



Prescient
Therapeutics

**Near term opportunities.
Long term value.**

**Post ISCT
Science Briefing
June 2023**

DISCLAIMER AND SAFE HARBOR



Certain statements made in this document are forward-looking statements within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995. These forward-looking statements are not historical facts but rather are based on the current expectations of Prescient Therapeutics Limited (“Prescient” or the “Company”), their estimates, assumptions, and projections about the industry in which Prescient operates. Material referred to in this document that use the words ‘estimate’, ‘project’, ‘intend’, ‘expect’, ‘plan’, ‘believe’, ‘guidance’, and similar expressions are intended to identify forward-looking statements and should be considered an at-risk statement. These forward-looking statements are not a guarantee of future performance and involve known and unknown risks and uncertainties, some of which are beyond the control of Prescient or which are difficult to predict, which could cause the actual results, performance, or achievements of Prescient to be materially different from those which may be expressed or implied by these statements. These statements are based on our management’s current expectations and are subject to a number of uncertainties and risks that could change the results described in the forward-looking statements. Risks and uncertainties include, but are not limited to, general industry conditions and competition, general economic factors, the impact of pharmaceutical industry development and health care legislation in the United States and internationally, and challenges inherent in new product development. Investors should be aware that there are no assurances that results will not differ from those projected and Prescient cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of Prescient only as of the date of this presentation. Prescient is not under a duty to update any forward-looking statement as a result of new information, future events or otherwise, except as required by law or by any appropriate regulatory authority.

Certain statements contained in this document, including, without limitation, statements containing the words “believes,” “plans,” “expects,” “anticipates,” and words of similar import, constitute “forward-looking statements.” Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Prescient to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among others, the following: the risk that our clinical trials will be delayed and not completed on a timely basis; the risk that the results from the clinical trials are not as favorable as we anticipate; the risk that our clinical trials will be more costly than anticipated; and the risk that applicable regulatory authorities may ask for additional data, information or studies to be completed or provided prior to their approval of our products. Given these uncertainties, undue reliance should not be placed on such forward-looking statements. The Company disclaims any obligation to update any such factors or to publicly announce the results of any revisions to any of the forward-looking statements contained herein to reflect future events or developments except as required by law.

This document may not contain all the details and information necessary for you to make a decision or evaluation. Neither this document nor any of its contents may be used for any other purpose without the prior written consent of the Company. Nothing in this document should be considered financial advice. Please consult your professional investment adviser who understands your risk appetite and financial objectives before considering an investment in Prescient.

The contents of this document are confidential information of Prescient. These contents are made available on a ‘for your eyes only’ basis to the person to whom it was sent by Prescient. The purpose of the disclosure is to facilitate commercial and confidential discussions between the discloser and Prescient. It should not be forwarded without the prior written consent of the Company.

Investment Highlights



World class pedigree.

We license from the best;
and work with the best



+\$20M cash

Long runway for multiple catalysts

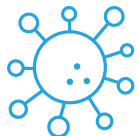


Many shots on goal for
substantial value creation



2 Targeted Therapies in clinic

- **Encouraging efficacy in cancers with unmet need**
- Orphan Drug Status



2 Cell Therapy platforms

Internal & external opportunities



Upcoming newsflow

from multiple programs

Diversified portfolio of later stage and emerging assets

**Targeted
therapies**

**Ph1b drug with potential for rapid clinical
development.
Encouraging activity in areas of unmet need**

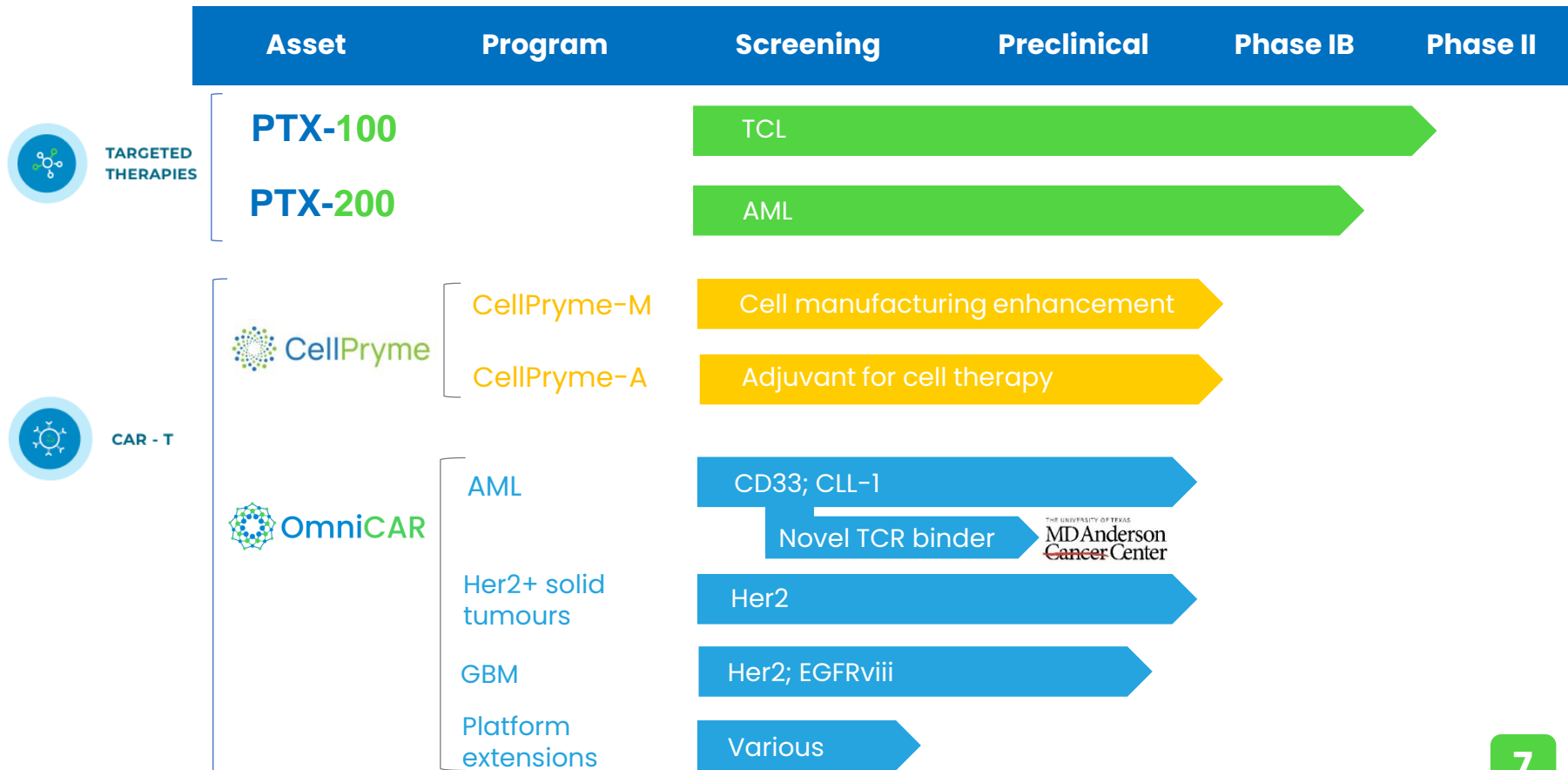
 **CellPryme**

**Cell therapy platform with demonstrated
benefits ready for the clinic**

 **OmniCAR**

**Platform with potential to revolutionise
cell therapy in pre-clinical development**

Innovative pipeline in personalised medicine



License from the best;
Work with the best.



Yale



Making Cancer History

Previous collaborators include:



