ASX ANNOUNCEMENT **October 23,2023**

POSITIVE PRELIMINARY PHASE 1A DATA FOR CLTX CAR T IN RECURRENT BRAIN CANCER CLINICAL TRIAL

- A 55% Disease Control Rate (DCR) was achieved in patients treated with CLTX CAR T, exceeding historical disease control rates of 20-37%[1]
- ~10 months median survival was demonstrated in patients that achieved disease control. Survival expectations for patients after first line therapy are generally ~7 months.[2]
- 2 patients have demonstrated survival beyond 14 months with three patients in ongoing follow up
- A clinically acceptable safety profile for CLTX CAR T was exhibited in heavily pretreated patients with recurrent Glioblastoma (GBM)
- Development will advance to expansion cohorts in the ongoing Phase 1B clinical trial
- Investor webinar discussing the data to be held today at 11am AEDT. Please register here.

Sydney, Australia, October 23, 2023: Chimeric Therapeutics (ASX:CHM, "Chimeric" or the "Company"), an Australian leader in cell therapy, is pleased to announce positive clinical data for CLTX CAR T in heavily pretreated, late stage, recurrent Glioblastoma patients in the Phase 1A trial, conducted at City of Hope, one of the largest cancer research and treatment organizations in the United States. The information provided herein is based on preliminary study data. The trial remains ongoing and will continue to be monitored and evaluated.

Patients treated in the Phase 1A trial were heavily pretreated, on average receiving CLTX CAR T as 4th line therapy (range 3-5th line). Historical trials in recurrent GBM have generally been limited to patients treated in 2nd line.

Patients treated across all 4 dose levels of the trial achieved a 55% Disease Control Rate, exceeding expectations and historical disease control rates of 20-37% for patients treated in 2nd line.

~9.9, 95% CI [5.8, NA] months median survival was demonstrated for patients that achieved disease control, with one patient exceeding 18 months survival, two patients exceeding 14 months survival and with 3 patients remaining alive and in follow up. Survival expectations for patients after first line therapy are generally ~7 months.

The interim results suggest that CLTX CAR T was generally well tolerated, with no dose limiting toxicities (DLT's), no Cytokine Release Syndrome (CRS) and no Tumor Lysis Syndrome (TLS). Grade 3 events were generally manageable and most often attributed to disease progression.

"The CLTX CAR T dose escalation preliminary data are truly encouraging and have exceeded our expectations, particularly given that the patients enrolled were heavily pretreated and very late stage," said Jennifer Chow, CEO and Managing Director of Chimeric Therapeutics.

"Historical therapies for recurrent Glioblastoma have generally been studied in patients with a median of 1 prior line of therapy. In contrast, the CLTX CAR T study enrolled patients with a median of 3 prior lines of therapy. The disease control rate of 55% is beyond that observed in patients treated with 2nd line therapy in historical clinical trials. Most exciting to us though, is that despite the advanced nature of the patients studied, CLTX CAR T demonstrated median survival of ~10 months for those that achieved disease control , with two patients demonstrating survival beyond 14 months. These data strongly demonstrate the potential utility of CLTX CAR T for patients with recurrent GBM."

Chimeric has now advanced development of CLTX CAR T to a Phase 1B clinical trial currently **open for enrollment** at the Sarah Cannon Transplant & Cellular Therapy Program at St. David's South Austin Medical Center in Austin, Texas.

The trial is being conducted under a US IND and is a two-part clinical trial (NCT04214392). Part A of the trial will enroll 3-6 clinical trial participants at 440 X 10^6 CHM 1101 cells, the highest dose tested in the Phase 1A clinical trial at City of Hope.

Based on the safety and efficacy demonstrated in the interim results of the Phase 1A City of Hope clinical trial, Chimeric will advance development of CLTX CAR T to Part B of the trial, an expansion cohort designed to confirm the recommended Phase 2 dose and administration schedule. Part B of the trial will enroll 12-26 additional patients.

"The preliminary data from the Phase 1A trial of CLTX CAR T reinforce our confidence in CLTX CAR T cell therapy," said Dr Jason Litten, Chief Medical Officer of Chimeric Therapeutics. "The safety profile and potential survival benefit demonstrated in these difficult-to- treat patients inspire us to advance clinical development of CLTX CAR T cell therapy. We are actively enrolling patients in our Phase 1B dose confirmation trial and now look forward to advancing our study to a dose expansion cohort in 2024".

