



What's Next?



Deep & durable remissions

“One-and-done” treatment

Personalized autologous product

Proven applicability

Evolving supportive care & toxicity
management

Relatively limited engineering
complexity

Acute toxicities

Persisting side effects

Manufacturing complexity

Limited scalability

Inherent product variability

Access constraints

Logistical demands

Opportunities for innovation remain

Autologous
CAR T-cells

Targeting surface proteins

TCR T-cells

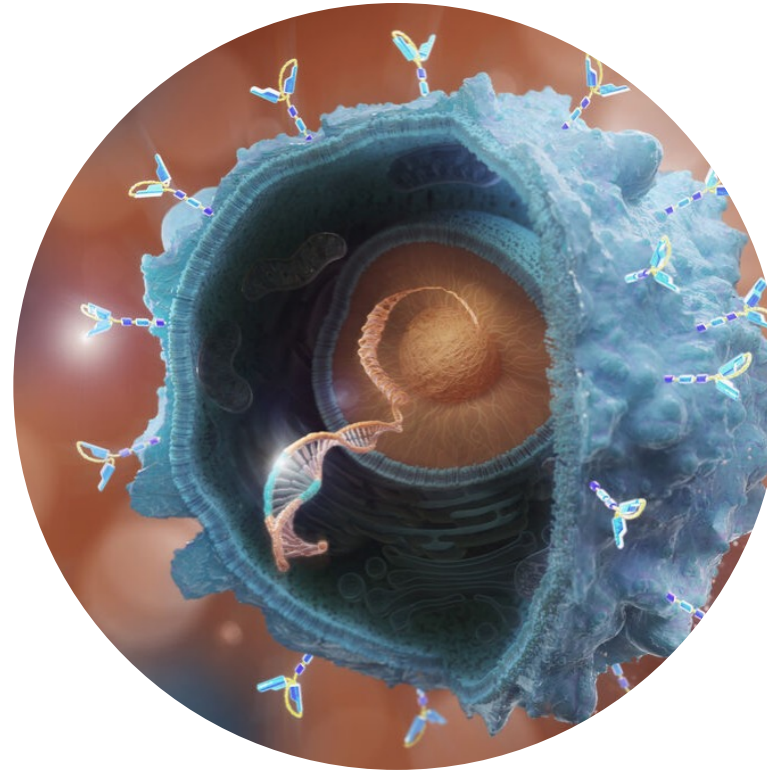