Memorial Sloan Kettering
Cancer Center



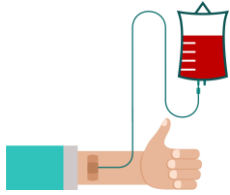
HARVARD
UNIVERSITY



INDIANA UNIVERSITY



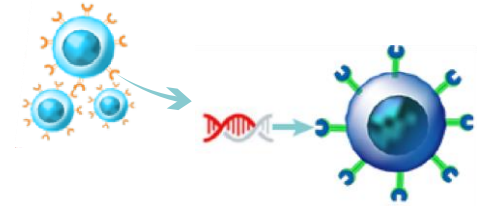
The CAR-T process



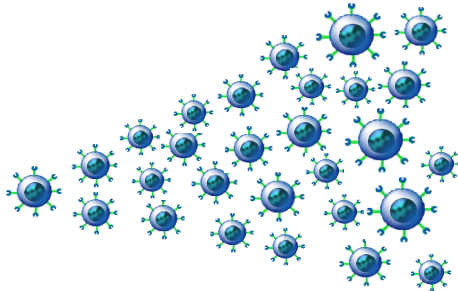
1 Blood is collected from the patient



2 T-Cells are isolated



3 T-Cells are genetically altered to have cancer-recognising receptors (CARs)













4 Millions of CAR-T cells are grown

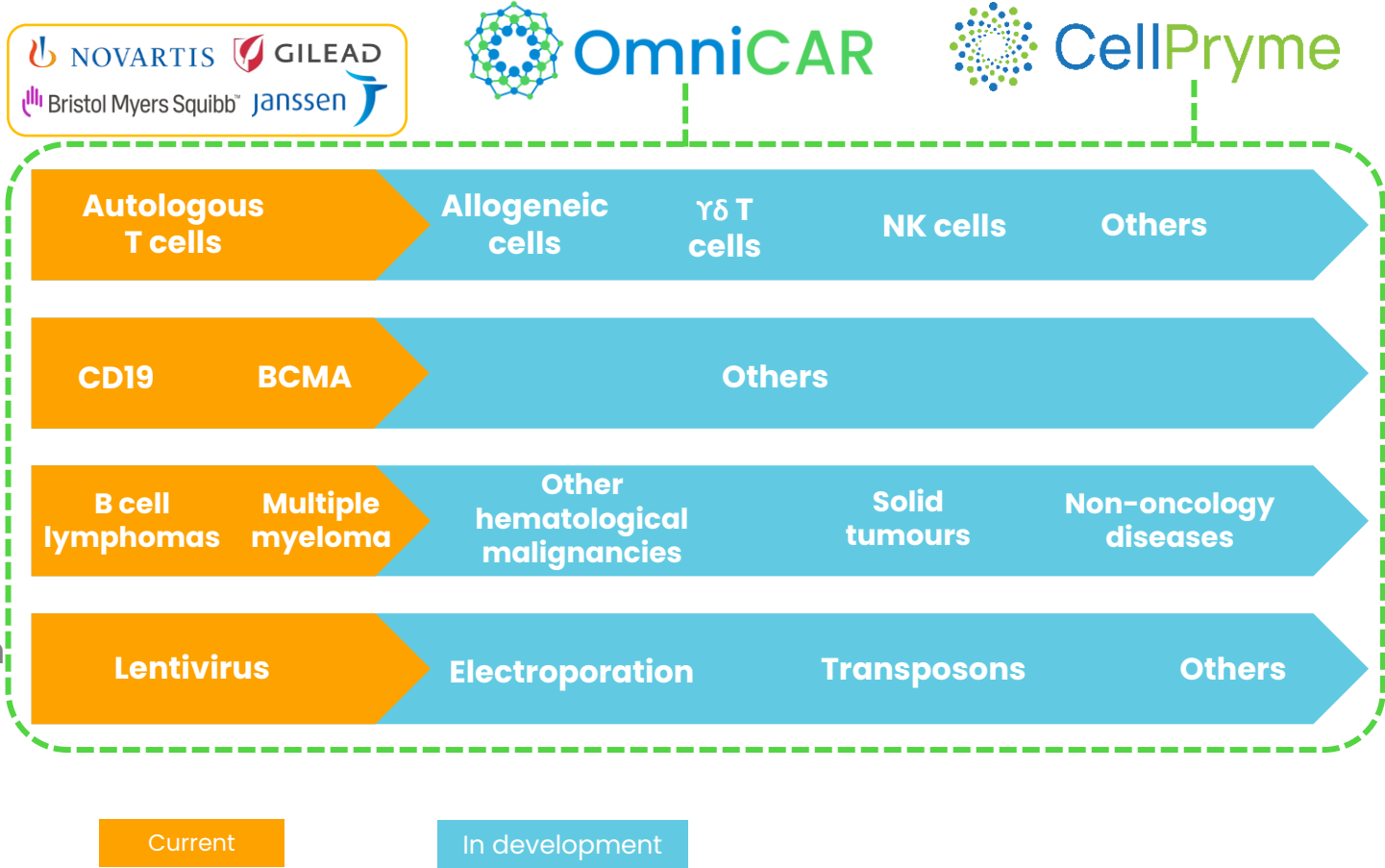


5 CAR-T cells are administered to the patient

Platforms to overcome CAR-T's key challenges

	Challenge	 OmniCAR	 CellPryme		
	Safety / Control	No control post infusion	✓	-	
	Targeting	Difficulties with targeting, antigen heterogeneity	✓	-	Safe
	Escape	Difficulties with mutating antigens	✓	-	Effective
	Production efficiency	Cost prohibitive & slow	✓	-	Sustainable
	Exhaustion	Cells run out of steam	✓	✓	Affordable
	Trafficking	Cells cannot find their way	✓	✓	Enduring
	Tumor penetrance	Protective layer around tumor	✓	✓ ✓	
	Tumor microenvironment	Suppresses immune cells	✓	✓ ✓	

Strategically positioned in the rapidly moving cell therapy landscape



Presenters



Dr Rebecca Lim
Senior VP – Scientific Affairs



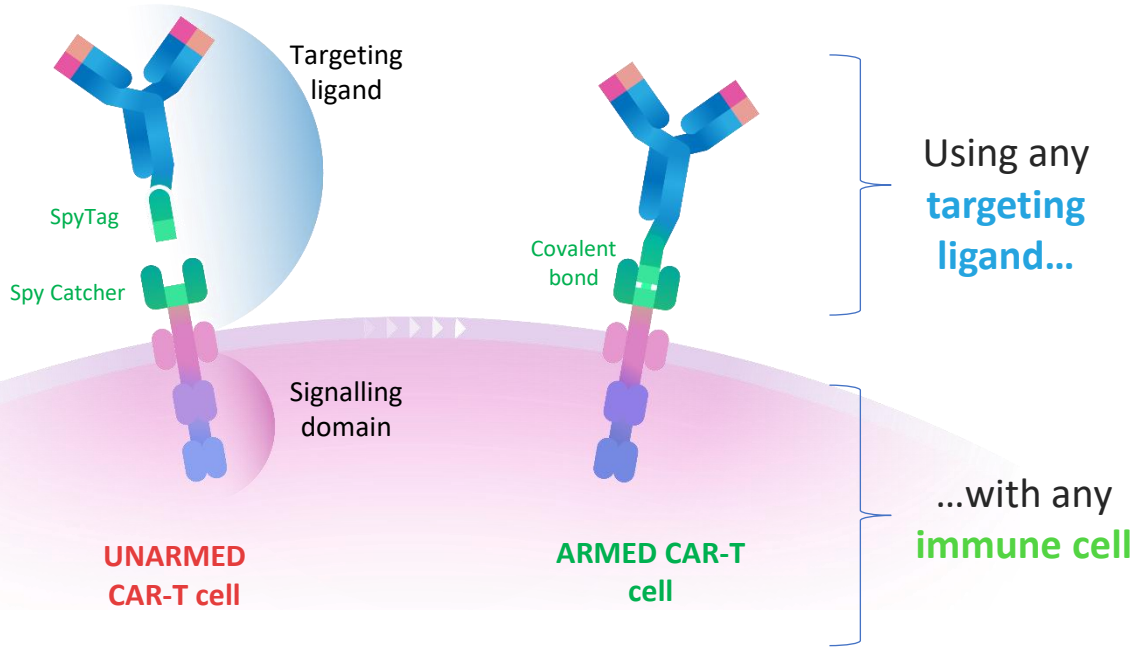
Dr Kevin Sek
Postdoctoral Researcher



OmniCAR

Universal, Next Generation CAR-T

OmniCAR: flexible, modular CAR platform



Associate Professor
Daniel J. Powell, Jr



Professor
Andrew Tsourkas

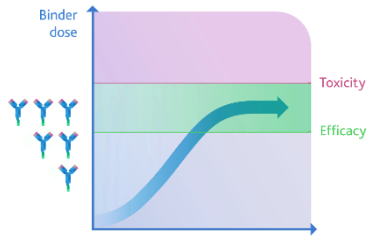


UNIVERSITY OF
OXFORD

OmniCAR: Control Features

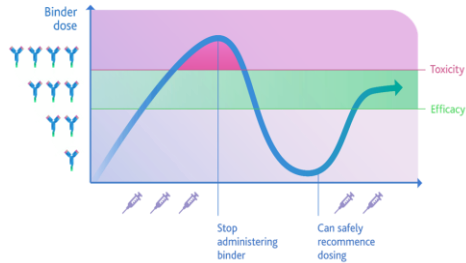
Modular and covalent architecture of OmniCAR enables true **post-infusion control** of CAR functionality

Dose Titration



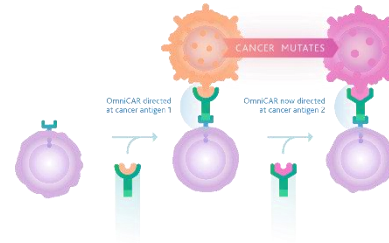
Control activity to **safe and efficacious** levels

On/off switch



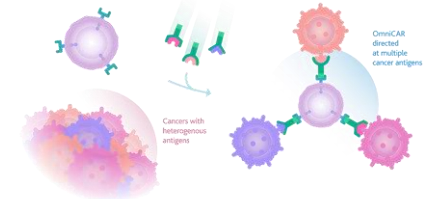
Turn therapy on/off/on without killing or re-administering cells = **safety & persistence**

Target Re-direction



Re-direct cells from one cancer target to another in vivo

Multi-Antigen Targeting



Target **multiple cancer antigens simultaneously** for thorough cancer killing

OmniCAR, a universal CAR T cell therapy utilizing covalent SpyCatcher/SpyTag binding to target multiple antigens in different tumors

Kevin Sek^{1,2}, Jun-Ming Tong^{1,2}, Christina Scheffler^{1,2}, Jasmine Li^{1,2}, Steven Yatomi-Clarke³, Rebecca Lim³, Philip K, Darcy^{1,2}

1. Peter MacCallum Cancer Centre, Melbourne, Victoria, Australia; 2. Sir Peter MacCallum Department of Oncology, University of Melbourne, Victorian

Comprehensive Cancer Centre; 3. Prescient Therapeutics Limited, Melbourne, Australia

