



ASX ANNOUNCEMENT

21 May 2025

CHM CDH17 ADVANCES TO DOSE LEVEL 2

- **CHM CDH17 advances to Dose Level 2 of 150 million CDH17 CAR-T+ cells**
- **Dose Level 1 of 50 million cells was completed with no safety or off target effects observed**
- **Of the seven patients enrolled to date, four have been included in Dose Level 1 with the remaining three to be in Dose Level 2**
- **Seven successful manufacturing runs now completed**

Melbourne, Australia, 21 May 2025: Chimeric Therapeutics (ASX:CHM, “Chimeric” or the “Company”), is pleased to announce that the CHM CDH17 clinical trial has advanced to Dose Level 2, following no safety concerns or off target effects observed at Dose Level 1.

Dose Level 1 tested 50 million CHM CDH17 CART+ cells in clinical trial subjects and provided early signs of activity and a compelling safety profile. Specifically, there were four subjects treated, three with colorectal cancer (CRC) and one with an intestinal neuroendocrine tumour (NET). In this group of advanced cancer patients, no dose-limiting toxicities or unexpected safety findings were reported. One patient experienced Grade 1 cytokine release syndrome (CRS) 10 days after receiving CHM CDH17 that was associated with peripheral CART+ cell expansion and persistence.

Chimeric is encouraged by these safety findings and early signs of clinical activity with one NET patient experiencing stable disease for five months and one CRC patient with stable disease that is ongoing at four months.

The clinical expansion observed, coupled with no evidence of off-tumour effects or gastrointestinal toxicity, significantly de-risks CHM CDH17. The emergence of CRS, a hallmark of CAR-T cell expansion, is an indication that CHM CDH17 is engaging patients’ immune systems and highlights its potential as a transformative new medicine for cancer patients.

With this safety foundation, the Company is now escalating to Dose Level 2 where 150 million CHM CDH17 CART+ cells will be administered in a single dose.

“This represents a major milestone for Chimeric as we continue to build momentum and deliver on the promise of our technology,” said Dr Rebecca McQualter, CEO of Chimeric Therapeutics.



The Phase 1/2 trial (NCT06055439) is a two-stage study designed to determine a recommended Phase 2 dose of CHM CDH17 and evaluate its safety and objective response rate in patients with advanced colorectal cancer, gastric cancer, and intestinal neuroendocrine tumours (NETs). CHM CDH17 is a 3rd generation, novel CAR-T cell therapy that targets CDH17, a cancer biomarker associated with poor prognosis and metastases in the most common gastrointestinal tumours.

The Phase 1 portion of this study is expected to enrol up to 15 patients and lead to dose selection and expansion with indication-specific Phase 2 cohorts.

ABOUT CHIMERIC THERAPEUTICS

Chimeric Therapeutics, a clinical stage cell therapy company is focused on bringing the promise of cell therapy to life for more patients with cancer.

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

Chimeric currently has a diversified portfolio that includes first in class autologous CAR T cell therapies and best in class allogeneic NK cell therapies. Chimeric assets are being developed across multiple different disease areas in oncology with 4 clinical stage programs.

CHM CDH17 is a first-in-class, 3rd generation CDH17 CAR T invented at the world-renowned cell therapy centre, the University of Pennsylvania (Penn) in the laboratory of Dr. Xianxin Hua, professor in the Department of Cancer Biology in the Abramson Family Cancer Research Institute at Penn. Preclinical evidence for CDH17 CAR T was published by Dr. Hua and his colleagues in 2022 in Nature Cancer demonstrating complete eradication of tumours in 7 types of cancer in mice. CHM CDH17 is currently being studied in a phase 1/2 clinical trial in gastrointestinal and neuroendocrine tumours that was initiated in 2024.

CHM CLTX is a novel and promising CAR T therapy developed for the treatment of patients with solid tumours. CLTX CAR T is currently being studied in a phase 1B clinical trial in recurrent / progressive glioblastoma. Positive preliminary data from the investigator-initiated phase 1A trial in glioblastoma was announced in October 2023.

CHM CORE-NK is a potentially best-in-class, clinically validated NK cell platform. Data from the complete phase 1A clinical trial was published in March 2022, demonstrating safety and efficacy in blood cancers and solid tumours. Based on the promising activity signal demonstrated in that trial, two additional Phase 1B clinical trials investigating CORE-NK in combination regimens have been initiated. From the CORE-NK platform, Chimeric has initiated development of new next generation NK and CAR NK assets.