Upon successful completion of the dose expansion cohort, Chimeric intends to design and initiate a registrational trial, in alignment with regulatory guidance and feedback.

The City of Hope Phase 1A study enrolled clinical trial participants with MMP2+ recurrent or progressive GBM across four dose levels. Behnam Badie, M.D., City of Hope Chief of Division of

Neurosurgery, is the trial's principal investigator. The trial is being conducted at City of Hope's Los Angeles campus.

Chimeric Therapeutics has licensed the exclusive global rights to intellectual property covering the chlorotoxin CAR-T cells from City of Hope, one of the largest cancer research and treatment organizations in the United States.

INVESTOR WEBINAR – 11am AEDT TODAY

Chimeric is pleased to host a webinar regarding today's announcement, with all shareholders and interested parties welcome to attend.

Chimeric's CEO and Managing Director Jennifer Chow and Chimeric's Chief Medical Officer, Dr Jason Litten will host the session and provide further discussion and context around the CLTX CAR T data. An opportunity to ask questions will also be provided.

When: 11am AEDT, Monday 23 October 2023
Register at: https://us02web.zoom.us/webinar/register/WN_Y_ewAXeiRxuV67tjeS_B_Q

Upon registering attendees will receive an email containing information about joining the webinar.

A recording will be available at the above link soon after the conclusion of the live session, with the replay to also be made available via Chimeric's website and social media channels.

Questions can be sent in advance of the webinar to matt@nwrcommunications.com.au

References :

1. *Temozolomide DCR: = 37% for rechallenge patients Ref: DOI:10.1200/JCO.2009.26.5520 Journal of Clinical Oncology 28, no. 12 (April 20, 2010) 2051-2057;*
   Lomustine DCR: 20% "Regorafenib compared with lomustine in patients with relapsed glioblastoma (REGOMA): a multicentre, open-label, randomised, controlled, phase 2 trial" - Vittorina Zagonel, Riccardo Soffietti, Marina Paola Gardiman, Stefano Indraccolo, Giovanna Magni, Miriam Farina, Ardi Pambuku, Luisa Bellu, Simona Rizzato, Francesco Pasqualetti, Bruno Daniele, Andrea Pace, Ivan Lolli, Marina Faedi, Roberta Rudà, Marica Eoli, Alba Ariela Brandes, Gian Luca De Salvo, Giuseppe Lombardi - The Lancet Oncology: Volume 20, Issue 1, 1-164, 65 https://www.thelancet.com/article/S1470204518306752/fulltext 1;6(7):1003-1010. doi: 10.1001/jamaoncol.2020.1024. PMID: 32437507; PMCID: PMC7243167.
2. *Gallego O. Nonsurgical treatment of recurrent glioblastoma. Curr Oncol. 2015 Aug;22(4):e273-81. doi: 10.3747/co.22.2436. PMID: 26300678; PMCID: PMC4530825*

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 2024.

CHM 1101 (CLTX CAR T) is a novel and promising CAR T therapy developed for the treatment of patients with solid tumours. Chimeric is currently studying CHM 1101 in a phase 1B clinical trial in recurrent / progressive glioblastoma. Preliminary positive data from the investigator-initiated phase 1A trial has been presented.

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, two additional Phase 1B investigator-initiated clinical trials have been opened. CHM 0201 in combination with IL2 and Vactosertib for patients with Colorectal Cancer and Acute Myeloid Leukemia is currently enrolling patients at Case Western Reserve University in Ohio. CHM 0201 in combination with Azacitidine and Venetoclax for patients with Acute Myeloid Leukemia has been initiated at MD Anderson Cancer Centre in Texas and will begin enrolling patients shortly. From the CHM 0201 platform, Chimeric has initiated development of new next generation NK (CHM 0301) and CAR NK (CHM 1301 and CHM 2301) assets.

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

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CHM 1101 (CLTX CAR T)

A Phase 1 Study to Evaluate Chimeric Antigen Receptor (CAR) T Cells With a Chlorotoxin Tumor-Targeting Domain for Patients With MMP2+ Recurrent or Progressive Glioblastoma