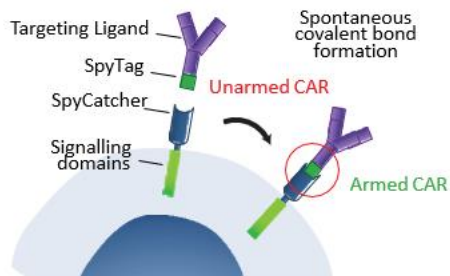


THE UNIVERSITY OF
MELBOURNE

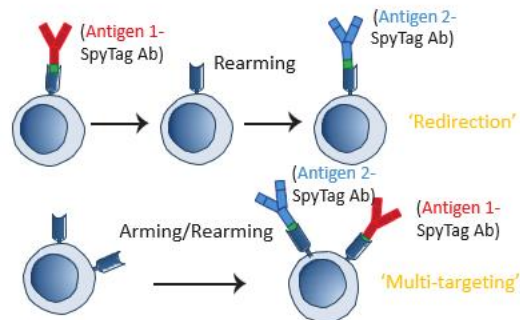


'Arming' OmniCAR™ T cells against multiple tumor antigens through rapid and spontaneous covalent SpyTag/SpyCatcher bond formation

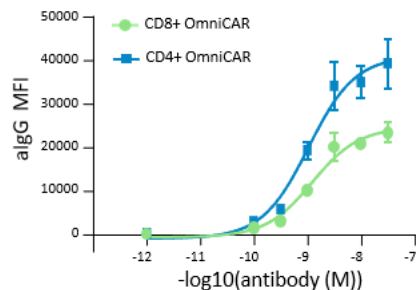
A. OmniCAR Platform



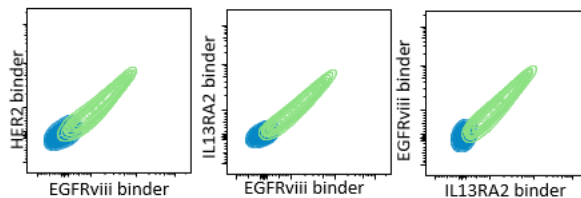
B. Re-direction and multi-antigen targeting



C. Arming efficiency



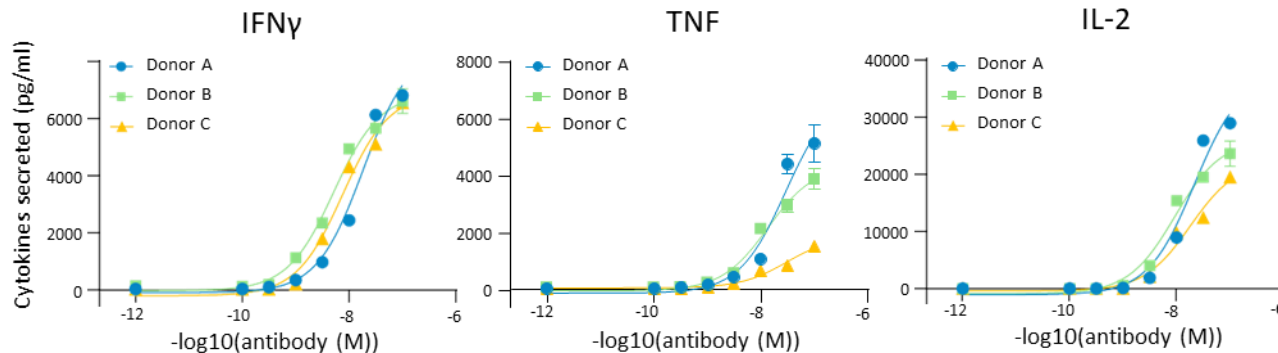
D. Triple arming against different antigens



Summary

- OmniCAR can be armed with at least 3 different binders at a time
- Arming is efficient
- Important in targeting cancers with multiple antigens (e.g. solid tumours)

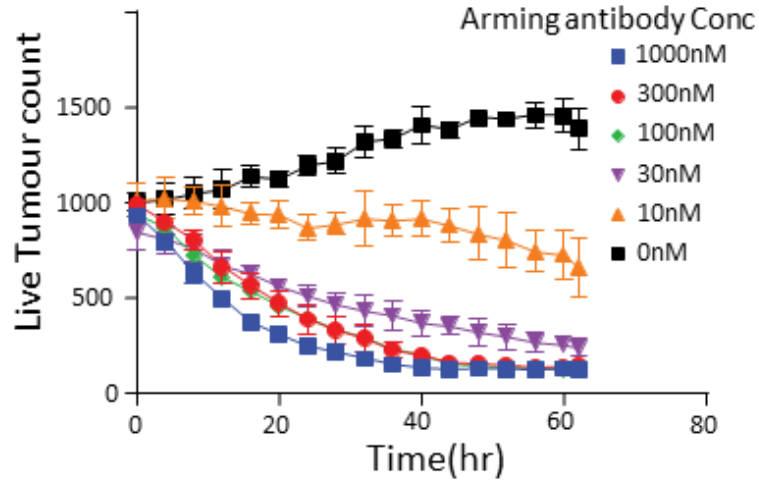
Precise control of anti-tumor function and killing by OmniCAR T cells against multiple different solid and liquid tumors



Summary

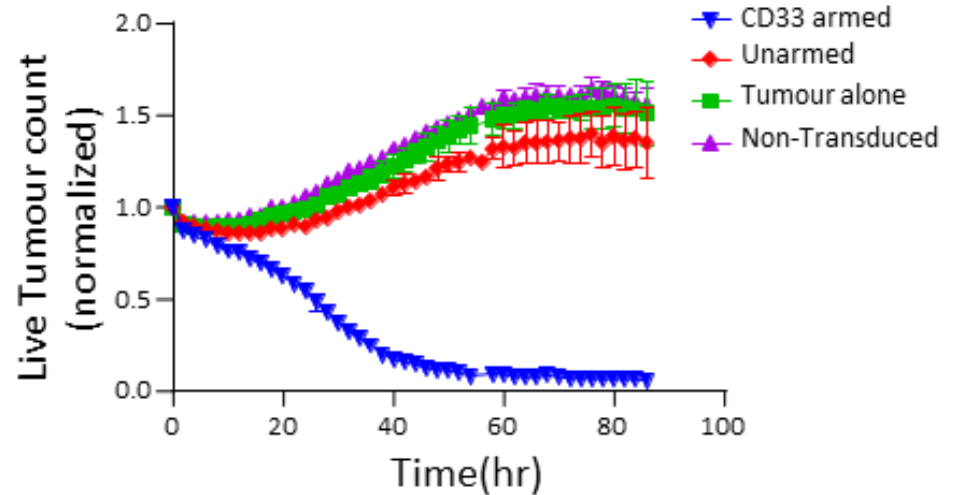
- OmniCAR tumour killing can be precisely controlled by varying the binder dose
- This is the sort of “dose response” seen in with conventional medicines, but not possible with regular CAR-T therapies.
- Controlled activity is good for patients and clinicians

Tumour killing: Glioblastoma



- Titratable, armed killing by OmniCAR T cells in GBM
- **Precise control:** increased binder = increased tumour killing

Tumour killing: AML



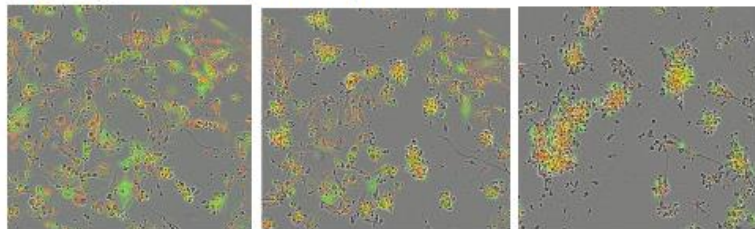
- Unarmed OmniCAR remained inactive
- OmniCAR armed with CD33 binder exhibits **dramatic tumour killing**

Live snapshots of OmniCAR killing tumours

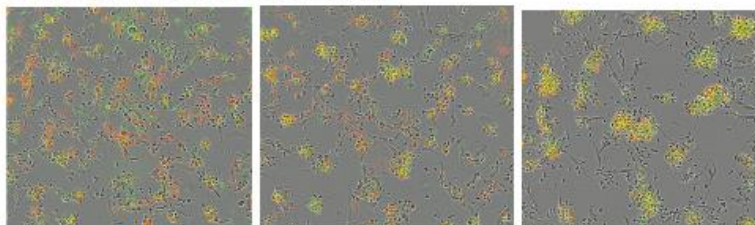
Red = live tumour cells

Green = dead tumour cells

Targeting HER2 (Glioblastoma)



Targeting EGFRviii (Glioblastoma)

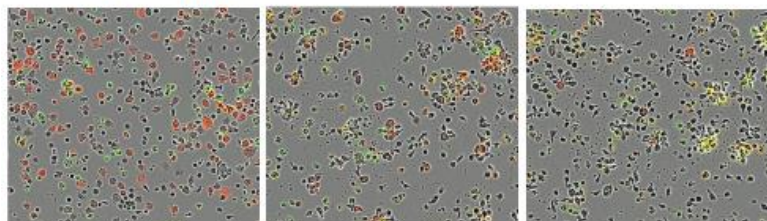


0 hrs

8 hrs

32 hrs

Targeting CD33 (AML)



0 hrs

24 hrs

48 hrs

Summary

In GBM:

