ASX ANNOUNCEMENT **6 June 2023**

CHIMERIC PRESENTS NEW PHASE 1B GLIOBLASTOMA TRIAL IN PROGRESS AT ASCO23

- The design and objectives of the new CHM 1101 Phase 1B multi-site clinical trial were presented at the American Society of Clinical Oncology (ASCO) meeting.
- The new Phase 1B trial builds upon the Phase 1A dose escalation trial that has shown no dose limiting toxicities to date and a previously presented 75% disease control rate.
- The ASCO abstract provided additional background data on one patient from the initial dose cohort that achieved survival of 15.5 months from time of 1st CHM 1101 infusion.
- The trial is now open for enrollment at the Sarah Cannon Transplant & Cellular Therapy Program at St. David's South Austin Medical Center in Austin, Texas.

Sydney, Australia, June 6, 2023: Chimeric Therapeutics (ASX:CHM, "Chimeric" or the "Company"), the only clinical stage cell therapy company on the ASX, was pleased to present the CHM 1101 Phase 1B clinical trial in progress for patients with recurrent and/or progressive glioblastoma multiforme (GBM) on Saturday June 3 at the American Society of Clinical Oncology (ASCO) Annual Scientific Meeting (ASCO23) being held June 2-6, 2023 in Chicago.

Chimeric's poster presented at ASCO23 can be viewed below.

The new trial, being conducted under a US IND, is a two-part Phase 1B trial in patients with recurrent and/ or progressive glioblastoma designed to assess safety and efficacy and determine a recommended Phase 2 dose and administration schedule. (ClinicalTrials.gov Identifier: NCT05627323)

The trial will build from the learnings of the Phase 1A dose escalation investigator-initiated trial that has advanced to the 4th and final dose level with no dose limiting toxicities. Data previously presented from the Phase 1A trial demonstrated 75% disease stability in the initial two dose cohorts[1]. Additionally, the ASCO abstract provided background data on one patient who was treated in the initial dose cohort and survived 15.5 months from time of first CHM 1101 infusion. This patient's experience is compelling as patients with recurrent / progressive glioblastoma are generally expected to survive only 2-9 months[2].

Part A of the new trial will enroll 3-6 patients at the 440 $X10^6$ CHM 1101 cells as a dose confirmation cohort. Patients will be administered CHM 1101 across 3 once-weekly (Days 0, 7, and 14) intracranial (intracavitary and intraventricular) infusions.

In late 2023, Chimeric will assess the clinical safety and activity from the CHM 1101 clinical program. Based on a favorable review of the results of that assessment, Part B of the trial, a dose expansion cohort, will be opened to enroll 12 to 26 additional patients.

Upon successful completion of the Part B dose expansion cohort, the Company intends to design and initiate a registration trial, in collaboration with global regulatory feedback.

References:
1. Brown CE, et al. CTIM-29. Neuro-Oncology, 2021
2. Birzu C, French P, Caccese M, Cerretti G, Idbaih A, Zagonel V, Lombardi G. Recurrent Glioblastoma: From Molecular Landscape to New Treatment Perspectives. Cancers (Basel). 2020 Dec 26;13(1):47. doi: 10.3390/cancers13010047. PMID: 33375286; PMCID: PMC7794906.

About CHM 1101:
CHM 1101 (CLTX CAR T) is a first-in-class CAR T therapy that has the potential to address the high unmet medical need of patients with recurrent or progressive glioblastoma. Research to develop the intellectual property covering this CAR T cell therapy took place at City of Hope.

CHM 1101 cells uniquely utilize chlorotoxin (CLTX), a peptide component of scorpion venom, as the tumour-targeting component of the chimeric antigen receptor (CAR). CHM 1101 CAR T cells have been shown in preclinical models to bind more broadly and specifically to GBM cells than other targeting domains like EGFR, HER-2 or IL-13.

In preclinical models, CHM 1101 cells also demonstrated potent antitumor activity against glioblastoma while not exhibiting any off-tumor recognition of normal human cells and tissues, indicating a potentially optimal safety and efficacy profile.

CHM 1101 is currently being studied in a phase 1B clinical trial in recurrent / progressive glioblastoma. Initial positive data from the investigator-initiated phase 1A trial has been presented and demonstrated safety with ~70% disease stability in the initial two dose cohorts of the trial.

