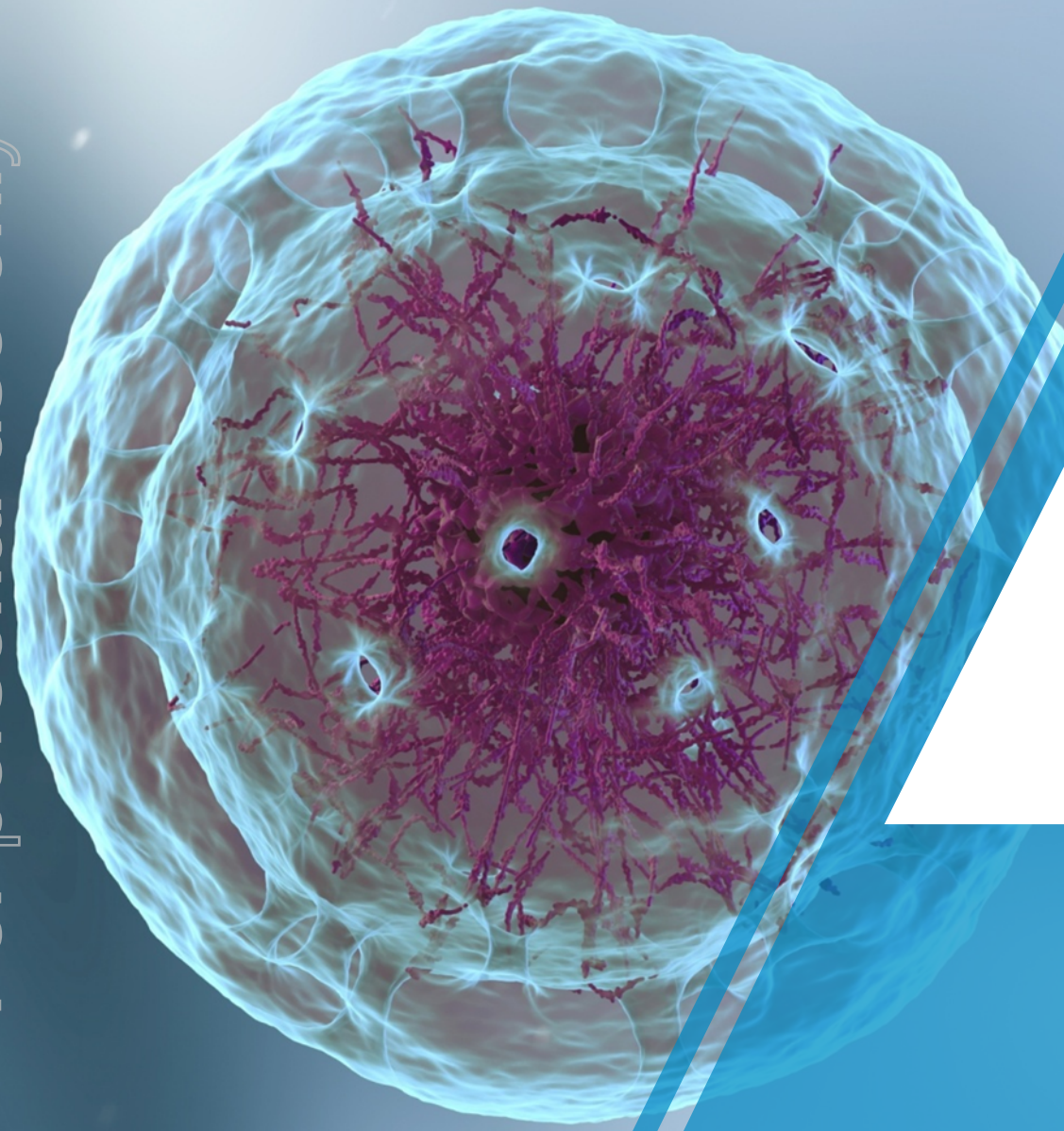


Prescient Therapeutics

Unveiling

CellPryme

Novel platform for enhancing cell therapies

Prescient Therapeutics Limited (ASX: PTX)

CellPryme-M: Prescient's newest family member

Prescient Therapeutics

PLATFORM TO ENHANCE CELL THERAPIES

- Current gen and next gen
- Complementary to OmniCAR

PRODUCES SUPERIOR CELLS

- **Doubles tumour control & survival**
- Longer lasting
- Tumour trafficking & penetration

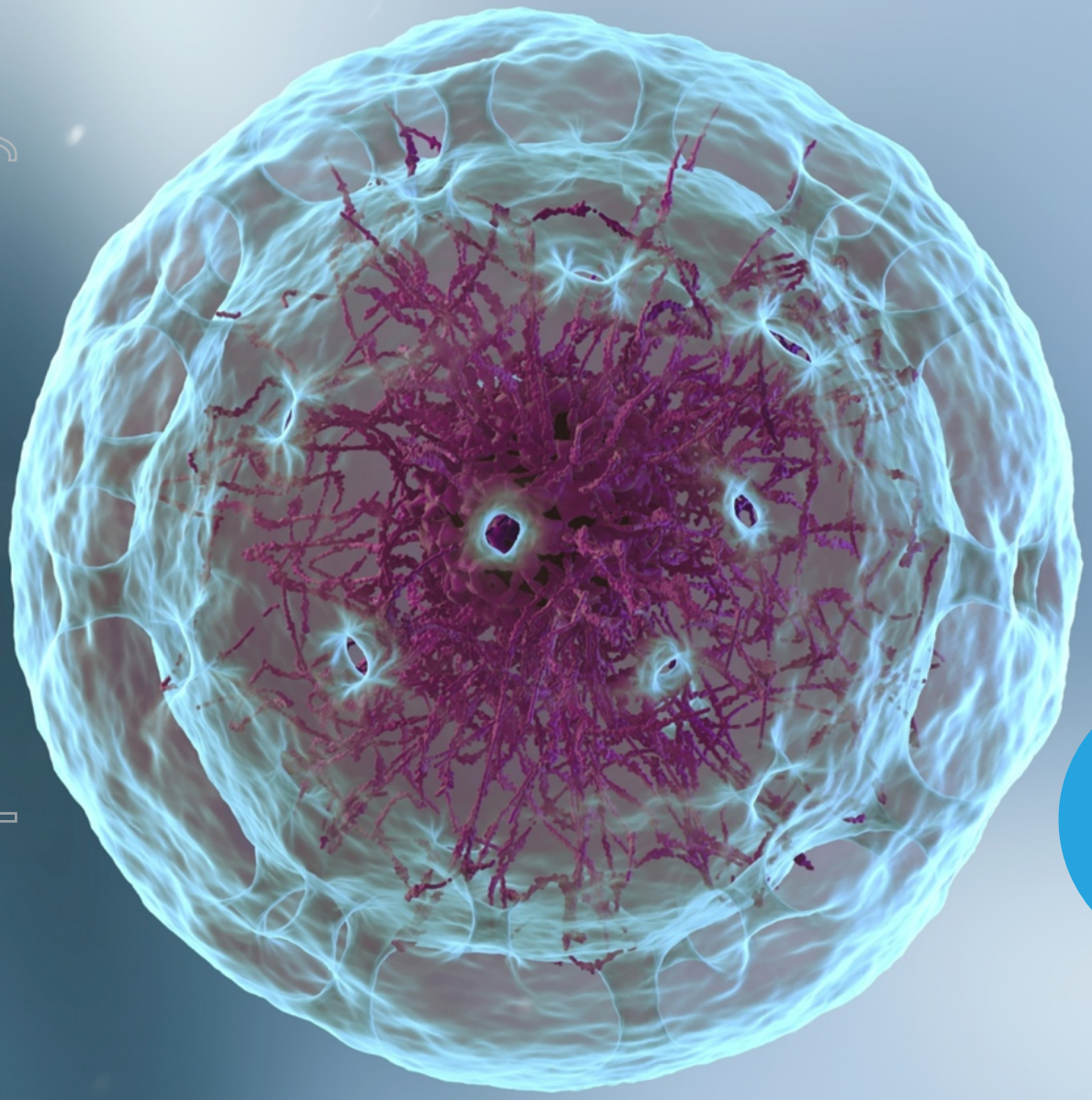
DEVELOPMENT OPPORTUNITIES

- Internal PTX programs
- External collaboration & sales to 3rd parties
- Use with any existing CAR-T manufacturing process with no loss of time

READY FOR CLINICAL TESTING

IP FULLY OWNED BY PTX

Developed by PTX in collaboration with Peter Mac



What is CellPryme-M?