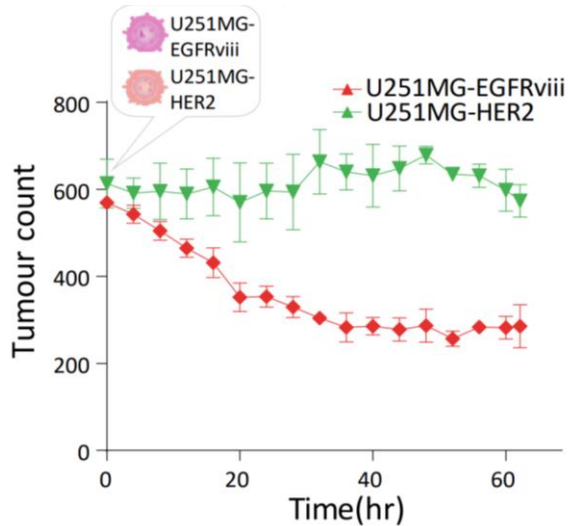
- Effective killing using either binder (Her2 & EGFRviii)

In AML:

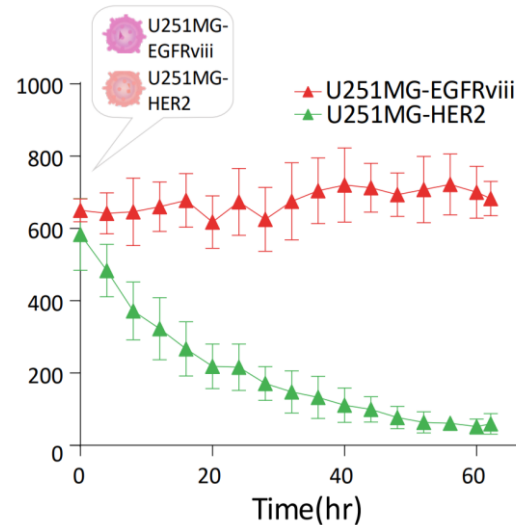
- Rapid killing by OmniCAR armed with CD33 binder

Specific activity and targeted re-direction

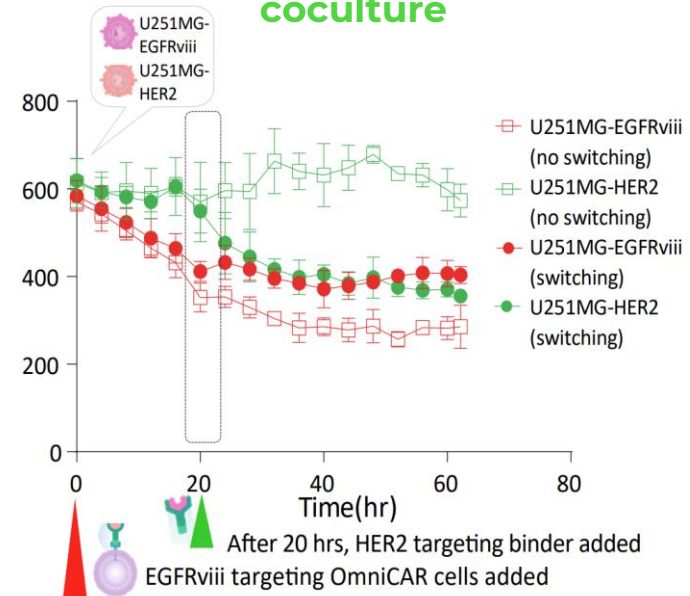
Armed against EGFRviii



Armed against HER2



Mixed antigen coculture

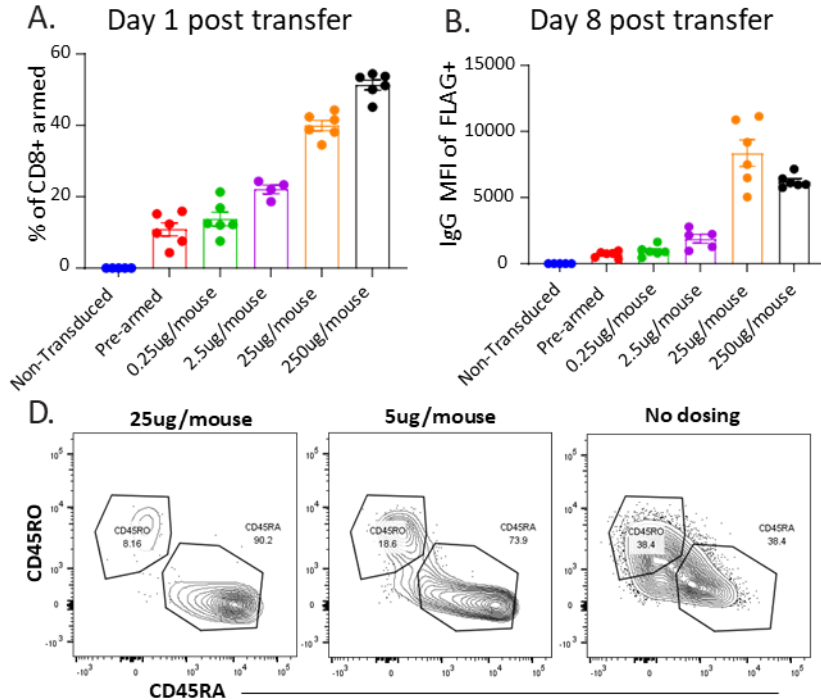


Summary

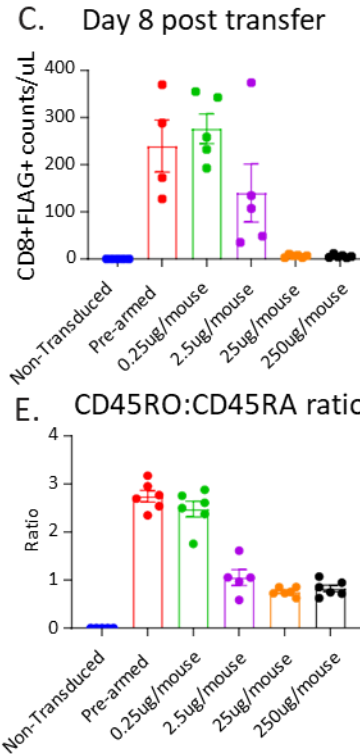
- Mix of two different GBM cells (mimicking the heterogeneity of the disease in humans)
- Arming OmniCAR with either binder only killed the tumour population being targeted
- Demonstrated ability to switch from one target to another by switching binders

Altering binder doses can optimise CAR-T cell engraftment and formation of memory cells

Arming OmniCAR post transfer



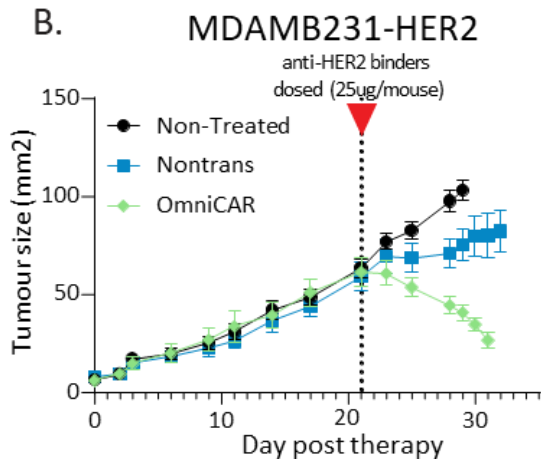
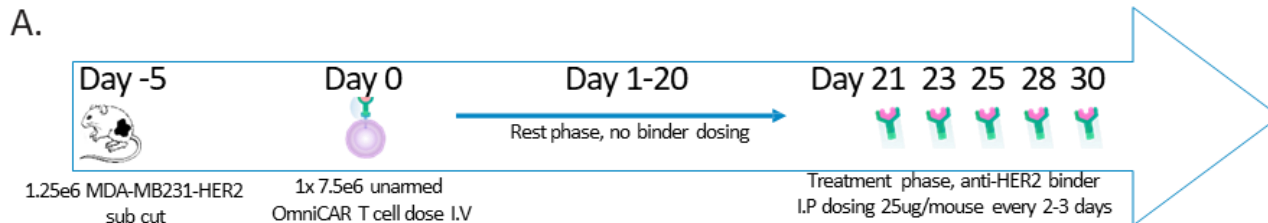
Amount of OmniCAR cells in blood



Summary

- *In vivo* dosing translates directly to OmniCAR arming
- Lower doses of binder translated to better persistence
- Higher doses of binder can result in a reduction of memory T cells (CD45RO+)

Resting OmniCAR T cells prior to dosing of binders drives potent anti-tumor efficacy



Summary

- OmniCAR cells rested for 3 weeks
- No activity without binder; tumour grew quite large
- OmniCAR can be armed at will
- Arming drives immediate & potent tumour killing

Summary

- OmniCAR leverages the flexibility and versatility of antibody binders and spontaneous covalent bond formation to **target multiple antigens** and **tumour types**.
- The ability to target multiple antigens **simultaneously** or **re-direct** to a second antigen addresses **tumour escape and heterogeneity**.
- The **precision** afforded through dose-response 'arming' allows for **titratable** CAR-T activity to **address toxicities** post-transfer.
- Finally, introducing a '**rest**' phase prior to arming OmniCAR cells leads to:
 - Reduced exhaustion
 - Better engraftment
 - Better memory phenotype
 - More potent anti-tumour efficacies

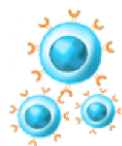


CellPryme

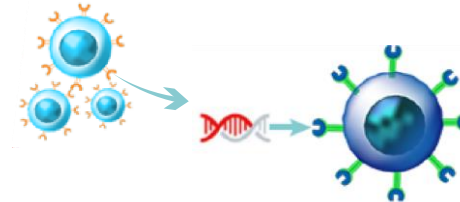
**CELL THERAPY
ENHANCEMENTS**



1 Blood is collected from the patient

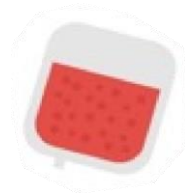
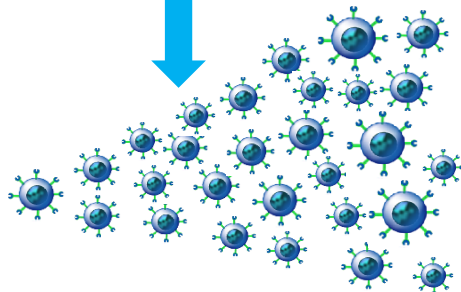


