

Product

CAR-T Cell Therapy

Indication

Autoimmune Disorders
Solid Organ Transplants
T-cell Leukemia

Value Propositions

- ▶ Pathogenic CD8 T-cell specific
- ▶ Drives long-term immunosuppression

Market

- ▶ \$ 3.82 B -Global market (29.8% CAGR 2023-2032)

Intellectual Property

- ▶ PCT filed in April 2023

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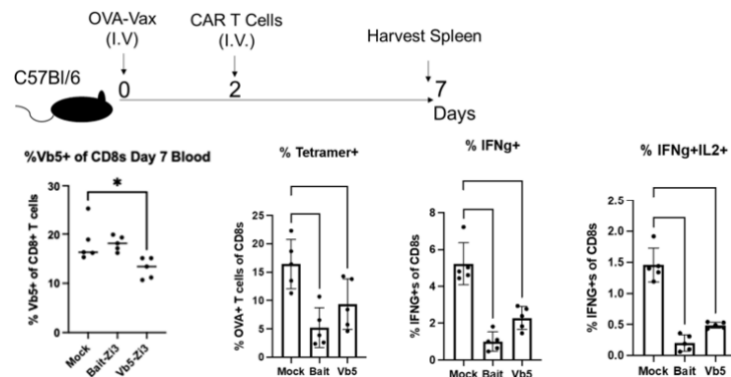
Necessity of CAR-T Targeting Autoimmunity

There is a need for more antigen targets for CAR-based therapies treating autoimmune disorders, solid organ transplant rejection, and T-cell leukemia. Pathogenic CD8 T-cells are one of the drivers for the listed indications and presents a promising target for CAR-based therapies.

CD8 Targeting CAR-T Cell Therapy

Dr. Prashanth Francis has developed a novel CAR-based platform to target pathogenic CD8 T-cells. This CAR construct contains an ectodomain specific for a cognate peptide specific to the pathogenic CD8 T-cells and an MHC-I/HLA-A/HLA-B/ or HLA-C molecule – allowing for targeted treatment.

Treatment using an OVA-CD8a T-cell specific CAR T-cell (herein called, “Bait CAR T-cells”) using an OVA-vaccination model, resulted in targeted immunosuppression of the OVA-CD8a T-cells as indicated by reduced presence and effector function of OVA-CD8a T-cells.



Furthermore, challenging these Bait CAR T-cell treated OVA-vaccinated mice with listeria-OVA resulted in reduced clearance of the virus – highlighting the long-lasting immunosuppressive effects driven by the Bait CAR T-cells.

