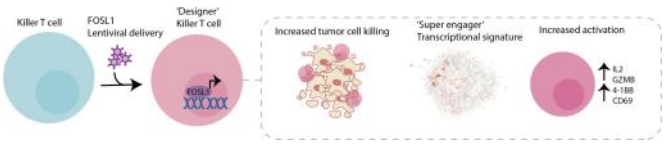
PROJECT NUMBER

22370

Designer Cytotoxic T cells: Transcription Factor-Based Engineering with FOSL1

Method to enhance persistence and cytotoxicity of T-Cell adoptive therapies.
This technology leverages a transcription factor, FOSL1, overexpressed to enhance T-cell function, boosting tumour-killing efficiency and engagement. It presents a promising advancement for adoptive therapies like CAR-T, TCR-T, and TIL, with broad applications in cancer treatment.

Applications: Immunotherapy, Adoptive Cell Therapy (e.g. CAR-T, TCR-T, TILs)



Features	Benefits
Enhanced cytotoxicity	Destroy tumour cells faster and more effectively, enabling better cancer clearance.
Increased T-cell engagement	Improved cytokine production and expression of tissue homing receptors
Safety profile	FOSL1 overexpression does not result in non-specific activation – cytotoxicity is triggered only upon tumour engagement
Versatility and scalability	Can integrate with existing T-cell therapies (e.g., CAR-T, TCR-T, TIL)

Awaiting patent and Available for

- Co-development
- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.