2 T-Cells are isolated



3 T-Cells are genetically altered to have cancer-recognising receptors (CARs)

 CellPryme-M



4 Millions of CAR-T cells are grown

 CellPryme-A



5 CAR-T cells are administered to the patient

Improving CAR-T cell efficacy in a preclinical model of breast cancer through modified manufacturing methods and adjuvant therapy

Jasmine Li^{1,2}, Jun-Ming Tong^{1,2}, Kevin Sek^{1,2}, Christina Scheffler^{1,2}, Steven Yatomi-Clarke³, Said Sebti³, Rebecca Lim, Philip K. Darcy^{1,2}
1. Peter MacCallum Cancer Centre, Melbourne, Victoria, Australia; 2. Sir Peter MacCallum Department of Oncology, University of Melbourne, Victorian Comprehensive Cancer Centre; 3. Prescient Therapeutics Limited, Melbourne, Australia

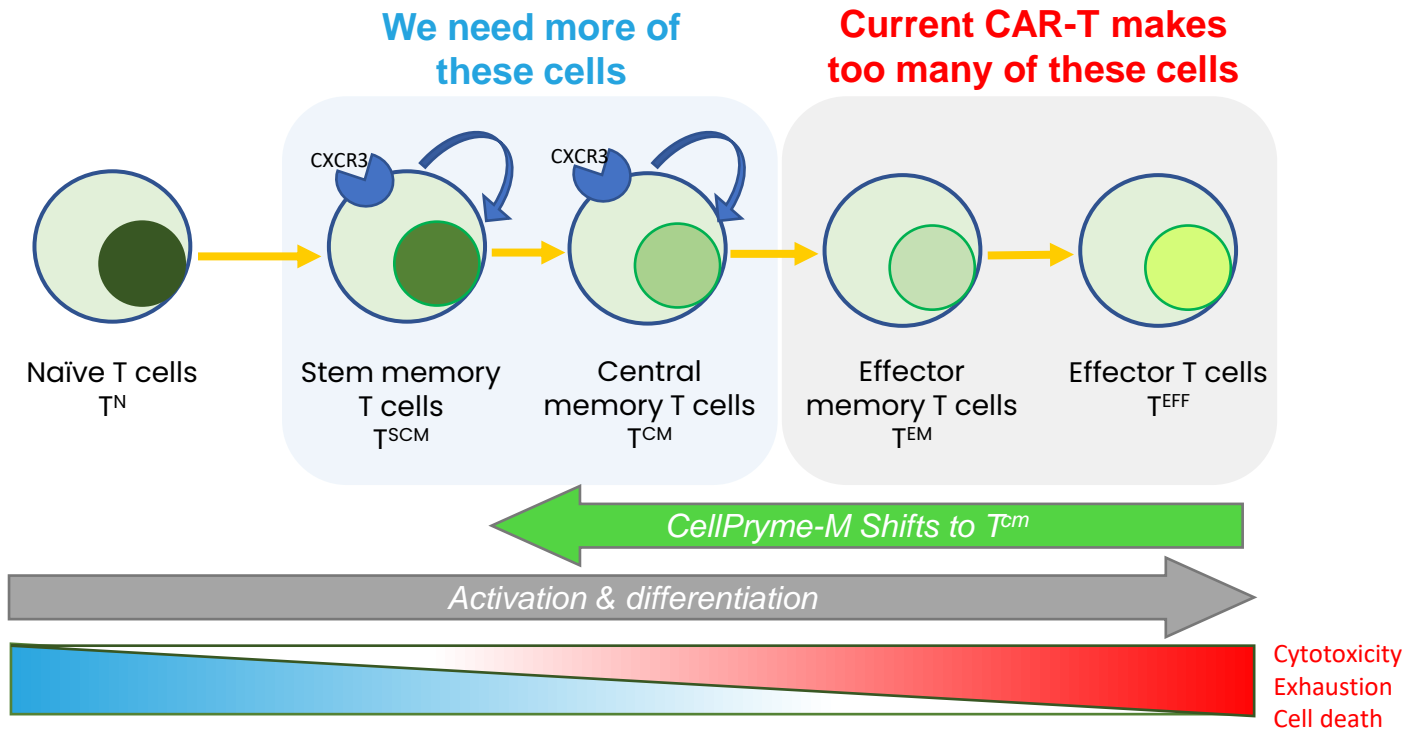


THE UNIVERSITY OF
MELBOURNE

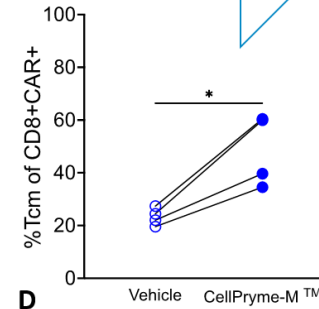
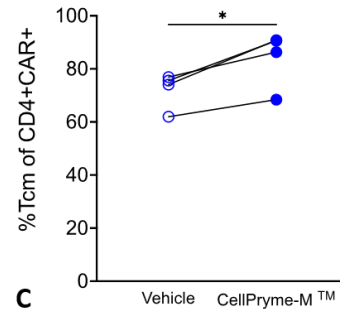
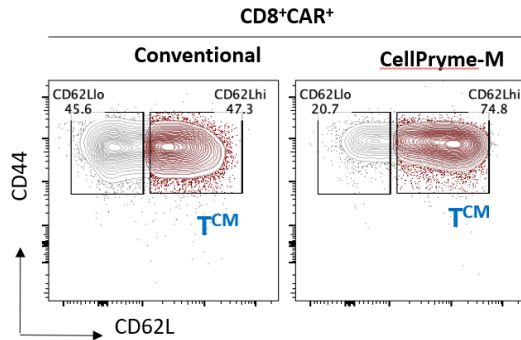
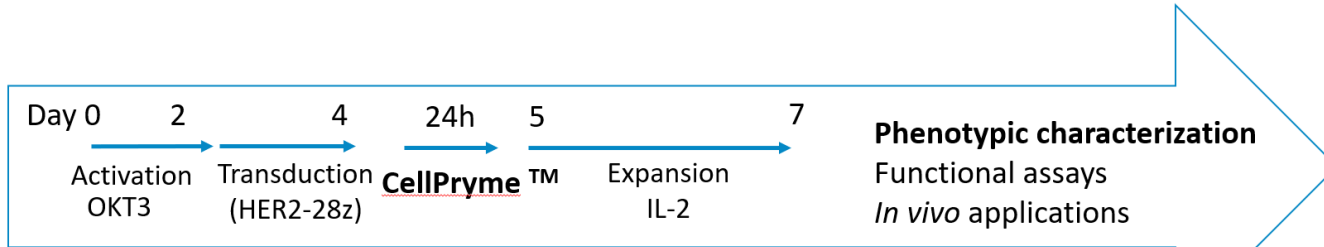


More memory cells required for clinical efficacy

- Clinical efficacy of CAR-T therapy remains dependent on the T cell phenotype
- It is possible to control this during the manufacturing step



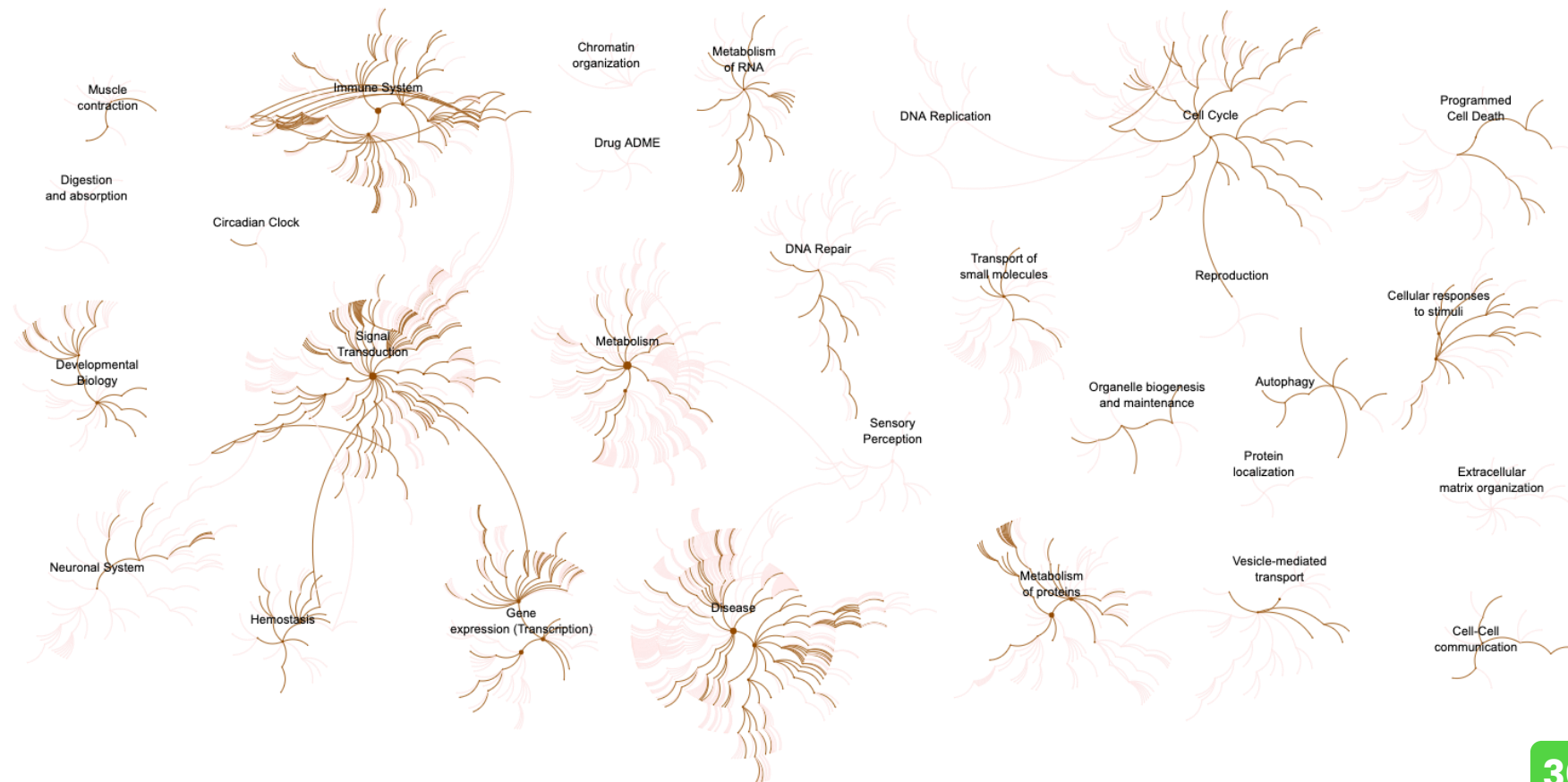
CellPryme™ enriches for central memory CD4+ and CD8+ T cells within 24 hours of pretreatment



