



Newsletter  
December 2022

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cancer free 2 years since  
her CHM 0201 therapy

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# Jennifer's update



**JENNIFER CHOW**  
**CHIEF EXECUTIVE OFFICER  
AND MANAGING DIRECTOR**

**As we come to the end of 2022, I want to thank you all for your ongoing support of Chimeric and our mission.**

This truly has been a remarkable year for Chimeric. We have been able to lay an incredible foundation for our future through the completion of licenses, collaboration agreements and partnerships in 2022. More importantly though, we have made significant progress with our clinical programs — truly on the path from our science to the patients that need it.

It means so much to us to be able to already speak to how Chimeric assets are changing people's lives. We are all incredibly excited and proud of the fact that the young woman who received our CHM 0201 (CORE-NK) cells in the phase 1 clinical trial is now more than 2 years out from her CHM 0201 treatment and remains in complete remission with no cancer. This is truly what our mission is all about.

We are also highly encouraged by the positive clinical signals we saw earlier this year with CHM 1101 (CLTX CAR T)

with ~70% of recurrent and progressive glioblastoma patients achieving disease stability. These patients have a devastating disease with such a high unmet medical need as their current survival expectation is generally less than one year. We see the early activity signal in this disease area as very promising and are all truly passionate about wanting to develop a therapy that can improve outcomes for these patients.

In the spring we saw the publication of our CHM 2101 preclinical data in the prestigious Nature Cancer journal. This preclinical data published demonstrates the incredible promise that we believe CHM 2101 holds for patients with gastrointestinal cancers and neuroendocrine tumours. Our team has been intensely dedicated in 2022 to completing all of the work necessary to move CHM 2101 into a phase 1 clinical trial as soon as possible.

Although all of this is truly exciting to us, none of it would have been possible without your ongoing belief in our mission and support of our development, for which I am truly grateful. I recognise that this has been a very challenging year as I, like so many of you have watched the biotech market and Chimeric's share price decline with concern.

While we recognise that we are unfortunately part of a broader market decline based on many macroeconomic factors, we have remained laser-focused on what we can control through these turbulent times — driving our development. While we are optimistic for a market rebound in 2023, you can be confident that we will continue to focus on advancing our clinical programs to deliver on our key milestones.

On behalf of myself and my entire team, we hope that enjoy all the wonder of this holiday season and look forward to updating you on our ongoing progress in the new year.

With warm regards,

**JENNIFER CHOW**

# Year in Review

This has been an active year for Chimeric. Over the course of the past 12 months, we have achieved an incredible number of key milestones. Many of the milestones were critical licenses and agreements that set up our foundation for future development and growth, including the recent licensing of CHM 0201, our CORE-NK platform. We also saw some highly encouraging clinical results this past year with both CHM 1101 (CLTX CAR T) and CHM 0201 (CORE-NK) that provide the foundation for further development.

| February  | March  | May  | June   | November   | December   |
|---|--|--|--|--|--|
| <b>CDH17 CAR T</b><br>(CHM 2101)<br>Sponsored Research Agreement with Penn<br><br><b>Positive DL2 Data</b><br>Phase 1A CLTX CAR T<br>(CHM 1101)<br>Clinical Trial | <b>CDH17 Nature Cancer</b><br>Preclinical Publication<br><br><b>Positive Phase 1 Data</b><br>CORE-NK<br>(CHM 0201)<br>Clinical Trial | <b>CORE-NK</b><br>(CHM 0201)<br>Exercise of Option | <b>CDH17 VECTOR</b><br>(CHM 2101)<br>Licensed from University of Pennsylvania<br><br><b>CORE-NK Combination Trial</b><br>Clearance from FDA<br>(CHM 0201+) | <b>CORE-NK</b><br>(CHM 0201)<br>Sponsored Research Agreement<br><br><b>CORE-NK License</b><br>(CHM 0201)<br>from Case Western Reserve University | <b>Completion of dose cohort 3</b><br>CLTX CAR T<br>(CHM 1101) |

For more information on any of these milestones, please go to our website for further detail: [www.chimerictherapeutics.com](http://www.chimerictherapeutics.com)

## CHM 0201 (CORE-NK) – building off a 24-month complete remission

In the June edition of our newsletter, we highlighted the strong Phase 1A clinical data for CHM 0201, our CORE-NK platform. Based on this initial efficacy signal we set ourselves an objective to identify an opportunity to move CHM 0201 into combination therapy development rapidly.