What does CellPryme-M do?

CellPryme-M is a single, rapid manufacturing step that produces a better, more effective cell type:

LONGER LASTING CELLS FOR SUSTAINED TUMOUR KILLING

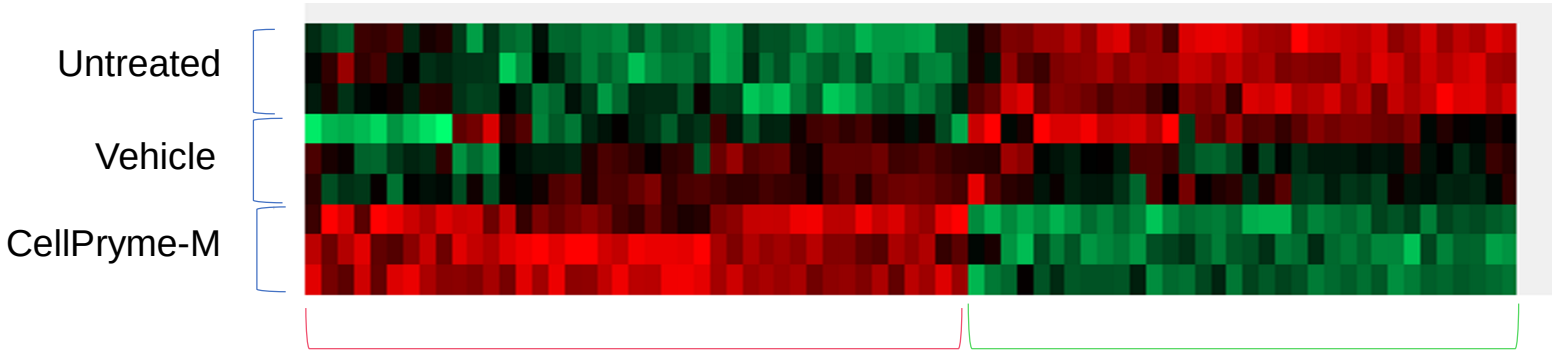
- 50% more memory T cells
- Doubles helper T cells
- Doubles tumour control

CELLS THAT CAN BETTER LOCATE THE TUMOUR

- Significantly more chemokine receptors for improved trafficking to tumour sites
- Important in solid tumours

How does CellPryme-M work?

- Rapid, single 24-hour preconditioning step with standard manufacturing protocols
- Influences gene expression in immune cells
- “Pushes” the cells towards a more favourable phenotype



Down-regulated:

- Cell metabolism
- Protein folding & mRNA splicing

Up-regulated:

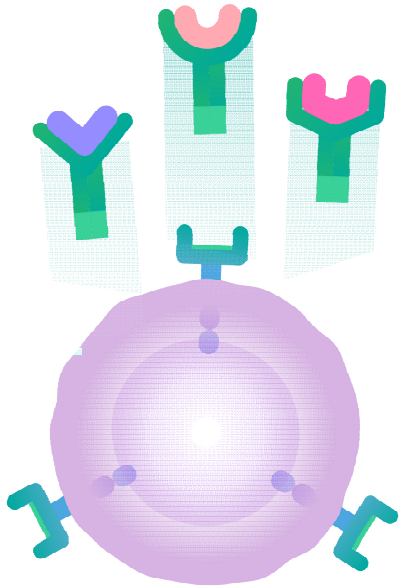
- Type 1 interferon signalling
- Cytokine signalling
- Genomic stability
- Potent anti-viral pathways