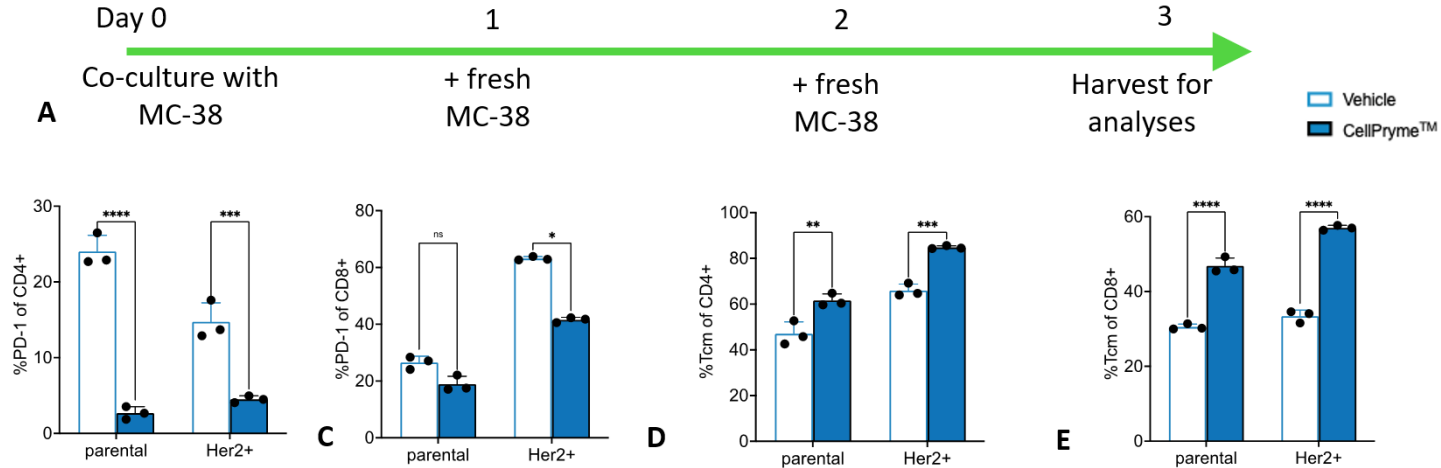
Summary

- When added to activated T cells, CellPryme enriches for central memory T cells
- Both CD4⁺ and CD8⁺ compartments benefit

Cellular pathways altered by CellPryme-M™ within 24 hours



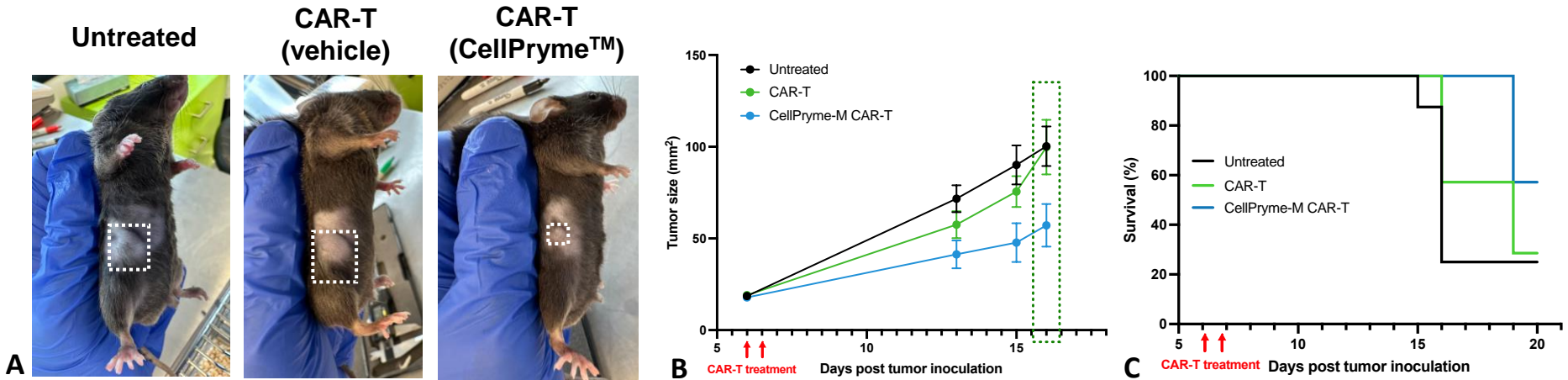
CellPryme-M protects CAR-T cells against exhaustion following repeated antigen challenge



Summary

- CAR-T cells were repeatedly challenged with tumour cells
- CellPryme-M protected them from exhaustion (central memory cells retained)
- CellPryme-M reduced PD-1 in T cells (good for anti-tumour activity)

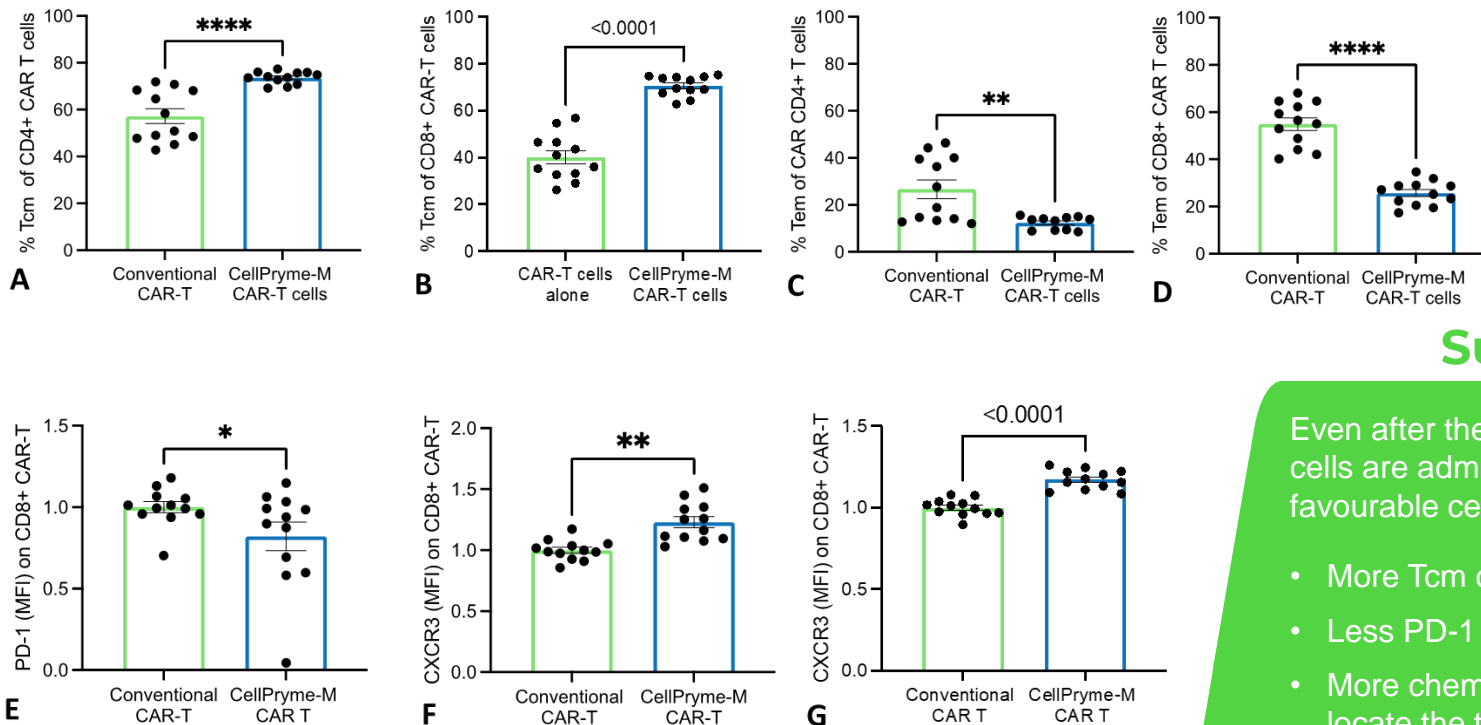
CellPryme™ pretreatment improves tumour killing and confers survival benefit *in vivo*