BACKGROUND
Glioblastoma (GBM) is the most common and most aggressive primary brain tumor. Around 294,900 new cases are diagnosed globally with 241,000 deaths each year. The 5-year survival is only 5%. Median overall survival from first recurrence is only 5-8 months. There is no established standard of care for recurrent GBM. This Phase IA Dose Escalation clinical trial studies the side effects and best dose of chimeric antigen receptor (CAR) T cells with a chlorotoxin tumor-targeting domain in treating patients with MPP2+ glioblastoma that has come back (recurrent) or that is growing, spreading, or getting worse (progressive).
PRIMARY STUDY OBJECTIVES
I. Assess the feasibility and safety of dual delivery of chlorotoxin (EQ)-CD28-CD3zeta-CD19t-expressing CAR T-lymphocytes NCI SYs (chlorotoxin [CLTX]-CAR T cells) for participants with MMP2+ recurrent or progressive glioblastoma. II. Determine the maximum tolerated dose schedule (MTD) and a recommended phase 2 dosing plan (RP2D) for dual delivery of CLTX-CAR T cells for participants with MMP2+ recurrent or progressive glioblastoma.
SECONDARY STUDY OBJECTIVES
I. Describe persistence, expansion, and phenotype of endogenous and CLTX-CAR CAR T cells in tumor cyst fluid (TCF), peripheral blood (PB), and cerebrospinal fluid (CSF). II. Describe cytokine levels in PB, TCF, and CSF over the study period. III. In research participants who receive the full schedule of 3 cycles of CLTX-CAR T cells: Estimate the six month progression free survival (PFS) rate. Estimate the nine month overall survival (OS) rate. Estimate disease response rates. Estimate median overall survival (OS). IV. In study participants who undergo an additional biopsy/resection or autopsy: Evaluate CAR T cell persistence in the tumor tissue and the location of the CAR T cells with respect to the injection site. Evaluate CLTX-targeted antigen expression levels on tumor tissue pre and post CAR T cell therapy. V. Use mathematical modeling of tumor growth to evaluate benefit of treatment.
METHOD
Patients receive chlorotoxin (EQ)-CD28-CD3zeta-CD19t-expressing CAR T-lymphocytes NCI SYs via dual delivery starting on day 0 for 3 weekly cycles over 28 days. Each treatment cycle begins with one or two CAR T cell infusions (one at each catheter site) and lasts for 1 week. Beginning 1 week after cycle 3, patients may continue with CAR T treatment per principal investigator and patient discretion. Treatment continues in the absence of disease progression or unacceptable toxicity. After completion of study treatment, patients are followed up at 30 days, 3, 6, 9, and 12 months, and then yearly for up to 15 years. This is a dose escalation study.

KEY INCLUSION CRITERIA	KEY EXCLUSION CRITERIA
• Documented informed consent of the participant and/or legally authorized representative. • Karnofsky performance status (KPS) >= 60% • Eastern Cooperative Oncology Group (ECOG) =< 2	• Prior and concomitant therapies • Owing to higher frequency of wound-related complications, participants who are within 3 months of having received

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- Life expectancy >= 4 weeks
- Participant has a prior histologically-confirmed diagnosis of a grade IV glioblastoma, or has a prior histologically-confirmed diagnosis of a grade II or III malignant brain tumors and now has radiographic progression consistent with a grade IV glioblastoma
- Relapsed disease: radiographic evidence of recurrence/progression of measurable disease after standard therapy, and >= 12 weeks after completion of front-line radiation therapy
- City of Hope (COH) Clinical Pathology confirms matrix metalloproteinase (MMP)2+ tumor expression by immunohistochemistry (>= 20% moderate/high MMP2 [2+/3+])
- No known contraindications to leukapheresis, steroids, or tocilizumab

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prior bevacizumab therapy at the time of enrollment are excluded.

- Participant has not yet recovered from toxicities of prior therapy
- Other illnesses or conditions
- Uncontrolled seizure activity and/or clinically evident progressive encephalopathy
- History of allergic reactions attributed to compounds of similar chemical or biologic composition to study agent
- Active diarrhea
- Clinically significant uncontrolled illness
- Active infection requiring antibiotics
- Known history of immunodeficiency virus (HIV) or hepatitis B or hepatitis C infection
- Other active malignancy

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<tr><td colspan="2">ARMS AND INTERVENTIONS</td></tr>
<tr><td>PARTICIPANT GROUP / ARM</td><td>INTERVENTION/ TREATMENT</td></tr>
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<td>Experimental:
Treatment (CAR T cell therapy) I
Arm 1 participants will undergo resection/biopsy of their tumor and placement of a Rickham catheter at the site of the resection/biopsy. Patients receive chlorotoxin (EQ)-CD28-CD3zeta-CD19t-expressing CAR T-lymphocytes NCI SYs via single delivery starting on day 0 for 3 weekly cycles over 28 days. Each treatment cycle begins with one CAR T cell infusion delivered intracranial intratumoral or intracavitary [ICT] and lasts for 1 week. Beginning 1 week after cycle 3, patients may continue with CAR T cell treatment per principal investigator and patient discretion. Treatment continues in the absence of disease progression or unacceptable toxicity.</td>
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Biological: Chlorotoxin (EQ)-CD28-CD3zeta-CD19t-expressing CAR T-lymphocytes (via ICT delivery)