Targeting intracellular proteins

Allogenic
CAR T-cells

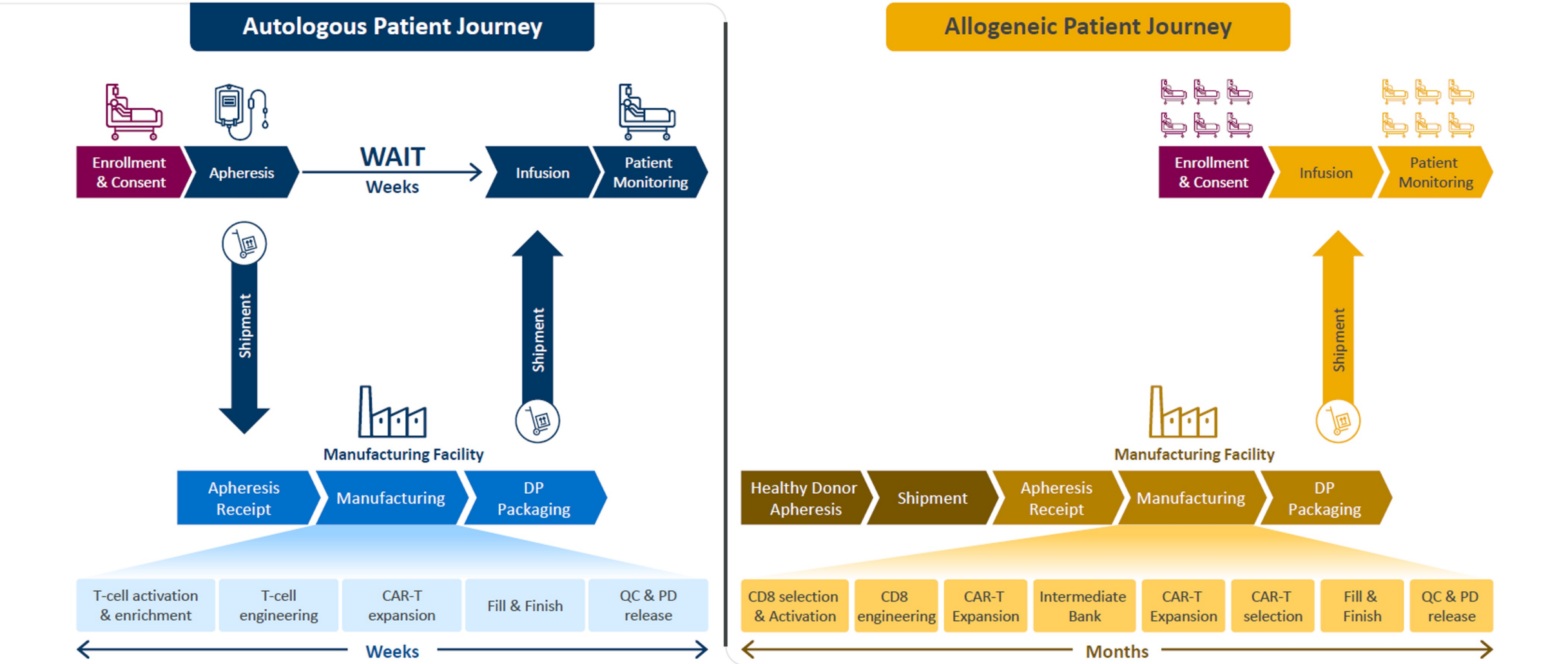
Targeting surface proteins

CAR Tregs

In vivo
Strategies



Allogeneic effector cells could improve scalability



Release details

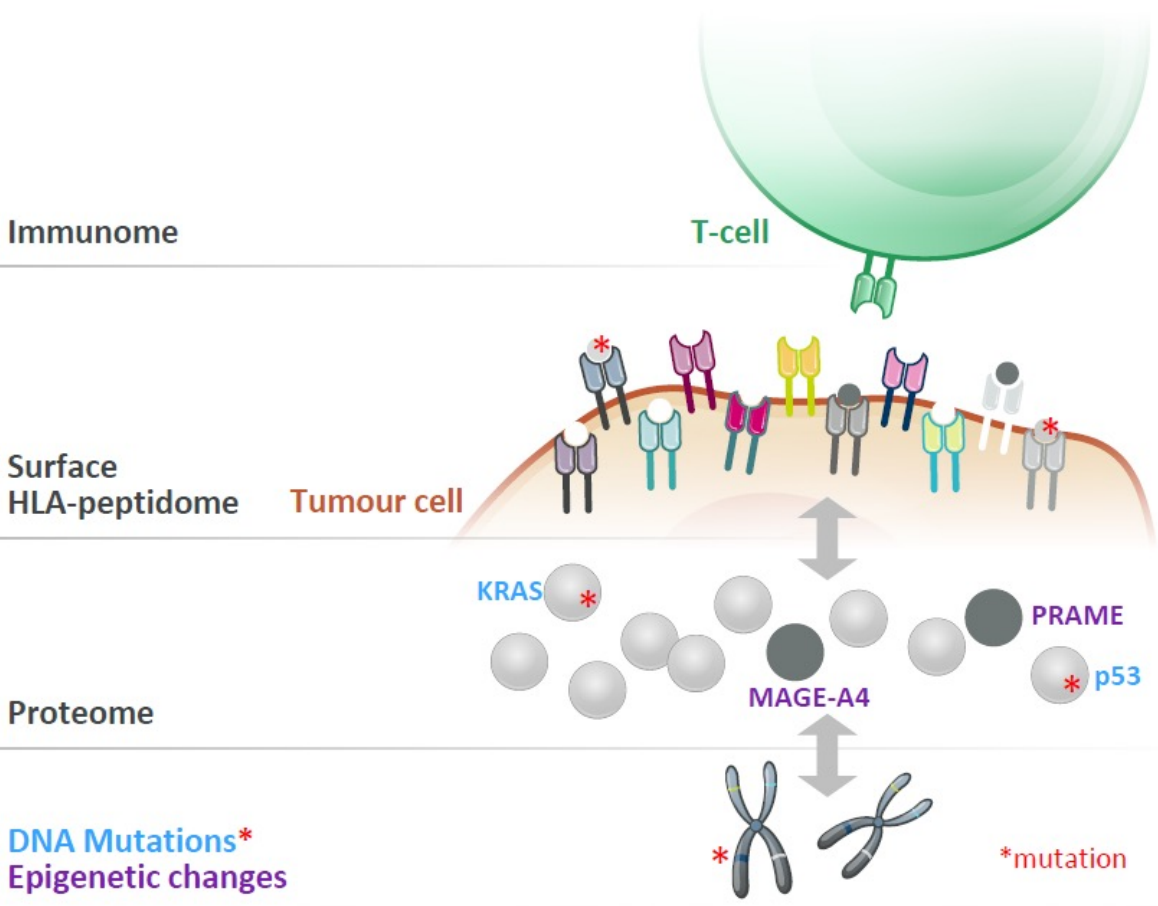
Caribou Biosciences Announces Positive Data from ANTLER Phase 1 Trial Demonstrating Efficacy and Durability of Vispa-cel (CB-010), an Allogeneic CAR-T Cell Therapy, on Par with Autologous CAR-T Cell Therapies