Today, we are thrilled with the progress that we have against this objective – not only have we been able to identify a combination that we believe will enhance the activity that we saw in our initial trial but we have also already been able to gain FDA approval to initiate that trial.

### Background

The initial Phase 1A dose escalation trial was completed at Seidman Cancer Center in Ohio. The trial included 9 patients with solid tumours and blood cancers and examined the safety of 3 dose levels of the CHM 0201 cells.

**The data demonstrated promising results across all key endpoints including efficacy, safety, expansion and persistence.**

A highlight of the data was the response seen in a young woman with relapse/refractory Acute Myeloid Leukemia.

The young woman had previously failed all standard of care therapies when she entered the CHM 0201 trial. Within the trial, she was given two infusions of CHM 0201 cells, two weeks apart. 28 days after her first infusion she showed signs of response achieving stability of her disease. This initial response deepened and by day 100, the patient had no disease left, achieving a complete response.

At the time of publication of this data the young woman had remained cancer free for 15 months. **We are thrilled to be able to provide you with an update that this young woman remains cancer free – now more than 2 years since her CHM 0201 therapy.**

Based on the safety and activity demonstrated in this initial trial, our objective was to rapidly identify an opportunity to combine our CHM 0201 platform cells with therapeutics that could enhance their clinical activity.

**Acute Myeloid Leukemia (AML) is a cancer of the blood and bone marrow – the spongy tissue inside bones where blood cells are made.**

The word 'acute' in acute myeloid leukemia denotes the disease's rapid progression. It's called 'myeloid' leukemia because it affects a group of white blood cells called the myeloid cells, which normally develop into the various types of mature blood cells, such as red blood cells, white blood cells and platelets.

- AML is the **most common type** of adult leukemia
- AML accounts for approximately **1% of all cancers** diagnosed
- The **average age** of people when they are first diagnosed with AML is **68 years**
- It is generally **more common among men** rather than women
- 5 year survival from AML diagnosis for adults is **~27%**

## CHM 0201 (CORE-NK) – building off a 24-month complete remission

### CHM 0201 (CORE-NK) PHASE 1A: SAFETY AND EFFICACY

The data demonstrated promising results across all key endpoints including efficacy, safety, expansion and persistence:



#### Safety

Established safety across 3 dose levels

No GVHD with universal donor cells



#### Persistence

28 day persistence of CORE-NK cells demonstrated



#### Expansion

Large scale manufacturing success from a single donor



#### Efficacy in solid tumours

33% disease control rate in solid tumours

66% durability of response past day 100



#### Efficacy in blood cancers

100% disease control rate in blood cancers

15+ month complete response

### CHM 0201 (CORE-NK) COMPLETE REMISSION ONGOING AT 24 MONTHS

#### Diagnosis

AML with therapy related High-Risk MDS with circulating blasts and high tumour burden