3 individual donors; 24h treatment

CellPryme-M Complements OmniCAR

OmniCAR

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

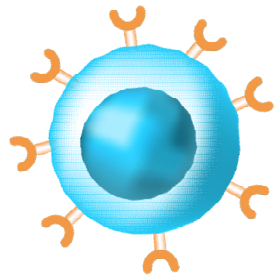


Next generation
Cell therapies

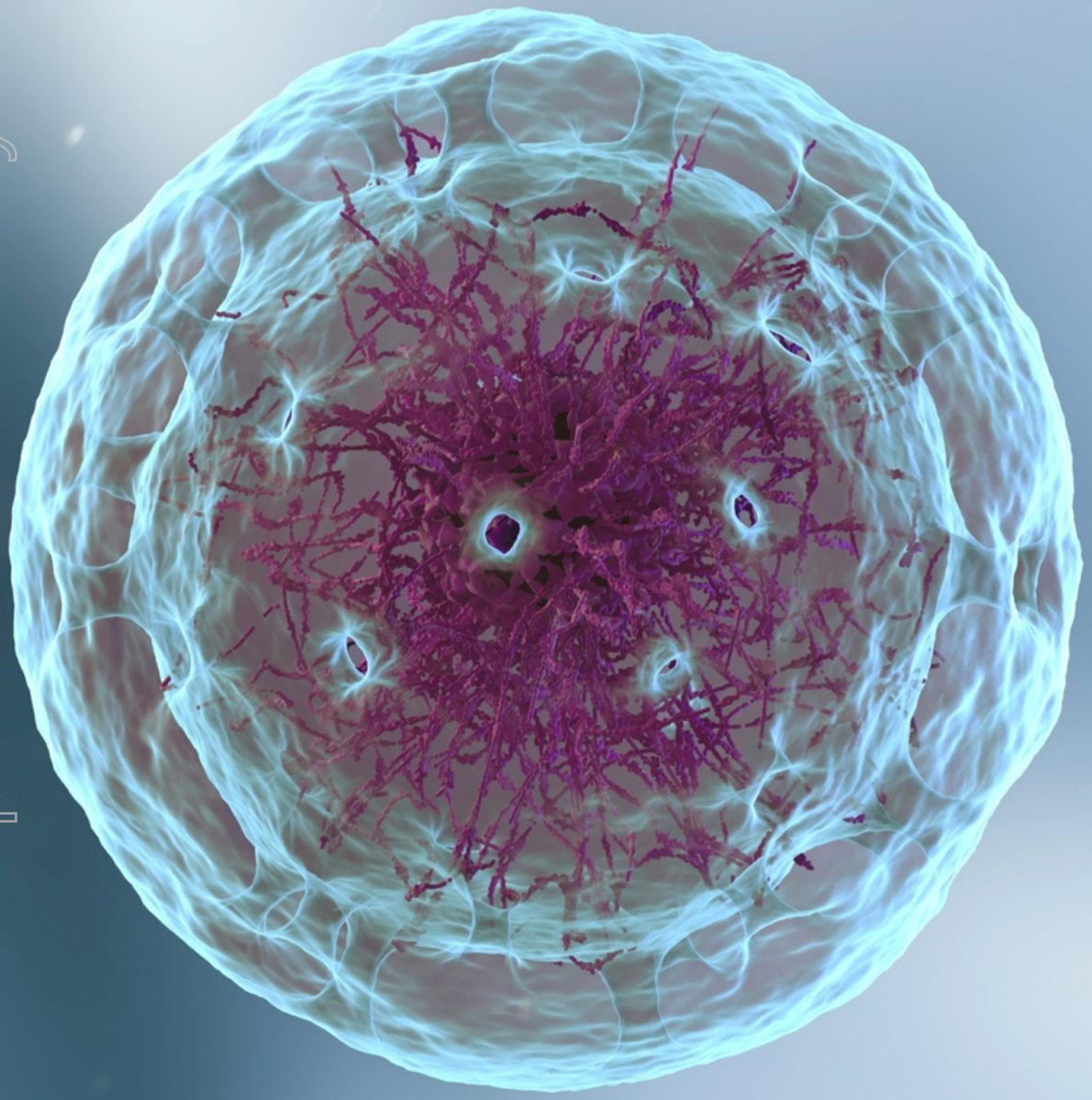
CellPryme-M

Process that produces a better <u>cell type</u>

- Persistence
- Trafficking



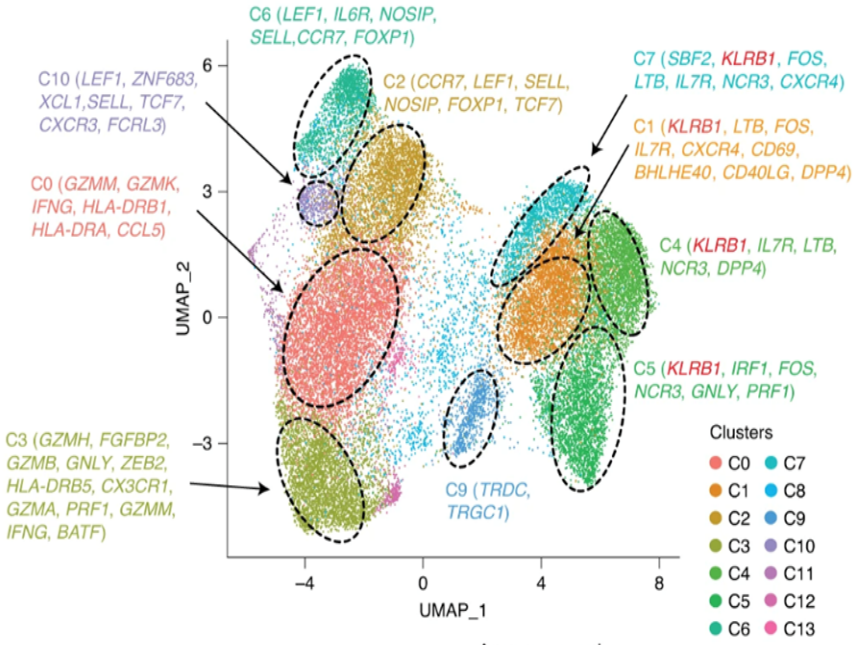
Current generation
cell therapies



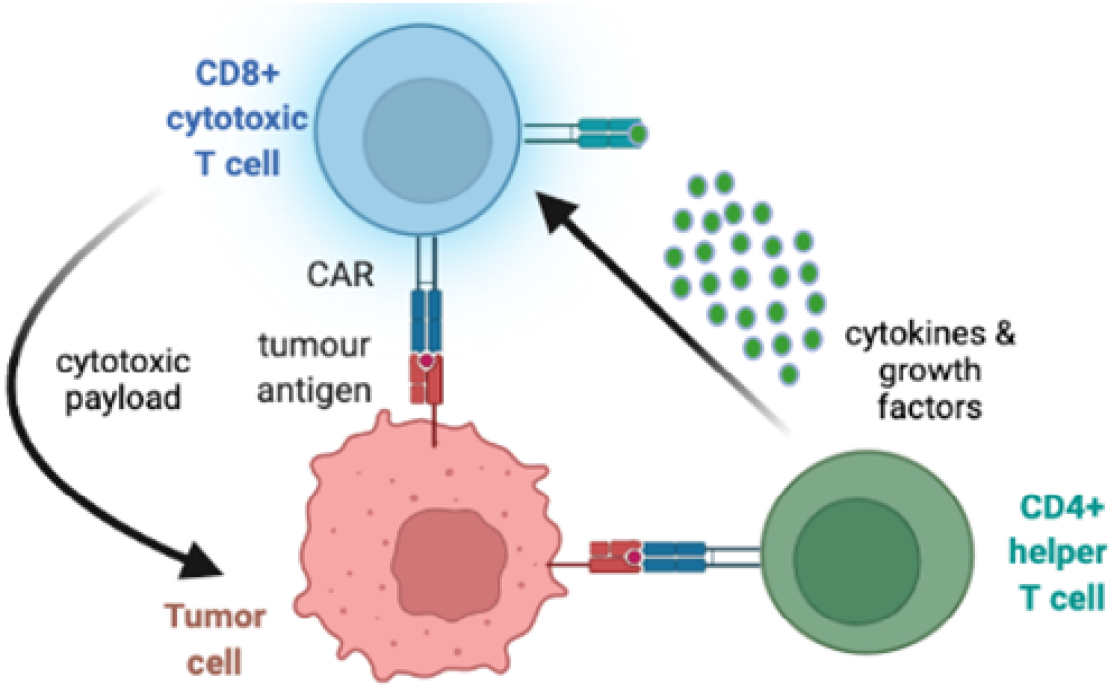
What problems does CellPryme-M overcome?

CAR-T cells: Not just one cell type!

T cells are extremely heterogenous, each with their own unique "fingerprint" that dictates **where** they go and **what** they do



