaltrials.gov/ct2/show/NCT05400122>) and once initiated will look to enroll 12 patients at UH Seidman Cancer Center in Ohio with either locally advanced/metastatic colorectal cancer or relapsed/refractory blood cancers.

Chimeric's CORE NK platform is a novel NK cell therapy platform of ex-vivo expanded non-HLA-matched universal donor NK cells. The CORE NK platform was previously studied in a phase 1A clinical trial that demonstrated safety and an early efficacy signal in patients with metastatic colorectal cancer and refractory hematological malignancies.

This new study seeks to build upon the responses seen in the initial CORE NK clinical trial by co-administering the CORE NK cells with subcutaneous IL-2 and oral Vactosertib. IL-2 is known to activate NK cells by stimulating proliferation and enhancing function. Vactosertib is an oral TGF- $\beta$  receptor inhibitor that can potentially disrupt the TGF- $\beta$  signaling pathway, which has been shown to limit the effectiveness of immune therapies like NK cells.

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“Vactosertib has never been used in combination with NK cells in the clinic, but it has been used in humans in other clinical trials,” said UH Seidman oncologist J. Eva Selfridge, MD, PhD, and Assistant Professor at Case Western Reserve University School of Medicine in Ohio, who is leading the upcoming trial.

“The goal of using it in this trial is to disrupt the TGF- $\beta$  signaling pathway that is so strong in colorectal cancer and cells. We want to shut down that TGF- $\beta$  signaling pathway so that the NK cells can actually make it into the tumours. Once they’re there, they have a chance of being active instead of just being silenced right away.”

Dr. Selfridge says she is hopeful this new clinical trial at UH Seidman Cancer Center will present patients with more and better options for treatment and care.

“T cell-directed immunotherapy is only available for 5 percent or less of cancer patients, but immunotherapy is really the only way we have to cure people with metastatic disease,” she said. “We’re just beginning our study, but ultimately the goal is to find immune therapies that work long-term.”

“With the initial positive results seen in the phase 1A clinical trial with our CORE NK Platform cells, we have been eager to accelerate the development opportunities for it,” said Jennifer Chow, CEO Chimeric Therapeutics.

“This study looks to combine novel therapeutics to overcome the challenges that are commonly thought to limit disease responses to NK cells. We hope that this combination will allow us to see more complete responses in patients with difficult to treat diseases, like the one seen in the Phase 1A study that has resulted in complete tumour eradication for more than 15 months now.”

Authorised on behalf of the Chimeric Therapeutics board of directors by Chairman Paul Hopper.

#### **ABOUT CHIMERIC THERAPEUTICS**

Chimeric Therapeutics, a clinical stage cell therapy company and an Australian leader in cell therapy, is focused on bringing the promise of cell therapy to life for more patients with cancer. We believe that cellular therapies have the promise to cure cancer, not just delay disease progression.

To bring that promise to life for more patients, Chimeric’s world class team of cell therapy pioneers and experts is focused on the discovery, development, and commercialization of the most innovative and promising cell therapies.

CHM 1101 (CLTX CAR T) is a novel and promising CAR T therapy developed for the treatment of patients with solid tumours. CHM 1101 is currently being studied in a phase 1 clinical trial in recurrent / progressive glioblastoma. Initial positive data has been presented on patients treated in the first two dose levels of the trial. A 2nd CLTX CAR T phase 1 clinical trial is

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planned to begin in metastatic melanoma with future expansion to additional solid tumours.

CHM 2101 (CDH17 CAR T) is a novel, 3rd generation CDH17 CAR T invented at the world-renowned cell therapy centre, the University of Pennsylvania. Preclinical evidence for CHM 2101 was published in March 2022 in Nature Cancer. CHM 2101 (CDH17 CAR T) is currently in preclinical development with a planned phase 1 clinical trial in neuroendocrine tumours, colorectal, gastroesophageal and gastric cancer.

CHM 0201 (CORE-NK platform) is a clinically validated, off the shelf natural killer (NK) cell platform. Data from the complete phase 1 clinical trial was published in March 2022, demonstrating safety and efficacy in blood cancers and solid tumours. From the CORE-NK platform, Chimeric will initiate development of four new next generation NK and CAR NK assets with plans for phase 1 clinical trials in solid tumours and blood cancers.

Chimeric Therapeutics continues to be actively engaged in further developing its oncology pipeline with new and novel cell therapy assets that will bring the promise of cell therapy to life for more patients with cancer.

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