Summary

- CellPryme-M improves CAR-T tumour killing
- CellPryme-M improves survival
- Mouse models had intact immune systems

CellPryme™ pretreated CAR-T cells retain central memory phenotype *in vivo* and upregulate chemokine receptors



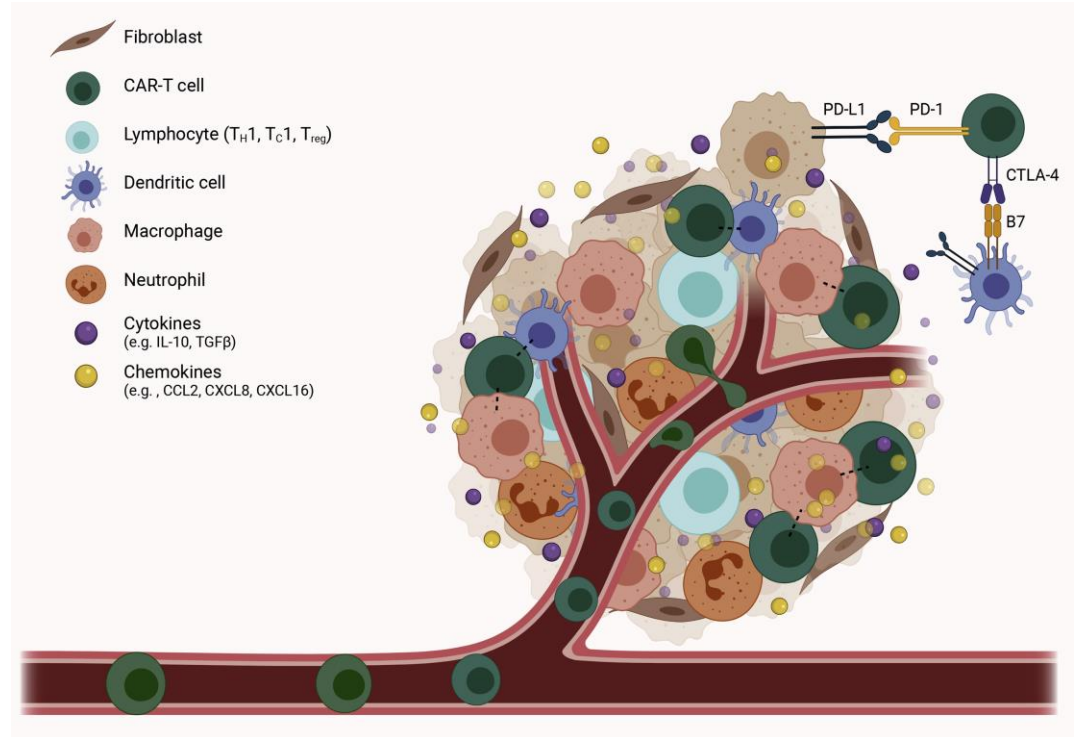
Summary

Even after the CellPryme-M CAR-T cells are administered to mice, the favourable cell profiles persist *in vivo*:

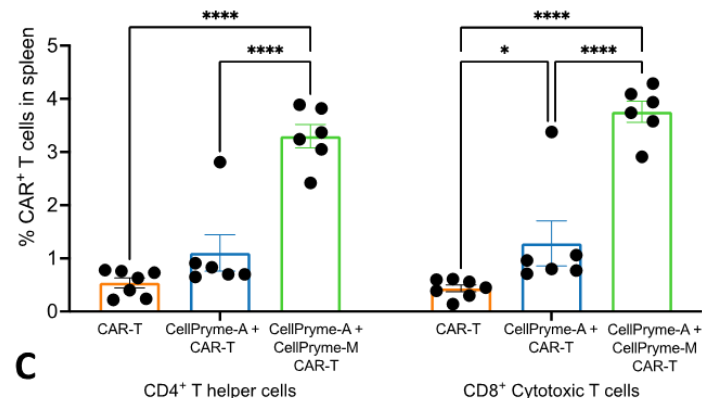
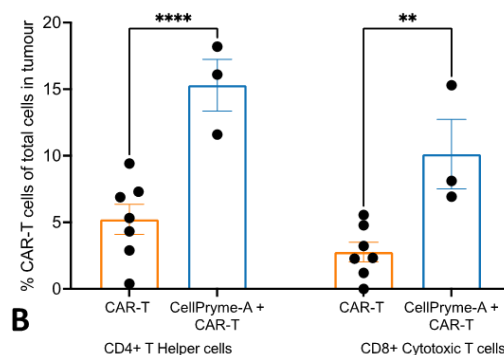
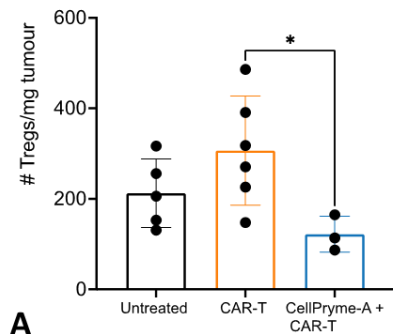
- More Tcm; less Tem cells
- Less PD-1
- More chemokines (helps T cells locate the tumours)

CellPryme-A addresses the hostile Tumour Microenvironment (TME)

- TME is the **complex ecosystem** surrounding solid tumours and the origins of blood cancers (e.g. bone marrow, spleen, lymph nodes)
- Protects and nurtures the cancer
- Acts as a **protective “force field”** that bluntens the effectiveness of cancer therapies



CellPryme™ reduces Tregs and significantly boosts *in vivo* CAR-T expansion



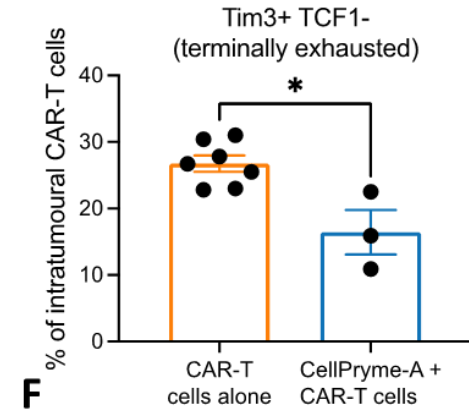
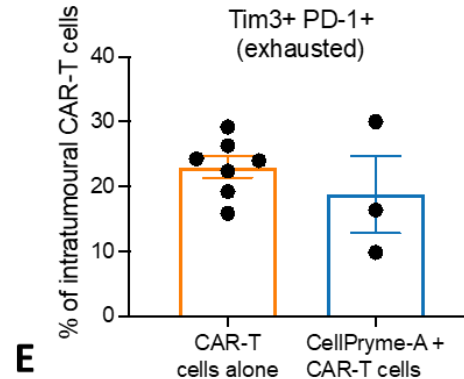
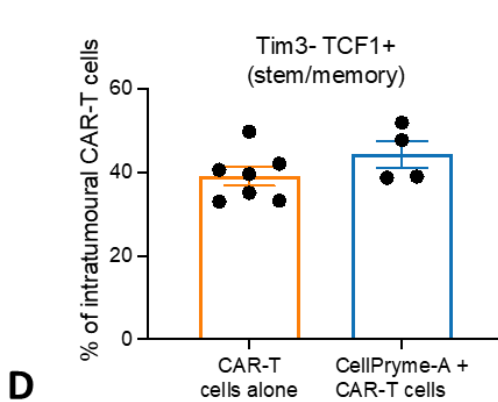
Reduces problematic Treg cells

(that extinguish immune responses against cancer)

Significantly more CAR-T cells penetrate the tumour

Dramatically increases CAR-T expansion

CellPryme-A attenuates the Tumour Microenvironment (TME) without compromising the CAR-T cells

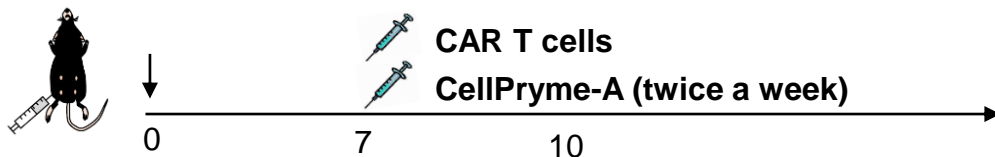


Modifies the TME
but DOES NOT impact
CAR-T cell
stem/memory...

...nor CAR-T cell
exhaustion...

...but reduces the
amount of CAR-T cells in
the tumour that are
terminally exhausted.