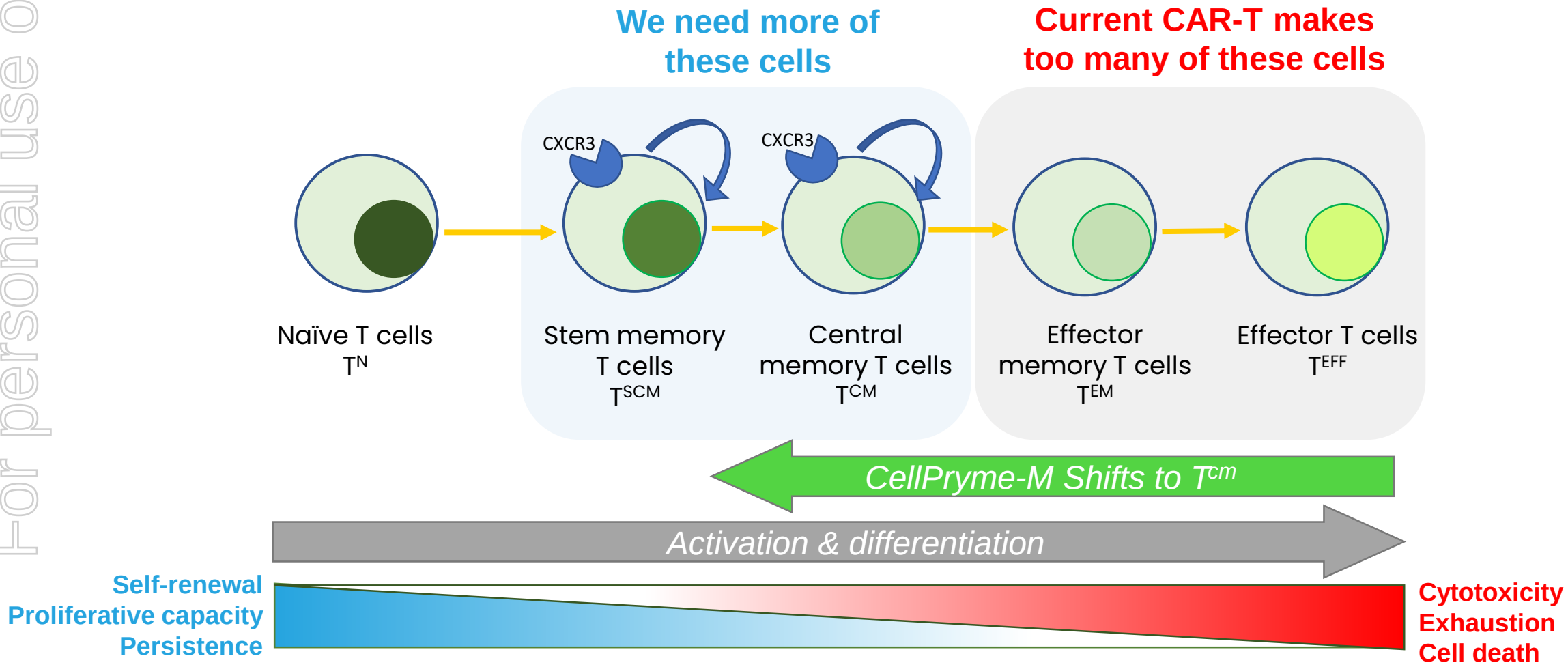
Nature Immunology (2020) Galletti et al



CD8+ T cells deliver the payload to kill cancer cells
CD4+ T cells release cytokines and growth factors to sustain CD8+ T cells

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



Overcoming CAR-T's key challenges

	OmniCAR	CellPryme	
	Next generation	Conventional CAR-T	Next generation
Poor cell expansion; manufacturing time & cost	n/a	✓	✓
Safety	✓		
Post infusion control	✓		
Tumour heterogeneity	✓		
Escape	✓		
Trafficking	✓	✓	✓
Tumour penetrance	✓	✓	✓
Suppressive tumour microenvironment	✓		
Exhaustion/persistence	✓	✓	✓

CellPryme-M produces CAR-T cell types with ideal characteristics and attributes

Persistence
For longevity of effects and continued tumour control

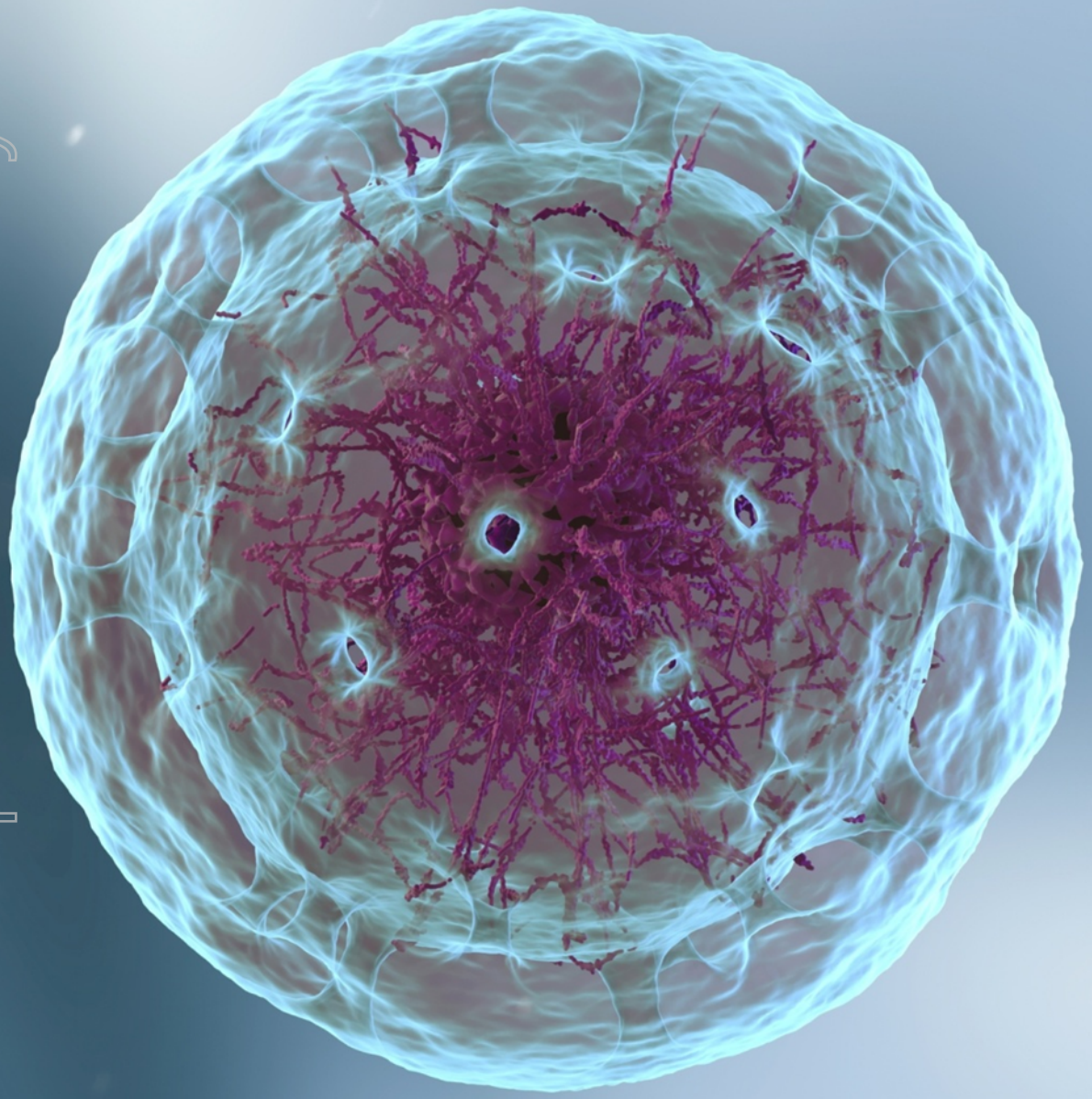
Trafficking
CAR-T cells able to find their way to the tumour

Tumour penetrance
Cells that can penetrate solid tumours

Immune memory
Central memory T cells typically persist 10-20 years and as long as 75 years

Genomic stability
Cells with enhanced self-renewal due to greater genomic stability

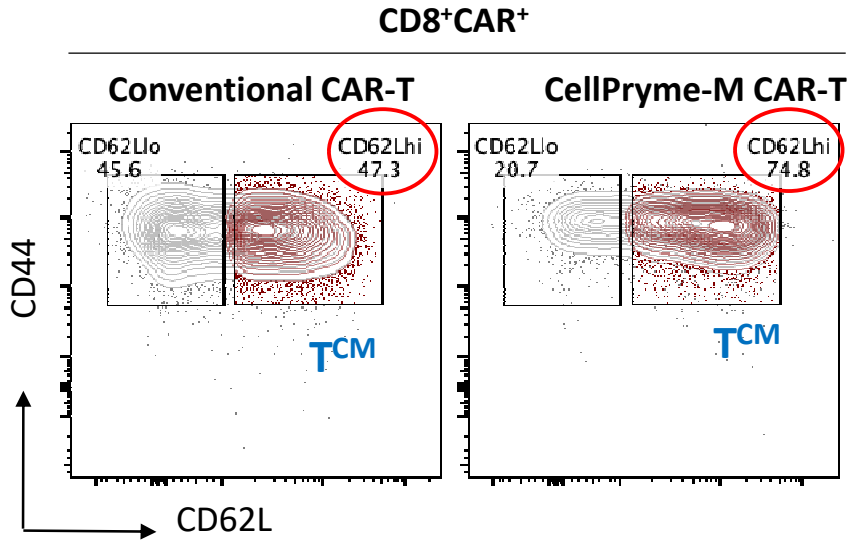
Anti-viral
Cells with potent anti-viral characteristics