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.

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 3 current clinical programs and plans to open additional clinical programs in 2023.

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 1B clinical trial in recurrent / progressive glioblastoma. Initial positive data from the investigator-initiated phase 1A trial has been presented on patients treated in the first two dose levels of the trial.

CHM 2101 (CDH17 CAR T) is a first-in-class, 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 demonstrating complete eradication of tumors in 7 types of cancer. CHM 2101 (CDH17 CAR T) is currently in preclinical development with a planned phase 1A clinical trial in gastrointestinal and neuroendocrine tumours.

CHM 0201 (CORE-NK platform) 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, an additional Phase1B clinical trial investigating CHM 0201 in combination with IL2 and Vactosertib is now underway. From the CHM 0201 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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PHASE 1B MULTICENTER STUDY TO EVALUATE CHM 1101 IN PATIENTS WITH RECURRENT OR PROGRESSIVE GBM

POSTER
TPS2086

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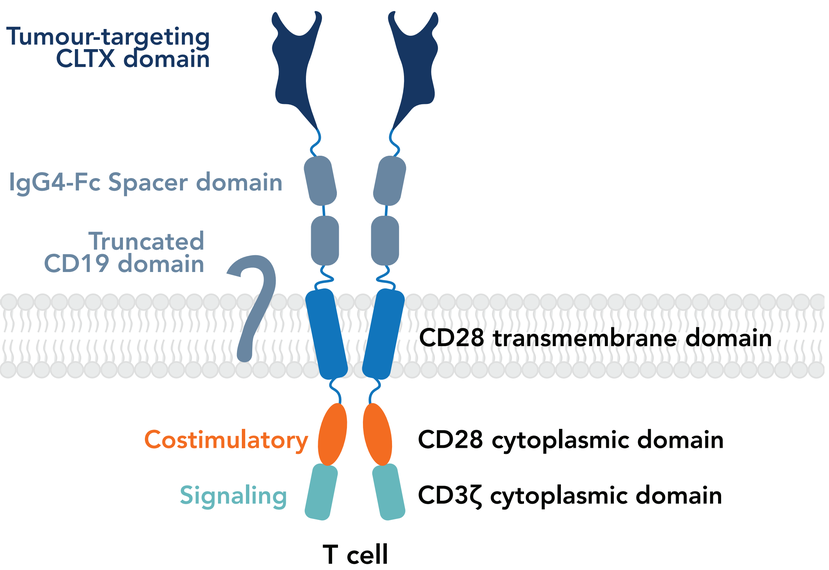
BACKGROUND

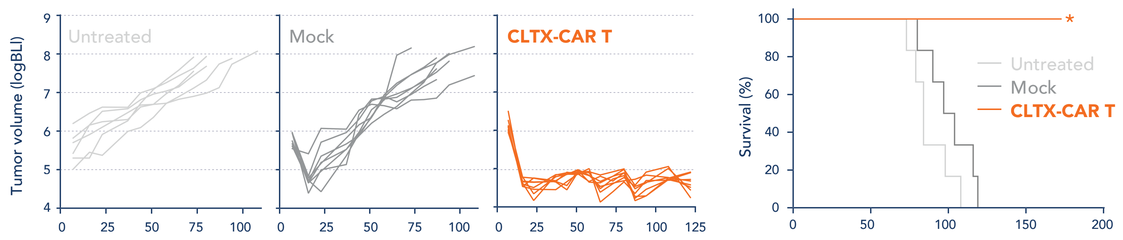
- Glioblastoma multiforme (GBM) is the most common and most aggressive primary brain tumor
  - More than 300,000 new cases are diagnosed globally with over 250,000 deaths each year[1]
  - Patients with recurrent GBM have a poor prognosis, with limited treatment options and a median survival of less than 1 year[2]
- While prior attempts to treat GBM with chimeric antigen receptor (CAR) T-cells have been limited by tumor heterogeneity, chlorotoxin (CLTX)-directed CAR T-cells in mice demonstrated broad anti-tumor activity and prolonged survival with no off-tumor toxicity or antigen escape **(Figure 3)**[3]
- CLTX, a 36–amino acid peptide identified in scorpion venom[4], selectively binds to malignant glioma cells through matrix metalloproteinase-2 (MMP2) and clinical administration of CLTX-based biologics has been well-tolerated in patients **(Figure 4)**[5-8]
- CHM 1101 is the first CAR T to utilize CLTX as its tumor targeting domain for autologous CAR T-cell therapy **(Figure 1)**
- The following was observed in an ongoing single-center first-in-human phase 1 study of CHM 1101 in patients with recurrent GBM[8]
  - Safety: no dose-limiting toxicities; one cerebral edema possibly attributed to CHM 1101
  - Efficacy: 75% disease control rate with survival up to 15.5 months
- Clinical Trial NCT05627323 is a phase 1b, multi-center study of CHM 1101 in adult subjects with MMP2+ recurrent or progressive GBM after standard therapy **(Figure 2)**