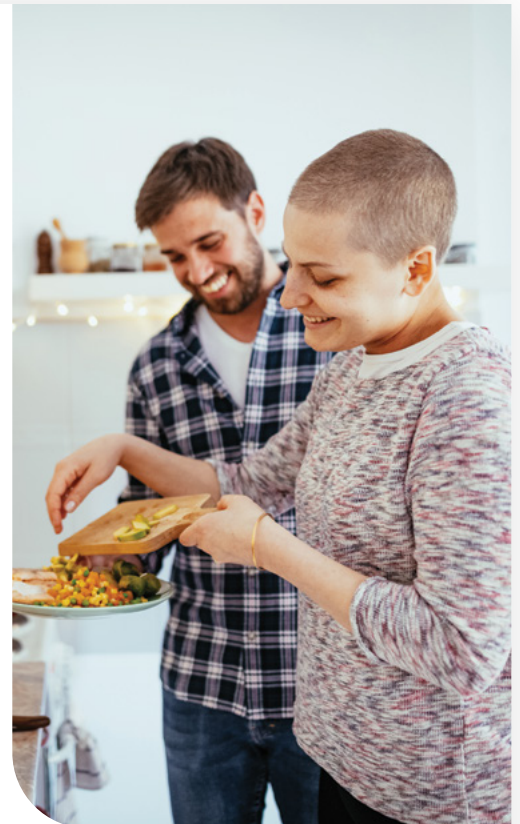
#### History

Progressive disease with prior allogeneic transplant

#### Safety

No dose limiting toxicities, no cytokine release syndrome, no GVHD

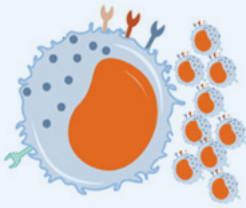
- ▼ **Day 0-14** **CORE-NK infusion**  
CORE-NK cell treatment at  $25 \times 10^6$  cells/kg
- ▼ **Day 28** **Stable disease**
- ▼ **Day 100** **Complete response**  
Enabling patient to undergo transplant
- ▼ **15+ months** **Ongoing complete response**
- ▼ **24+ months** **Ongoing complete response**



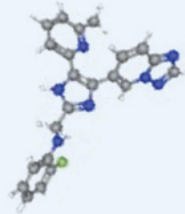
We are thrilled to be able to provide you with an update that this young woman remains cancer free – now more than 2 years since her CHM 0201 therapy.

# CHM 0201 + VACTOSERTIB + IL2 (Phase 1b)

We were very pleased that a combination that we believe has strong potential to build upon the responses seen in the initial CORE-NK clinical trial was rapidly identified. CHM 0201 will be studied in combination with Vactosertib and IL-2. 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 while IL-2 is known to activate NK cells by stimulating proliferation and enhancing function.

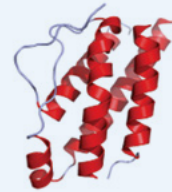


**CHM 0201 (CORE-NK Cells)**



**VACTOSERTIB**

A clinical drug candidate that inhibits TGF- $\beta$  signaling, a pathway known to inhibit the effect of immunotherapy



**IL-2**

An approved therapeutic known to activate NK cells



**J. EVA SELFRIDGE**

MD, PhD, UH Seidman oncologist and Assistant Professor at Case Western Reserve University School of Medicine in Ohio.

## FDA approved first ever trial of NK cells with Vactosertib

A Phase 1B study to evaluate safety and persistence of ex vivo expanded universal donor NK cells in combination with IL-2 and TGF- $\beta$  Receptor 1 Inhibitor Vactosertib.

### Study Initiation

9 September 2022

### Enrolment

12 Patients

### Estimated Completion

December 2023

### Eligible Patients

Relapse or refractory solid tumours and haematological malignancies

### Clinical Trials.gov Identifier

NCT05400122

Vactosertib has never been used in combination with NK cells in the clinic, but it has been used in humans in other clinical trials. 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.

The combination Phase 1B clinical trial has gained FDA clearance and has already been initiated at the Seidman Cancer Center in Ohio for patients with relapse/refractory colorectal cancer or relapse/refractory haematological malignancies. The trial will be the first ever trial to combine NK cells with Vactosertib and has been designed to enroll approximately 12 patients over the course of the next year.