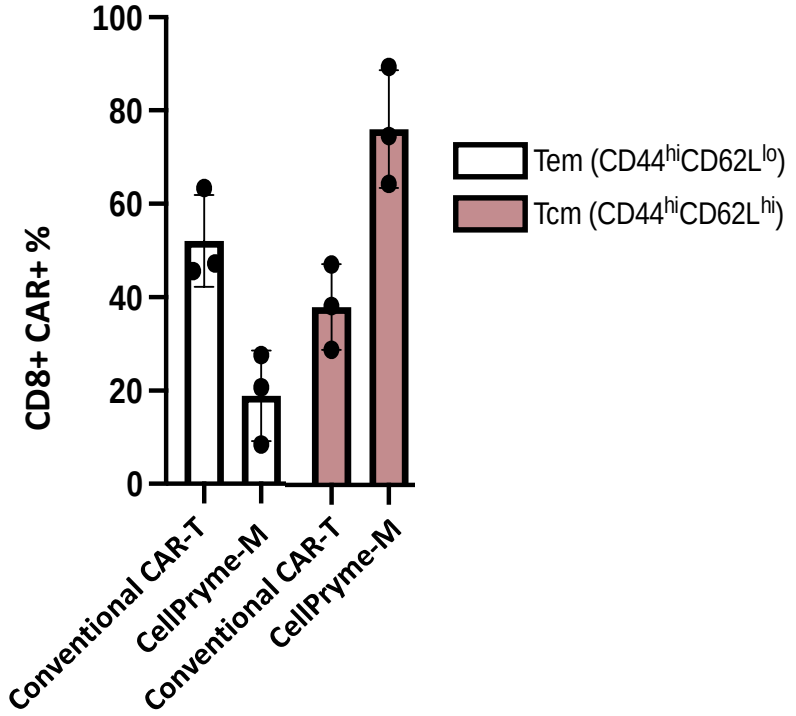


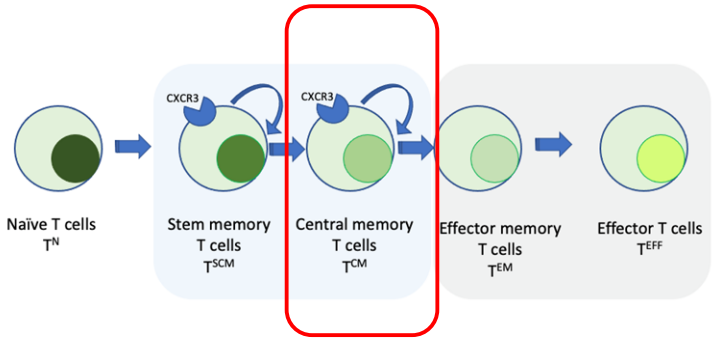
Compelling data

Greater Persistence: 50% more central memory cells than conventional CAR-T

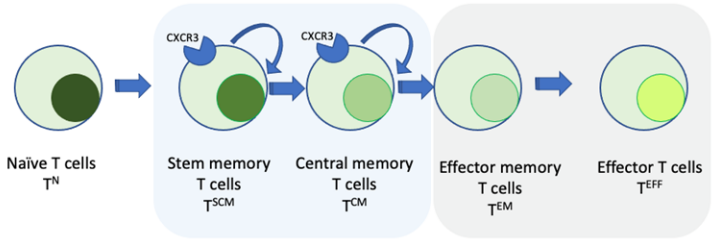
CellPryme-M increases central memory T cells 1.5-fold within 24hrs