FIGURE 1. CHM 1101 WAS DESIGNED FOR CLINICAL SAFETY & EFFICACY



PRECLINICAL ANTI-GBM ACTIVITY

FIGURE 3. CHM 1101 (CLTX-CAR T-CELLS) DEMONSTRATE ROBUST ANTI-TUMOR ACTIVITY AND IMPROVED SURVIVAL IN VIVO[3]

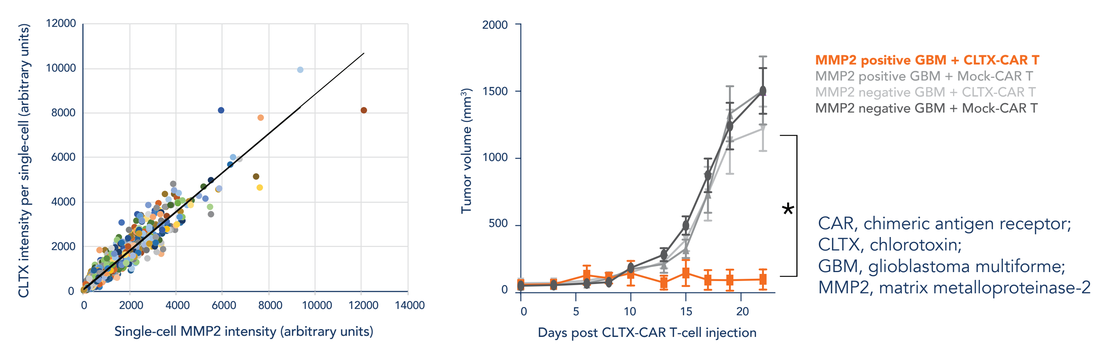


- In immunodeficient mice with established GBM tumors, mice treated with CLTX-CAR T-cells experienced dramatic and prolonged tumor control, while untreated mice and those treated with a Mock CAR T-cell product showed uncontrolled tumor growth
- Tumor control by CLTX-CAR T-cells led to prolonged survival
- CLTX-CAR T-cells exhibited no observable off-target effector activity or toxicity to normal tissues (data not shown)

BLI, bioluminescent intensity; CAR, chimeric antigen receptor; CLTX, chlorotoxin; GBM, glioblastoma multiforme; ICT, intracerebrotumoral; IVT, intracerebroventricular

MMP2 BIOMARKER

FIGURE 4. CHM 1101 (CLTX-CAR T-CELLS) REQUIRES MMP2 FOR ANTI-GBM ACTIVITY

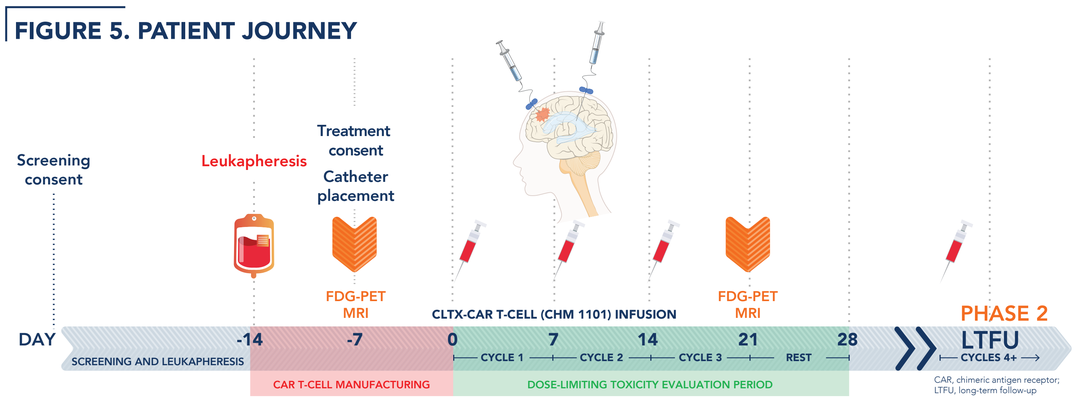


CAR, chimeric antigen receptor; CLTX, chlorotoxin; GBM, glioblastoma multiforme; MMP2, matrix metalloproteinase-2