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



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Study Overview

Brief Summary

The goal of this clinical trial is to evaluate CHM-2101, an autologous CDH17 CAR T-cell therapy for the treatment of advanced gastrointestinal (GI) cancers that are relapsed or refractory to at least 1 standard treatment regimen in the metastatic or locally advanced setting.

Detailed Description

This is a Phase 1/2 open-label study to evaluate CHM-2101, an autologous CDH17 CAR T-cell therapy for the treatment of advanced gastrointestinal (GI) cancers that are relapsed or refractory to at least 1 standard treatment regimen in the metastatic or locally advanced setting.

The study has 2 parts: Phase 1, Dose Escalation and Expansion, and Phase 2. Potential participants will provide written consent and be screened for study eligibility prior to undergoing any screening procedures, including leukapheresis. Protocol-specified criteria must be met prior to the start of leukapheresis for collection of peripheral blood mononuclear cells (PBMCs). Eligible participants will undergo leukapheresis to collect PBMCs for product manufacturing, which comprises enrichment of T cells, lentiviral transduction, ex vivo expansion, and cryopreservation of the CHM-2101 cell product. Participants who have a leukapheresis or manufacturing failure may be permitted a second attempt at leukapheresis.

Bridging chemotherapy (treatment between the time of leukapheresis and first dose of lymphodepleting chemotherapy [LDC]) is permitted at the discretion of the investigator, if needed to maintain disease stability during CHM-2101 manufacturing time. Bridging chemotherapy is prohibited within the 2 weeks prior to leukapheresis and 2 weeks prior to planned CHM-2101 infusion. Specific criteria to proceed should be reviewed prior to leukapheresis, LDC, and CHM-2101 infusion. Participants will be followed in this study for 18 months or until disease progression.

Official Title

A Phase 1/2 Study to Evaluate CHM-2101, an Autologous Cadherin 17 (CDH17) Chimeric Antigen Receptor (CAR) T Cell Therapy for the Treatment of Relapsed or Refractory Gastrointestinal Cancers

Conditions

Neuroendocrine TumorsColorectal CancerGastric Cancer

Intervention / Treatment

- Biological: CHM-2101 CAR-T cells

Other Study ID Numbers

- CHM-2101-001

Participation Criteria

Researchers look for people who fit a certain description, called eligibility criteria. Some examples of these criteria are a person's general health condition or prior treatments.



For general information about clinical research, read [Learn About Studies](#).

Eligibility Criteria

Description

Inclusion Criteria:

1. Documented informed consent of the participant and/or legally authorized representative.
2. Confirmed histologic diagnosis of one of the following solid tumors of GI origin:
 1. Gastric adenocarcinoma Note: for gastric adenocarcinoma patients only, central laboratory confirmation of CDH17+ tumor expression is required.
 2. Colon and/or rectal adenocarcinoma
 3. G1, G2, and well-differentiated G3 neuroendocrine tumors of the midgut and hindgut (ileal, jejunal, cecal, distal colonic, or rectal; with $\leq 55\%$ Ki67 expression)
3. Availability of unstained tumor tissue slides from archived tumor tissue or a new tumor biopsy, if medically feasible. Note: for gastric adenocarcinoma patients only, confirmation of CDH17+ is required prior to study inclusion.
4. Have received at least 1 prior line of systemic anti-cancer treatment in the locally advanced or metastatic setting, as defined by National Comprehensive Cancer Network (NCCN) guidelines. Participants must have received or declined FDA-approved and available treatment options, including targeted therapies for disease mutation or antigen expression status.
5. Age ≥ 18 years and ≤ 85 years.
6. For Phase 1 Dose Expansion and Phase 2 only: Measurable disease as per RECIST v1.1 criteria (Note: Measurable disease is NOT required for Phase 1 Dose Escalation).
7. Eastern Cooperative Oncology Group (ECOG) ≤ 1 .
8. Life expectancy ≥ 12 weeks.
9. No known contraindications to leukapheresis, cyclophosphamide, fludarabine, or steroids.
10. Baseline laboratory values as shown in the following table:

Minimum Laboratory Values for Study Entry Laboratory Assessment Criteria
White blood cell count $> 4,000/\text{mm}^3$ Absolute neutrophil count (ANC) $\geq 1,500/\text{mm}^3$ Platelets $\geq 100,000/\text{mm}^3$
Hemoglobin $\geq 10 \text{ g/dL}$ Total bilirubin $\leq 1.5 \times$ upper limit of normal (ULN) Aspartate amino transferase (AST) $\leq 3 \times$ ULN Alanine transaminase (ALT) $\leq 3 \times$ ULN Creatinine clearance by Cockcroft-Gault equation 60 mL/min Oxygen saturation $\geq 92\%$ on room air Albumin $\geq 3 \text{ g/dL}$