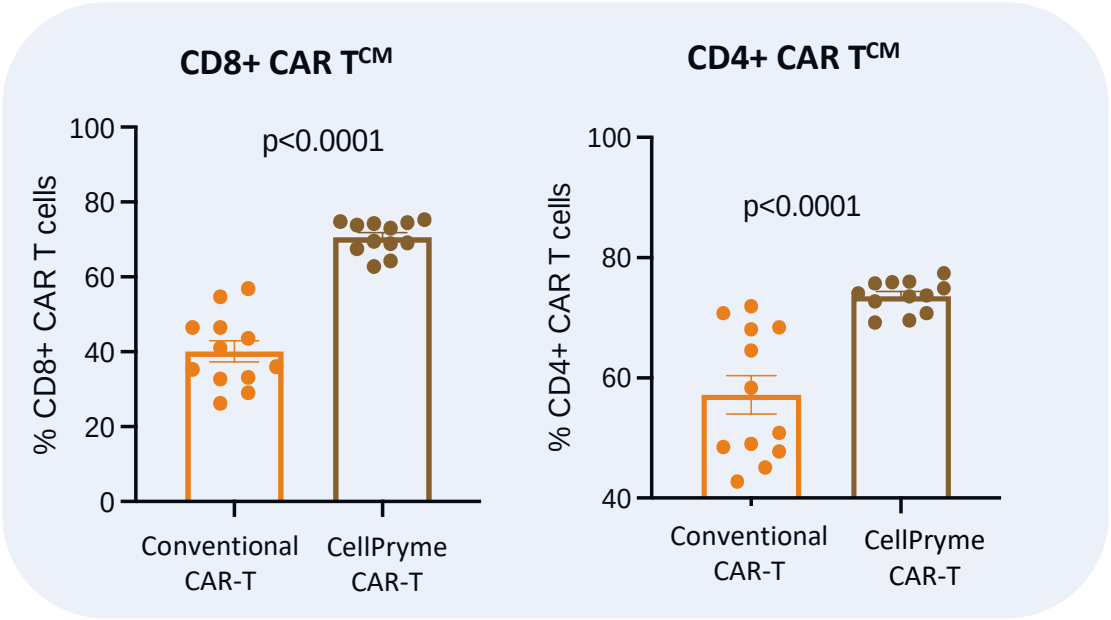


Greater Persistence/Less Exhaustion



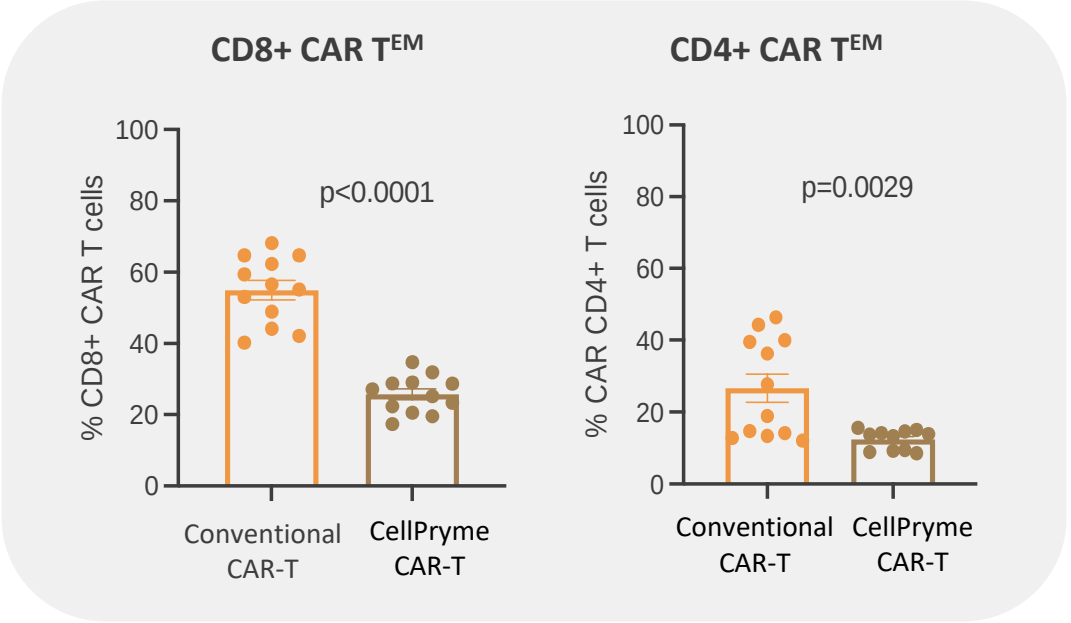
Sustained increase in T^{CM}

for both cytotoxic CD8+ and helper CD4+

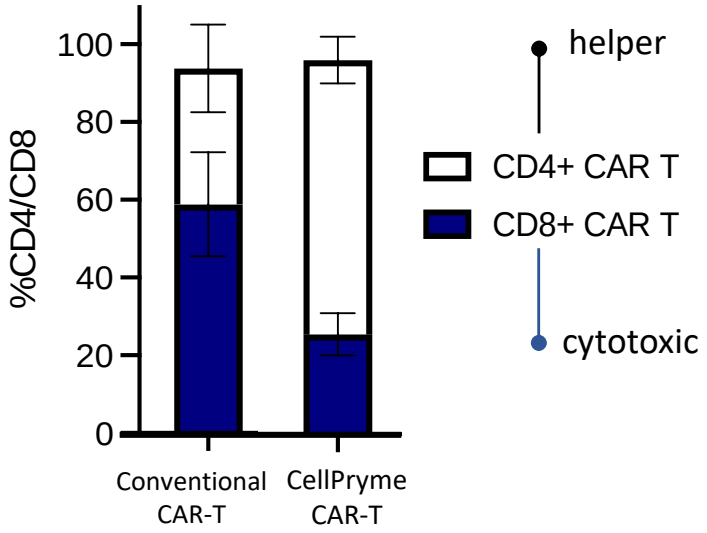


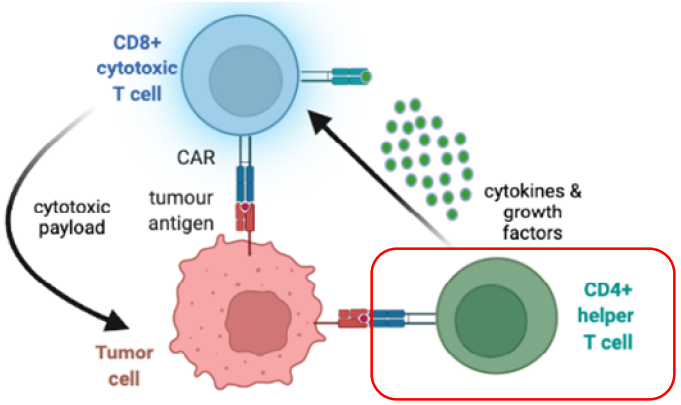
Sustained decrease in T^{EM}

for both cytotoxic CD8+ and helper CD4+



Synergy: CellPryme-M doubles proportion of helper T cells





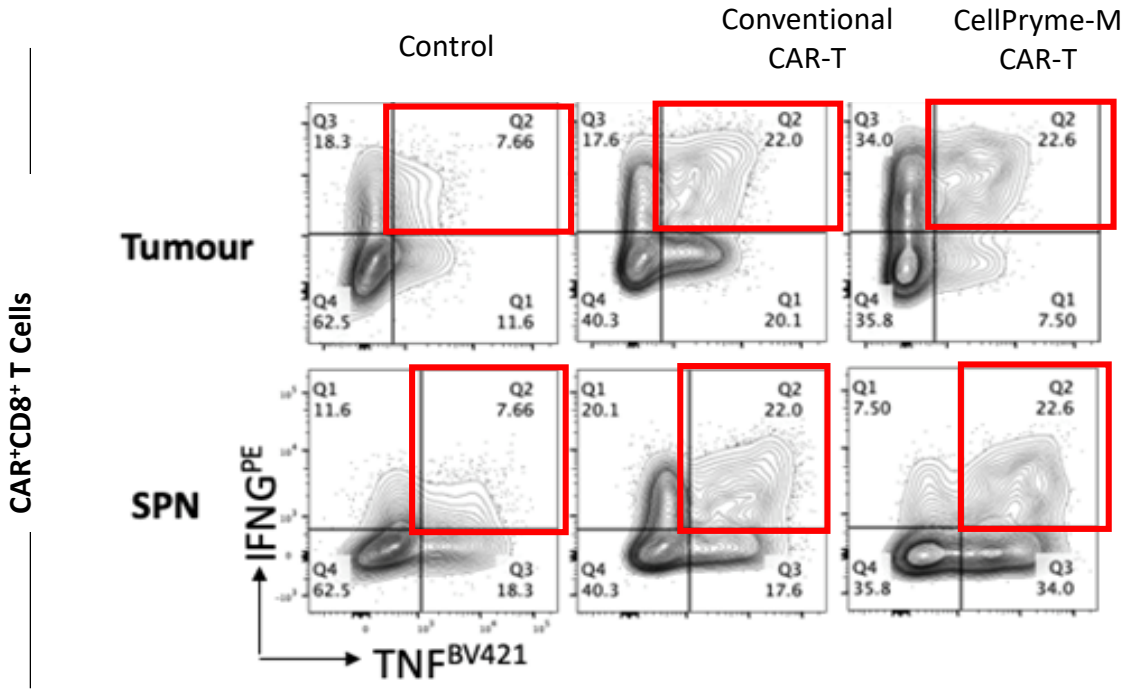
- Shift towards dominant helper CD4+ CAR T cells
- Helper T cells are known to prevent the exhaustion of cytotoxic CD8+ T cells
  - Some can also have tumour killing ability
- Helper & cytotoxic T cells work in synergy to increase CAR-T persistence

CellPryme-M retains potency of cytotoxic T cells

Better T cell phenotype
does not come at the expense of:

- Cytotoxic T cells:
  Potency retained

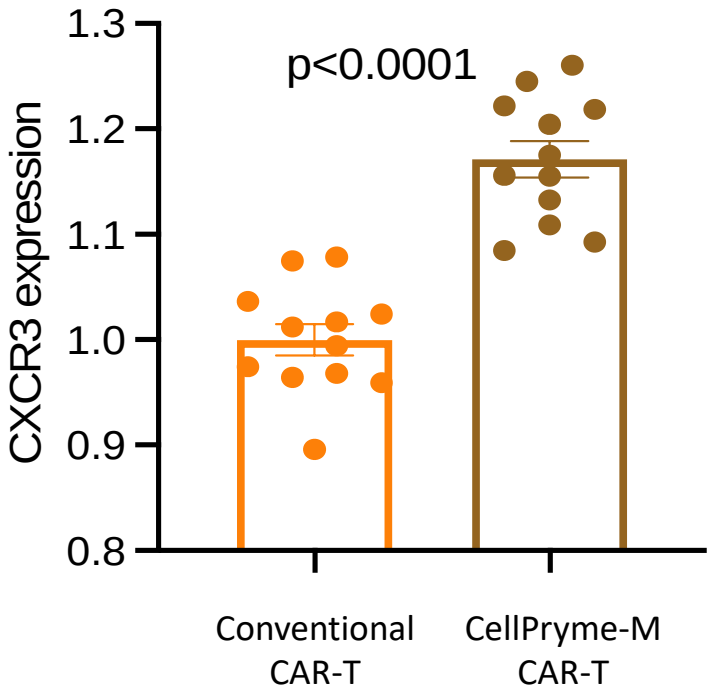
- Cytokine production:
  No increased safety risk of CRS