- Direct correlation between CLTX binding and MMP2 localization in GBM tumor tissue (left)[9]
- MMP2 is required for anti-tumor activity of CLTX-CAR T-cells (CHM 1101) in GBM (right)[3]

THE PATIENT JOURNEY

FIGURE 5. PATIENT JOURNEY

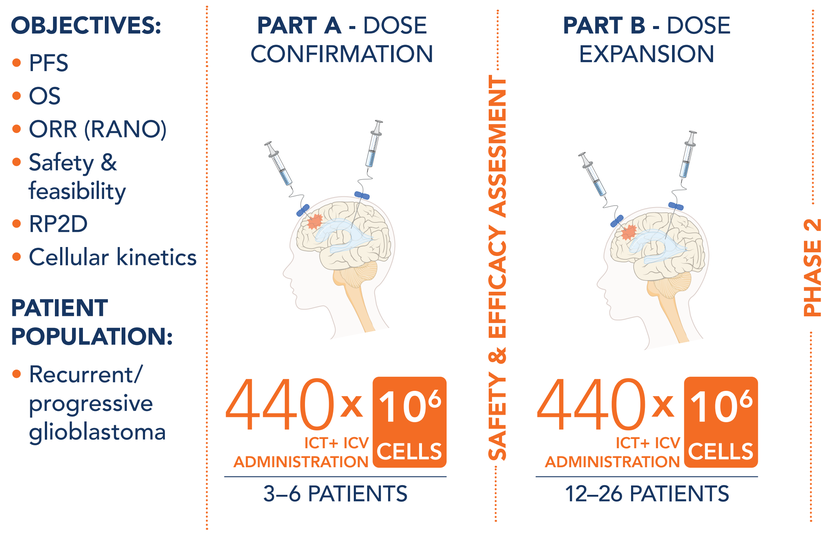


CAR, chimeric antigen receptor; LTFU, long-term follow-up

- After leukapheresis and tumor resection, CHM 1101 is administered across 3 once-weekly (Days 0, 7, and 14) intracranial (intracavitary and intraventricular) infusions
- After disease assessment at Day 28, additional weekly doses of CHM 1101 may be administered in the absence of disease progression or unacceptable toxicity

STUDY DESIGN AND ENDPOINTS

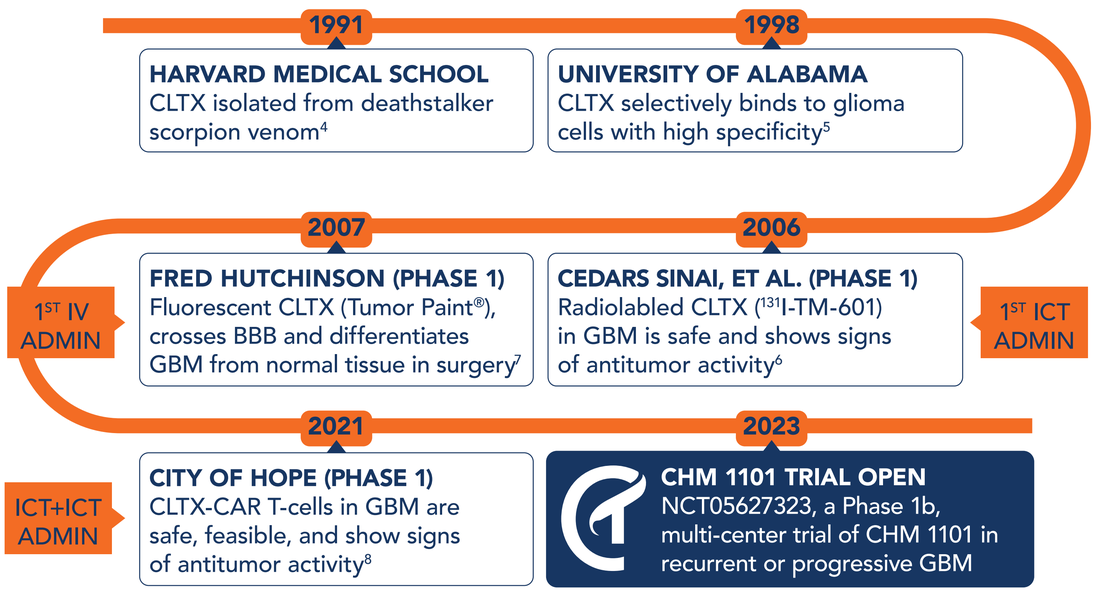
FIGURE 2. CHM 1101 STUDY DESIGN AND KEY ENDPOINTS