# CHM 0201 licensing and SRA

We were very pleased to recently announce the acquisition of the exclusive global license from Case Western Reserve University (CWRU) for CHM 0201 along with a Sponsored Research Agreement to further advance the development of our NK portfolio.

Under the license agreement, Chimeric gains exclusive global rights to the CORE-NK platform for oncology, along with exclusive global rights to the CORE-NK platform for immune disorders and viral infectious diseases.

The sponsored research program at CWRU will be led by Dr David Wald, inventor of the CORE-NK technology. Through this research collaboration, Dr Wald and his laboratory will work closely with Chimeric to advance multiple next-generation NK cell products through preclinical development, including CHM 0301 (Next-Generation CORE-NK Platform), CHM 1301 (Chlorotoxin CAR NK), CHM 2301 (CDH17 CAR NK), and CHM 3301 (undisclosed CAR NK).



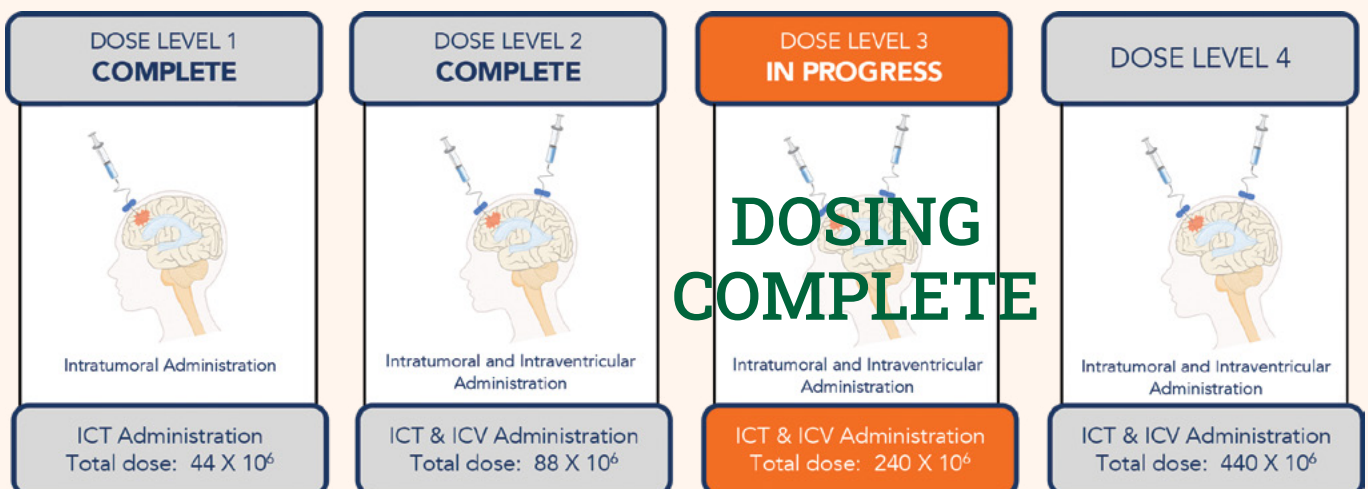
**DR DAVID WALD, MD, PHD**  
Associate Professor, Department of Pathology, School of Medicine Member, Immune Oncology Program, Case Comprehensive Cancer Center, Associate Director for Basic Research, University Hospitals, Wesley Center for Immunotherapy.



# Clinical progress on CHM 1101 (CLTX CAR T)

We are very pleased to (finally) be able to report that dosing in level 3 cohort of the CHM 1101 trial at City of Hope® has been completed.

As many of you know, the trial began recruiting patients in dose level 3 earlier this year. Unfortunately, due to COVID-19 restrictions in California and staffing issues at City of Hope®, the trial has not progressed at the pace we had anticipated. We are pleased to be able to report that we now believe that the roadblocks associated with the trial delays at City of Hope® have been cleared and look forward to being able to update you as the trial progresses to dose level 4.