- Given via ICT delivery
- Other Names:
  - Chlorotoxin-CD28-CD3z-CD19t-expressing CAR T-cells
  - CHM 1101
  - CLTX CAR T

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<td>Experimental:
Treatment (CAR T cell therapy) II
Arm 2 participants will undergo resection/biopsy of their tumor and placement of a Rickham catheter at the site of the resection/biopsy and the lateral ventricle. Patients receive chlorotoxin (EQ)-CD28-CD3zeta-CD19t-expressing CAR T-lymphocytes NCI SYs via dual delivery starting on day 0 for 3 weekly cycles over 28 days. Each treatment cycle begins with two CAR T cell infusions (intracranial intratumoral or intracavitary [ICT]) and also into the lateral ventricle (intracranial intraventricular [ICV]) and lasts for 1 week. Beginning 1 week after cycle 3, patients may continue with CAR T treatment per principal investigator and patient discretion. Treatment continues in the absence of disease progression or unacceptable toxicity.</td>
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Biological: Chlorotoxin (EQ)-CD28-CD3zeta-CD19t-expressing CAR T-lymphocytes (via ICT/ICV dual delivery)

- Given via ICT/ICV dual delivery
- Other Names:
  - Chlorotoxin-CD28-CD3z-CD19t-expressing CAR T-cells
  - CHM 1101
  - CLTX CAR T

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PRIMARY OUTCOME MEASURES		
OUTCOME MEAUSRE	MEAUSRE DESCRIPTION	TIME FRAME
Dose limiting toxicity (DLT)	Will be assessed by National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE version 5.0). Rate and associated 90% Clopper and Pearson binomial confidence limits (90% confidence interval) will be estimated for participants experiencing DLTs at the recommended phase 2 dose schedule. Tables will be created to summarize all toxicities and side effects by dose, time post treatment, organ, severity, and arm. 2. Cytokine Release Syndrome (CRS) 3. All other toxicities.	28 days
SECONDARY OUTCOME MEASURES		
OUTCOME MEASURE	MEASURE DECRIPTION	TIME FRAME
Chimeric antigen receptor (CAR) T cell	Will assess its levels and phenotype detected in tumor cyst fluid (TCF), peripheral blood (PB), and cerebrospinal fluid (CSF) (absolute number per ul by flowcytometry). Statistical and graphical methods will be used.	15 years
Endogenous T cell	Will assess its level and phenotype detected in TCF, PB, and CSF (absolute number per ul by flowcytometry). Statistical and graphical methods will be used.	15 years
Cytokine levels in TCF, PB and CSF		15 years
Progression free survival time		At 6 months
Disease response	Will be assessed by modified Response Assessment in Neuro-Oncology Criteria (RANO) criteria with the need for bevacizumab as an additional indicator of progression.	At 6 months
Overall survival (OS)	Kaplan Meier methods will be used to estimate median OS and graph the results.	At 9 months
CAR T cells detected in tumor tissue	Will be assessed by immunohistochemistry.	15 years
Chlorotoxin-targeted antigen expression levels in tumor tissue	Will assess the pathology H score.	15 years
Biomathematical modeling of tumor growth	Will assess perfusion and growth parameters based on serial brain magnetic resonance imaging (MRI)s.	15 years

SPONSOR	City of Hope Medical Center
COLLLABORATOR	National Cancer Institute (NCI)
INVESTIGATOR(S)	Principal Investigator: Behnam Badie,City of Hope Medical Cente
NCT IDENTIFIER	04214392
PRELIMINARY CLINICAL DATA	
TOTAL EVALUABLE PATIENTS	N=11
TOTAL PATIENTS ASSESSED FOR DISEASE CONTROL RATE	N=11
DISEASE CONTROL RATE	55%
TOTAL PATIENTS ASSESSED FOR SURVIVAL	N=11
SURVIVAL FOR PATIENTS ACHIEVING DISEASE CONTROL	~9.9, 95% CI [5.8, NA] months median survival
TOTAL PATIENTS ASSESSED FOR SAFETY	N=12