ICT, intracerebrotumoral; IVT, intracerebroventricular; ORR, objective response rate (RANO); OS, overall survival; PFS, progression-free survival; RANO, Response Assessment in Neuro-Oncology; RP2D, recommended Phase 2 dose

CHLOROTOXIN DEVELOPMENT

FIGURE 6. TIMELINE FOR DEVELOPMENT OF CLTX THERAPIES IN GBM



BBB, blood-brain-barrier; CAR, chimeric antigen receptor; CLTX, chlorotoxin; GBM, glioblastoma multiforme; ICT, intracerebrotumoral; IV, intravenous; IVT, intracerebroventricular

KEY PATIENT ELIGIBILITY

- Age 18 years and older
- Eastern Cooperative Oncology Group (ECOG) status of 0 or 1
- Life expectancy ≥12 weeks
- Histologically confirmed diagnosis of a grade 4 GBM, a grade 2 or 3 malignant glioma with radiographic progression consistent with a grade 4 GBM (IDH wild type), grade 4 diffuse astrocytoma (IDH mutant), or a unifocal relapse of GBM
- Relapsed disease: radiographic evidence of recurrence/progression of measurable disease after standard therapy and ≥ 12 weeks after completion of front-line radiation therapy
- MMP2+ tumor expression confirmed by IHC (≥20% moderate/high MMP2 score [2+ or 3+])
- Adequate baseline organ function and venous access for leukapheresis

REGISTRATION

The study is sponsored by Chimeric Therapeutics, Ltd., and is registered at ClinicalTrials.gov (NCT05627323)

STATUS

The study opened to accrual in 2023 and is currently enrolling patients from sites in the United States

Refer to ClinicalTrials.gov for the most up to date list of activated sites

For questions or comments, please email: clinicaltrials@chimerictherapeutics.com

REFERENCES

1. Sung H, *et al.* CA *Cancer J Clin.* 2021;71(3):209-249. **2.** Gallego O. *Curr Oncol*, 2015;22 (4):e273-81. **3.** Wang D, *et al. Sci Transl Med.* 2020;12(533):eaaw2672. **4.** DeBin JA, *et al. Am J Physiol.* 1993;264:C361–C369. **5.** Soroceanu L, *et al. Cancer Res.* 1998;58:4871–4879 **6.** Mamelak AN, *et al. J Clin Oncol.* 2006;24(22):3644-3650. **7.** Veiseh M, *et al. Cancer Res.* 2007;67(14):6882–8. **8.** Brown CE, *et al.* CTIM-29. *Neuro-Oncology*, 2021 **9.** Aftabizadeh M, *et al.* EXTH-10. *Neuro-Oncology*, 2021

ACKNOWLEDGEMENTS

We thank the patients and their families, caregivers, and the study investigators, staff, and clinical sites for participating in this study.

Medical writing support was provided by Christopher Waldapfel, PharmD, of Red Thread Communications, with funding from Chimeric Therapeutics, Ltd.

DISCLOSURES

BB: consulting, advisory role, and research support from Chimeric Therapeutics; research funding from NIH, patent EP3411393B1 granted. **AA:** employment at Chimeric Therapeutics. **CH:** employment and equity ownership in Chimeric Therapeutics. **SHA:** employment and equity ownership in Chimeric Therapeutics. **JBL:** employment and equity ownership in Chimeric Therapeutics.

Presented at the American Society for Clinical Oncology (ASCO) Annual Meeting, June 2–6, 2023

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