## Clinical progress on CHM 1101 (CLTX CAR T) (cont.)

### Expansion to multi-site trial

To support consistent recruitment of patients as we move forward, our team has also been working hard to open additional clinical trial sites for the CHM 1101 study. We are pleased to let you know that we are currently working through the very last step to open new sites. We look forward to introducing you all to our new clinical sites shortly.



#### New clinical site activations

- ✓ IRB submissions to new clinical sites
- ✓ Manufacture and release of clinical vector
- ✓ Central laboratory partner
- ✓ Clinical logistics partner
- ✓ Clinical manufacturing partner
- ✓ Clinical research organisation partner
- ✓ Assess the feasibility of new clinical sites
- ✓ Updated clinical protocol for 1A/1B expansion
- ✓ CHIMERIC IND clearance

## Dr Jason Litten, our new Chief Medical Officer

**Finding the perfect Chief Medical Officer is a big task – we needed someone with the experience and expertise necessary to drive our development programs forward – but we also wanted someone that we would all enjoy working with. I count us as very lucky as we were able to find both in Dr Jason Litten, an experienced cell therapy CMO who I know you will all enjoy getting to know better.**

Dr Litten brings almost 15 years of leadership in drug development to Chimeric, with the past five years dedicated to advancing NK and CAR T Cell therapy clinical-stage programs in oncology. Dr Litten entered the cellular immunotherapy field in the early days making him a pioneer and part of the group that built our existing understanding of cell therapies.

Most recently, Dr Litten served as the Chief Medical Officer at Artiva Biotherapeutics where he led the development of a portfolio of allogeneic Natural Killer (NK) cell therapies. Prior to Artiva, Dr Litten was vice president clinical development at Juno Therapeutics, where he built and oversaw the autologous solid tumour CAR T and TCRs cell therapy programs.



**To help you know Jason better, we asked him our questions:**

**Q. What was the last movie you watched?**

**A.** Top Gun: Maverick in 4D.

**Q. What is your favourite food?**

**A.** Flourless chocolate torte.

**Q. Where is your favourite vacation spot?**

**A.** Anywhere with Bernice and Brandon.

**Q. If you could play an instrument, what would it be?**

**A.** Drums. They look like the most fun.

**Q. When you were a kid what did you want to be when you grew up?**

**A.** A doctor, like my dad.

Q & A

# A word from our Executive Chairman and Founder



## What a year this has been with a roller coaster ride in capital and investment markets for life science companies!

All shareholders have felt the pain of watching our share price fall from a high on IPO opening of 42 cents, to present levels of around 8 cents.

I think Jeff Bezos captured it well when he talked about Amazon falling from \$113 to \$6 in less than a year.

"The stock is not the company. And the company is not the stock. And so, as I watched the stock fall... I was also watching all of our internal business metrics... number of customers, profit

per unit... every single thing about the business was getting better...

And so, while the stock price was going the wrong way, everything inside the company was going the right way."

Myself and our leadership team feel the same way.

Take a look at the Year in Review at the start of this newsletter, and I hope you will be reassured that the internal metrics of Chimeric are sound, and that we are building a real company for the future.

To paraphrase Bezos, the share market is a voting machine, but in the long run its a weighing machine, so we need to run Chimeric in such a manner that it will be weighed one day.

Thanks for your support and best wishes for the holiday season.

**PAUL HOPPER**  
**EXECUTIVE CHAIRMAN**  
**AND FOUNDER**

## Heading into the next 6–12 months

### CHM 2101

- FDA IND Clearance
- Manufacture and Release of CDH17 Vector

### CHM 1101

- Completion of GBM Phase 1 Dose Escalation
- Second CHM GBM Trial Site Initiation
- First Patient Dosed CHM GBM Trial
- Initiation of CHM Phase 1A/B GBM Trial
- Completion of COH Dose Level 3

### CHM 0201

First Patient Dosed in CORE-NK Combo Trial



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