11. Left ventricular ejection fraction $\geq 50\%$.
12. Seronegative for human immunodeficiency virus (HIV) by antigen/antibody (Ag/Ab) testing.
13. Seronegative for hepatitis B and/or hepatitis C virus.
14. Women of childbearing potential (WOCBP) must have a negative urine or serum pregnancy test. If the urine test is positive or cannot be confirmed as negative, a serum pregnancy test is required.
15. Agreement by women and men of childbearing potential to use an effective method of birth control or abstain from heterosexual activity through at least 3 months after the last dose of CHM-2101.

Exclusion Criteria:

1. Previous treatment with CDH17-targeted therapies.
2. Unresolved toxicities from prior therapy except for chronic toxicity no greater than Grade 1 and stable > 30 days (Note: alopecia of any grade is not exclusionary).
3. Uncontrolled seizure activity and/or known central nervous system (CNS) metastases.
4. History of allergic reactions attributed to compounds of similar chemical or biologic composition to study agent.
5. Uncontrolled Crohn's disease, ulcerative colitis, or other autoimmune or inflammatory disorders of the GI tract. "Uncontrolled" is defined as requiring hospitalization, corticosteroids, or chronic medication increase (dosage or frequency) within the previous 6 months.
6. Liver involvement $\geq 50\%$.
7. Active infection requiring oral or IV antibiotics.
8. Current diagnosis of pleural effusions, interstitial lung disease, or heart failure of New York Heart Association Classification of Heart Failure Class III or IV.
9. Ongoing treatment with systemic corticosteroid therapy at doses of prednisone ≥ 20 mg/day or equivalent (lower doses of corticosteroid therapy are allowed until 7 days prior to leukapheresis).
10. No prior malignancy within 5 years except for non-melanomatous skin cancer or cervical cancer treated with curative intent
11. Currently breastfeeding or planning to become pregnant within 9 months of study enrollment.
12. Any other clinically significant uncontrolled illness or other comorbid condition that would, in the investigator's judgment, contraindicate the participant's participation in the clinical study.

Ages Eligible for Study

18 Years to 85 Years (Adult, Older Adult)

Sexes Eligible for Study

All

Accepts Healthy Volunteers

No

Aims and Interventions

Participant Group/Arm	Intervention/Treatment
<p>Experimental: Autologous CDH17CAR T-cell Therapy</p> <p>After receiving three daily doses of IV fludarabine and cyclophosphamide, participants will</p>	<p>Biological: CHM-2101 CAR-T cells</p> <ul style="list-style-type: none"> • Cadherin 17 (CDH17) Chimeric Antigen Receptor (CAR)-positive T cells

Participant Group/Arm	Intervention/Treatment
<p>receive a single dose of IV CHM-2101.</p> <p>The dose of CHM-2101 during Phase 1 will be based on "3+3" rules of dose escalation.</p> <p>The recommended Phase 2 dose will be based on results from the Phase 1.</p>	

What is the study measuring?

Primary Outcome Measures

Outcome Measure	Measure Description	Time Frame
Dose-Limiting Toxicity (DLT)	Assessed according to National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE), version 5.0.	28 Days
Rates and Grades of Cytokine Release Syndrome (CRS)	Assessed per American Society for Transplant and Cellular Therapy (ASTCT) consensus grading guideline	up to 15 years
All other adverse events and toxicities	Assessed per NCI CTCAE v5.0	up to 15 years
Objective Response Rate (ORR)	Assessed by RECIST v 1.1	up to 15 years



Secondary Outcome Measures

Outcome Measure	Measure Description	Time Frame
Disease control rate (DCR)	Assessed as the percentage of patients with advanced or metastatic cancer who have achieved complete response, partial response, and stable disease to a therapeutic intervention in clinical trials of anticancer agents.	up to 15 years
Time to response (TTR)	Measured as the amount of time elapsed until drug response is achieved for the first time.	up to 15 years
Duration of response (DOR)	Measured as the amount of time a patient responds to a treatment before disease progresses or the patient dies.	up to 15 years
Progression-free survival (PFS)	Measured from the date of first infusion of CAR-T cells until the first date when progressive disease (PD) is objectively documented or death from any cause, whichever is earlier.	up to 15 years
Overall survival (OS)	Measured from the date of first infusion of CAR-T cells until death.	up to 15 years