Trafficking: greater chemokine receptor expression

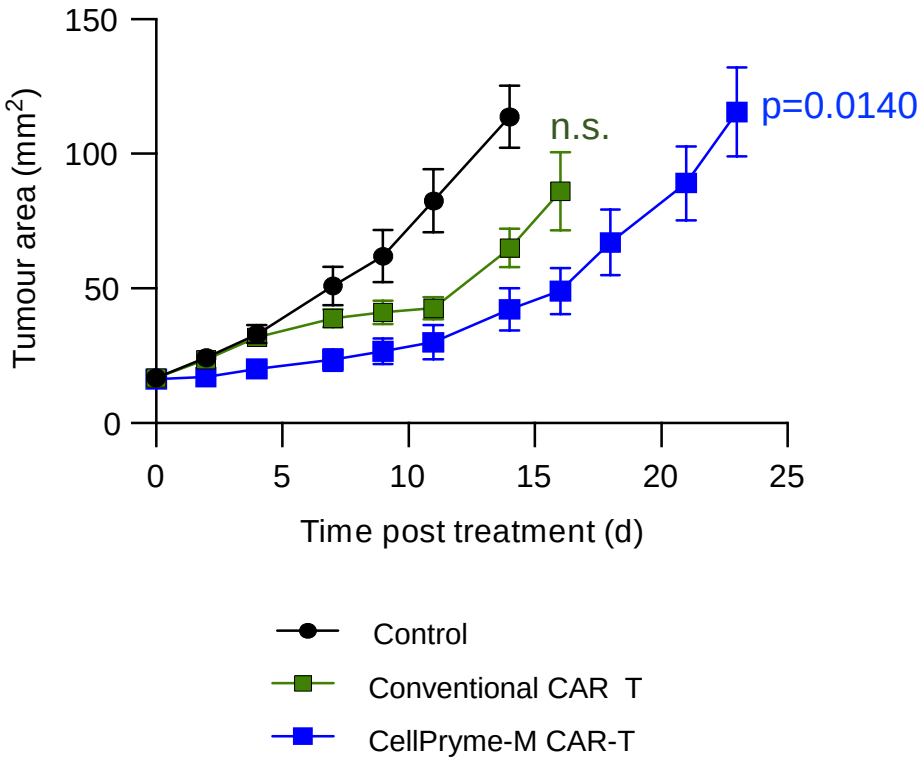
- Effector T cells can downregulate chemokine receptors (CXCR3), limiting the ability of conventional CAR-T cells to locate tumours
- CellPryme-M significantly increases CXCR3 expression on CAR-T cells
- Better trafficking to tumour site
- Better tumour penetrance

Chemokine receptor expression on CD8+ cytotoxic CAR-T cells

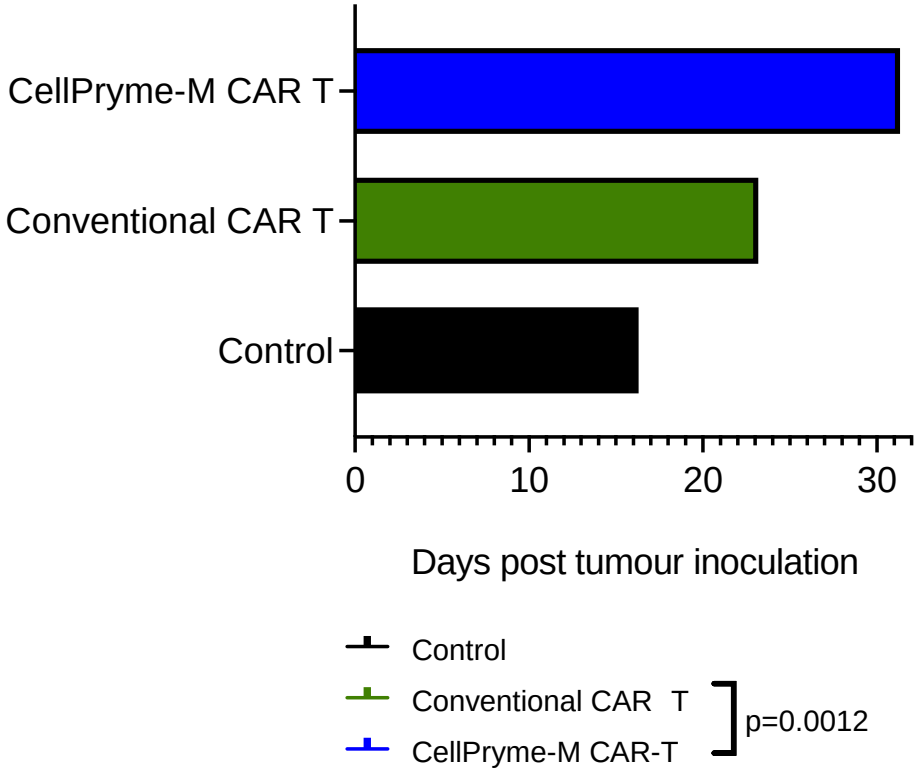


CellPryme-M doubles tumour control and survival

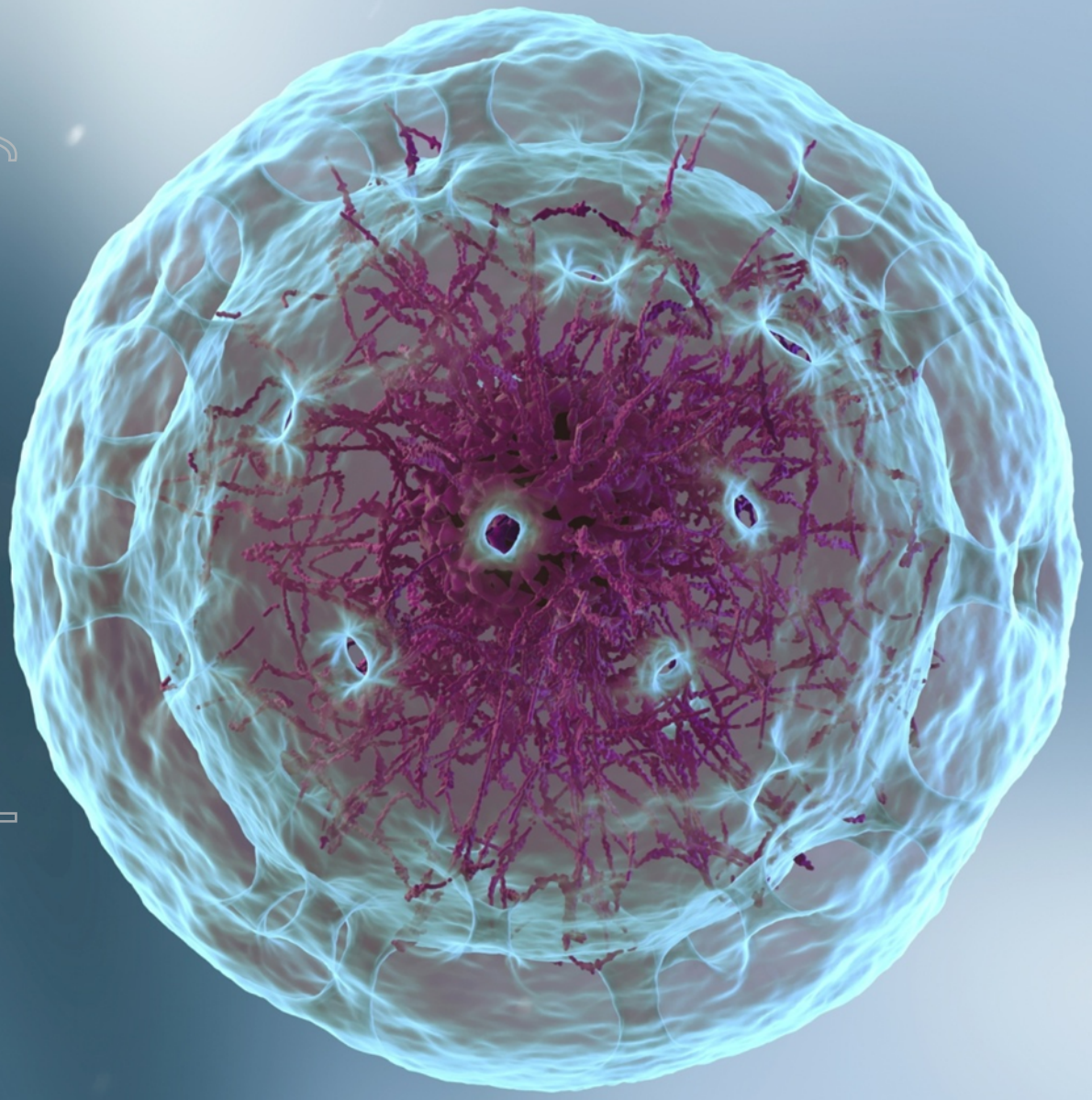
CellPryme-M nearly doubles CAR-T tumour control