CellPryme-A significantly improves survival and works synergistically with CellPryme-M pretreated CAR-T

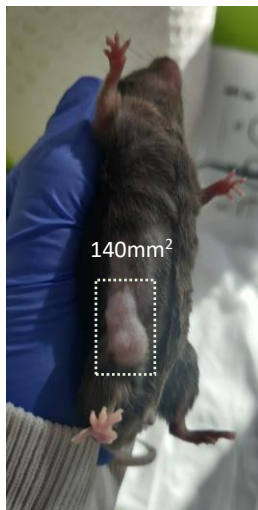


Colon cancer cells are transplanted into the mammary fat pad

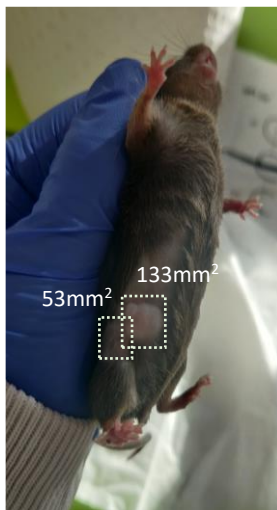
Experimental end point

Tumour size $> 150 \text{ mm}^2$ or ≤ 28 days unless other humane endpoints are reached

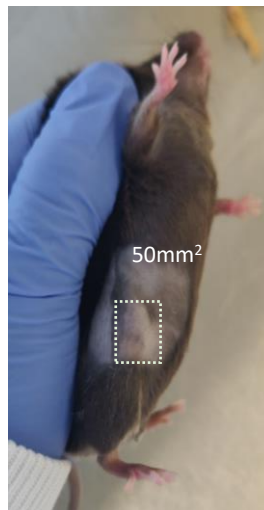
Untreated



CAR-T cells alone



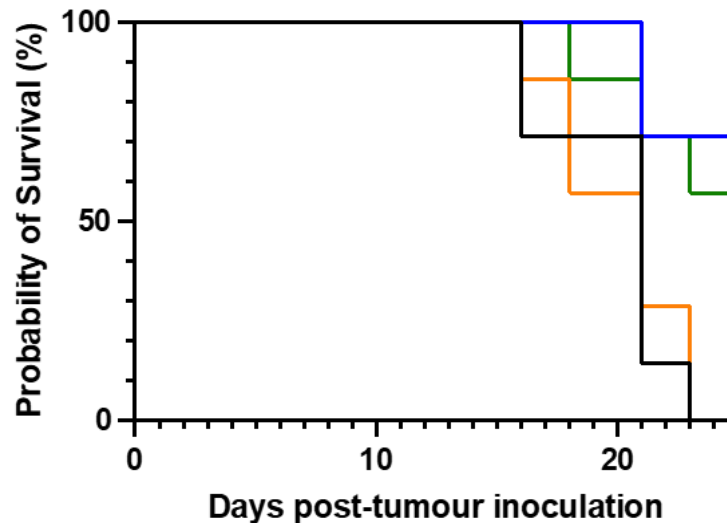
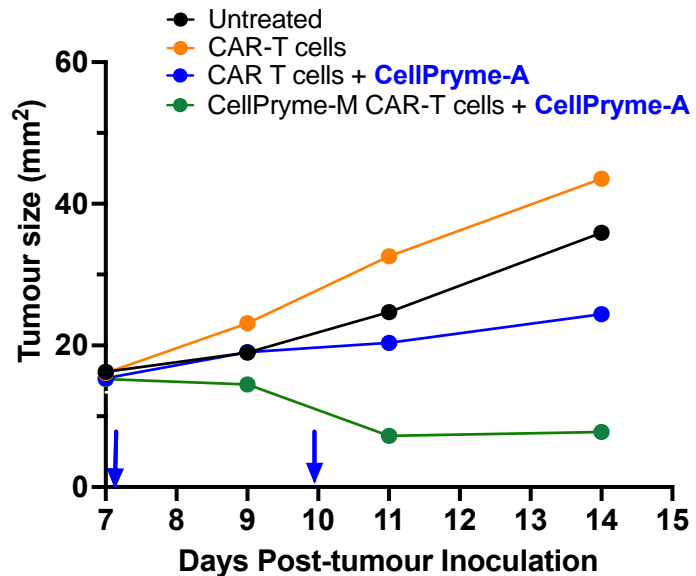
CellPryme-A +
CAR-T cells



CellPryme-A +
CellPryme-M CAR-T cells



CellPryme-A significantly boosts CAR-T tumour killing and host survival



- Conventional CAR-T had no benefit unless used with CellPryme-A
- Greatest benefit was using CellPryme-M & A together (highly significant benefit)

Summary

- CellPryme™ is a small molecule compound that can **improve CAR-T efficacy**
- **Improves tumour killing and improves survival**

CellPryme-M

can be briefly added to standard manufacturing processes

- Enriches for **favorable Tcm**
- **Less exhaustion; improved trafficking**

- CellPryme-M & -A can be used **separately**, but have **significant synergies** when used together
- Can be used to enhance 3rd party programs

CellPryme-A

is used as an adjuvant alongside cellular immunotherapy

- Addresses the **immunosuppressive TME**
- Significantly boosts **CAR-T expansion** within the host & **penetration into tumours**

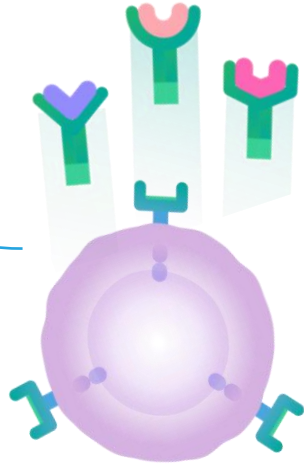
Summary

CellPryme Complements OmniCAR



OmniCAR

- Multi-targeting
- Redirection
- Control & safety
- Any target; any cell



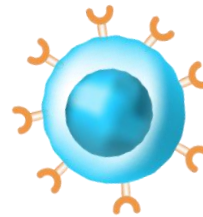
Next generation
Cell therapies



CellPryme-M

Process that produces
a better cell type

- Persistence
- Trafficking



Current generation cell
therapies



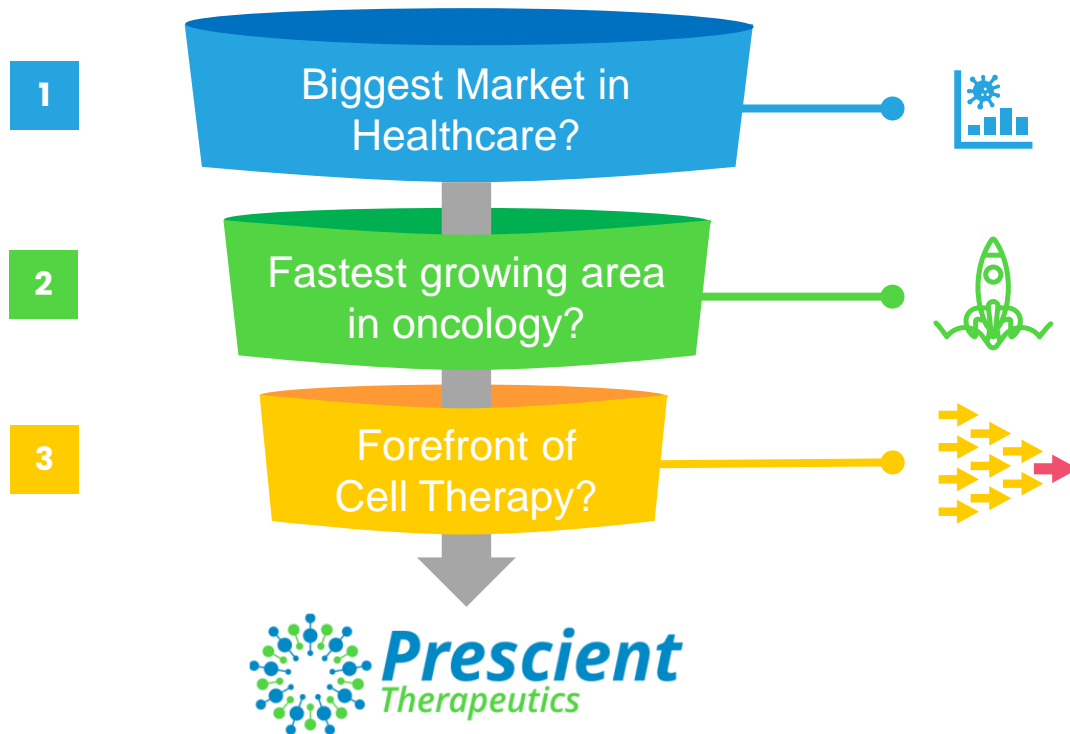
CellPryme-A



Adjuvant therapy

- Reduces Tregs
- Primes TME for cell therapy
- Boosts CAR-T cell expansion *in vivo*

Top-down analysis is sensible for investors



Oncology*

- 2021: US\$ 280bn
- 2029: US\$ 536bn (8.2% CAGR)

Cell Therapies (CAR-T)

- >US\$37bn by 2028[^]

Prescient Therapeutics

- Next gen platforms
- Enhancing 3rd party programs
- Scalable
- Controllable
- Any target; any cell
- Top pedigree

Targeted therapies

- PTX-100
 - Exciting opportunity in TCL
 - Could leap deep into clinical development
 - US Orphan Drug designation
- PTX-200 in AML



OmniCAR

- Next gen universal CAR platform
- Any cell
- Any target
- Controllable
- 3rd party opportunities



CellPryme

- Enhancing current & next-gen cell therapies
- Manufacturing enhancements
- Adjuvant therapy
- 3rd party opportunities
- Clinic ready

Investment Summary



World class pedigree.

We license from the best;
and work with the best



+\$20M cash

Long runway for multiple catalysts

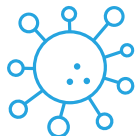


Many shots on goal for
substantial value creation



2 Targeted Therapies in clinic

- **Encouraging efficacy in cancers with unmet need**
- Orphan Drug Status



2 Cell Therapy platforms

Internal & external opportunities



Upcoming newsflow

from multiple programs



Thank you!

ASX code: PTX

www.ptxtherapeutics.com