November 3, 2025

 PDF Version

- *Data demonstrate efficacy and durability of vispa-cel, an allogeneic anti-CD19 CAR-T cell therapy, are on par with autologous CAR-T cell therapies in the confirmatory cohort (N=22) and with longer-term follow-up on patients who received optimized vispa-cel (N=35)*

TCR-T's – Beyond extracellular targets



TCR target space encompasses **100% of the genome**

CAR target space encompasses **0.25% of the genome**

TCRs are HLA restricted

Neoantigen	HLA	US incidence for neoantigen & HLA
BRAFpV600E	A*02	40,000/year
KRASp.G12D	A*03	11,000/year
KRASp.G12V	A*03:01	10,000/year
TP53p.R175H	A*02:01	9,000/year
KRASp.G12D	A*11:01	6,000/year
KRASp.G12V	B*35	5,000/year
*KRASp.Q61R	A*01:01	5,000/year
KRASp.G12V	A*11:01	5,000/year
BRAFpV600E	B*27:05	5,000/year
KRASp.G12D	C*08:02	4,000/year

Need to target subpopulations

Intracellular TCR Targets

Ectopically expressed proteins

Epigenetic Changes

- PRAME
- MAGE-A4

Tumour Driver mutations

DNA Mutations*

- KRAS
- P53

Regulatory T-Cells as catalyst in non-oncology approaches?

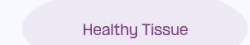
Suppress
Suppress pathogenic cells



Convert
Convert pathogenic cells to good cells



Repair
Repair the damage done



Adopted from <https://www.quell-tx.com/platform>

Nobel Prize in Physiology or Medicine 2025



Ill. Niklas Elmehed © Nobel Prize Outreach

Mary E. Brunkow

Prize share: 1/3



Ill. Niklas Elmehed © Nobel Prize Outreach

Frederick J. Ramsdell

Prize share: 1/3



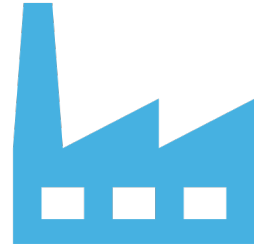
Ill. Niklas Elmehed © Nobel Prize Outreach

Shimon Sakaguchi

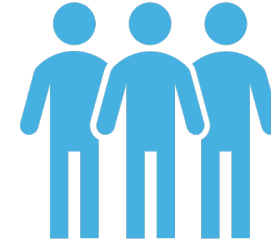
Prize share: 1/3

The Nobel Prize in Physiology or Medicine 2025 was awarded jointly to Mary E. Brunkow, Frederick J. Ramsdell and Shimon Sakaguchi "for their discoveries concerning peripheral immune tolerance"

In vivo constructed cell therapies – the new frontier?



Manufacturing facility



Manufacturing facilities

EsoBiotec to Be Acquired by AstraZeneca to Advance Cell Therapy Ambition

Mar 17, 2025

EsoBiotec's ENaBL platform enables rapid, scalable cell therapy treatments, bypassing traditional complexities and making transformative therapies more accessible to patients.

Press Release

AstraZeneca acquires EsoBiotec to advance in vivo cell therapy, leveraging the ENaBL platform.

Mar. 17, 2025



interius

PLATFORM ▾

PIPELINE ▾

ABOUT US

CAREERS

NEWS

CONTACT

AUGUST 21, 2025 | PRESS RELEASE

Kite to Acquire Interius BioTherapeutics to Advance In Vivo Platform

ORBITAL
THERAPEUTICS

< Back to News

Bristol Myers Squibb Strengthens and Diversifies Cell Therapy Portfolio with Acquisition of Orbital Therapeutics



Capstan Therapeutics is now a part of AbbVie

We aim to develop and deliver innovative medicines that have an impact on people's lives.

<https://www.esobiotec.com/esobiotec-to-be-acquired-by-astrazeneca-to-advance-cell-therapy-ambition/>
<https://www.orbitaltx.com/bristol-myers-squibb-strengthens-and-diversifies-cell-therapy-portfolio-with-acquisition-of-orbital-therapeutics/>

<https://interiusbio.com/press-release/kite-to-acquire-interius-biotherapeutics-to-advance-in-vivo-platform/>
<https://www.abbvie.com/capstan-therapeutics.html>