CellPryme-M significantly increases survival



Her2+ E0771 breast tumour cells orthotopically transplanted into the mammary fat pad of syngeneic (immunocompetent) humanised Her2-C57Bl6 mice



Steps towards commercialisation

CellPryme-M integration: rapid, value for money

- Integrates seamlessly into standard 3rd party manufacturing protocols
- No impact on manufacturing time
  - Rapid (single administration) 24-hour preconditioning step
- Compatible with emerging rapid CAR-T manufacturing protocols
- CellPryme-M has been manufactured at GMP grade and is ready for clinical use

Next steps and future applications

IN-HOUSE DEVELOPMENT

- PTX will be its own first customer
- Incorporate into internal OmniCAR programs
- Trade secret manufacturing process

EXTERNAL OPPORTUNITIES

- Incorporate into 3rd party programs
- Attractive option for improving existing suboptimal CAR T products
- **Haematological malignancies**
  → to improve persistence
- **Solid tumours**
  → to improve trafficking and persistence
- Revenue potential for PTX

CellPryme-M Summary

PLATFORM TO ENHANCE CELL THERAPIES

- Current gen and next gen
- Complementary to OmniCAR

READY FOR CLINICAL TESTING

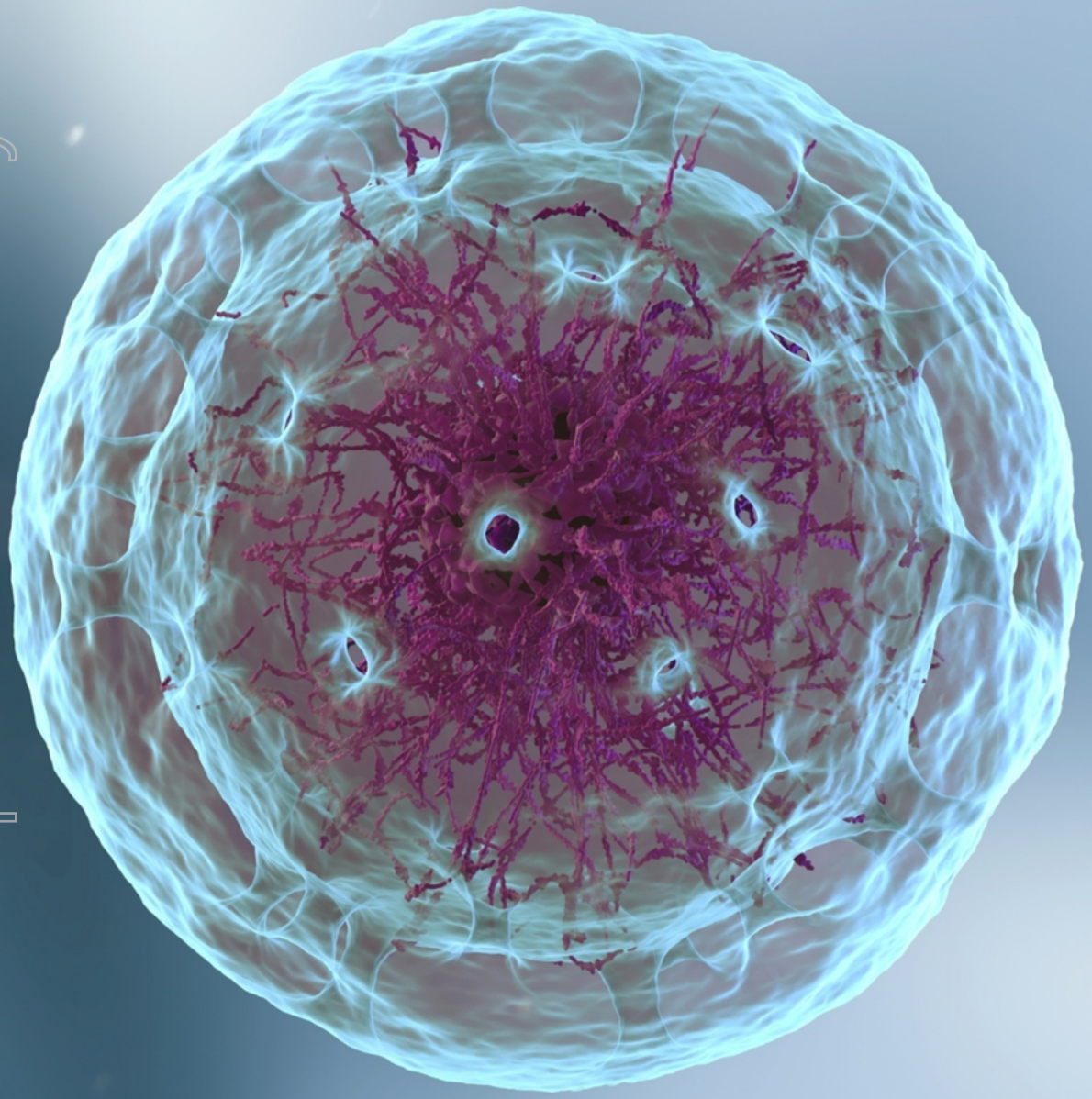
IP FULLY OWNED BY PTX

PRODUCES SUPERIOR CELLS

- 50% more memory T cells
- Doubles helper T cells
- More CXCR3 = tumour trafficking
- **Doubles tumour control & survival**
- Greater genomic stability
- Enhanced anti-viral activity

DEVELOPMENT OPPORTUNITIES

- PTX & 3rd party programs
- Use with any existing CAR-T manufacturing process with no loss of time



Prescient Therapeutics

PTX-100

PTX-200

OmniCAR

CellPryme

Coming soon:

CellPryme-A

A synergistic cell therapy enhancement