# The Scenic Route: Redirecting CAR T-cells Through Lymph Nodes

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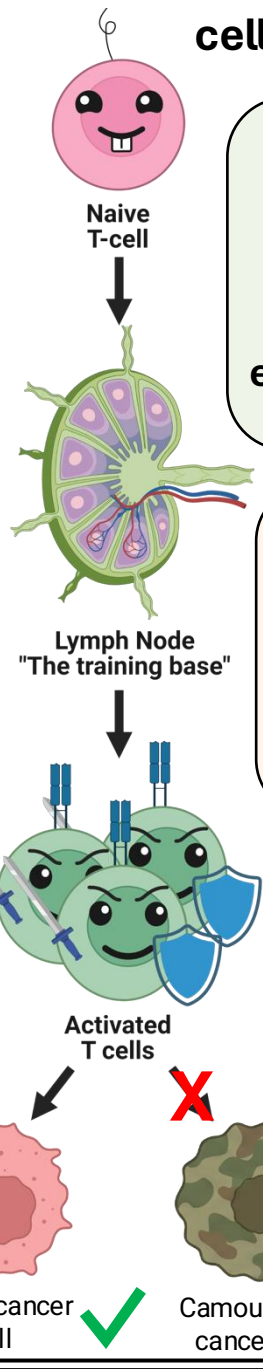
## 1. INTRODUCTION

### 1) T-cells are trained in lymph nodes to detect and kill cancerous cells

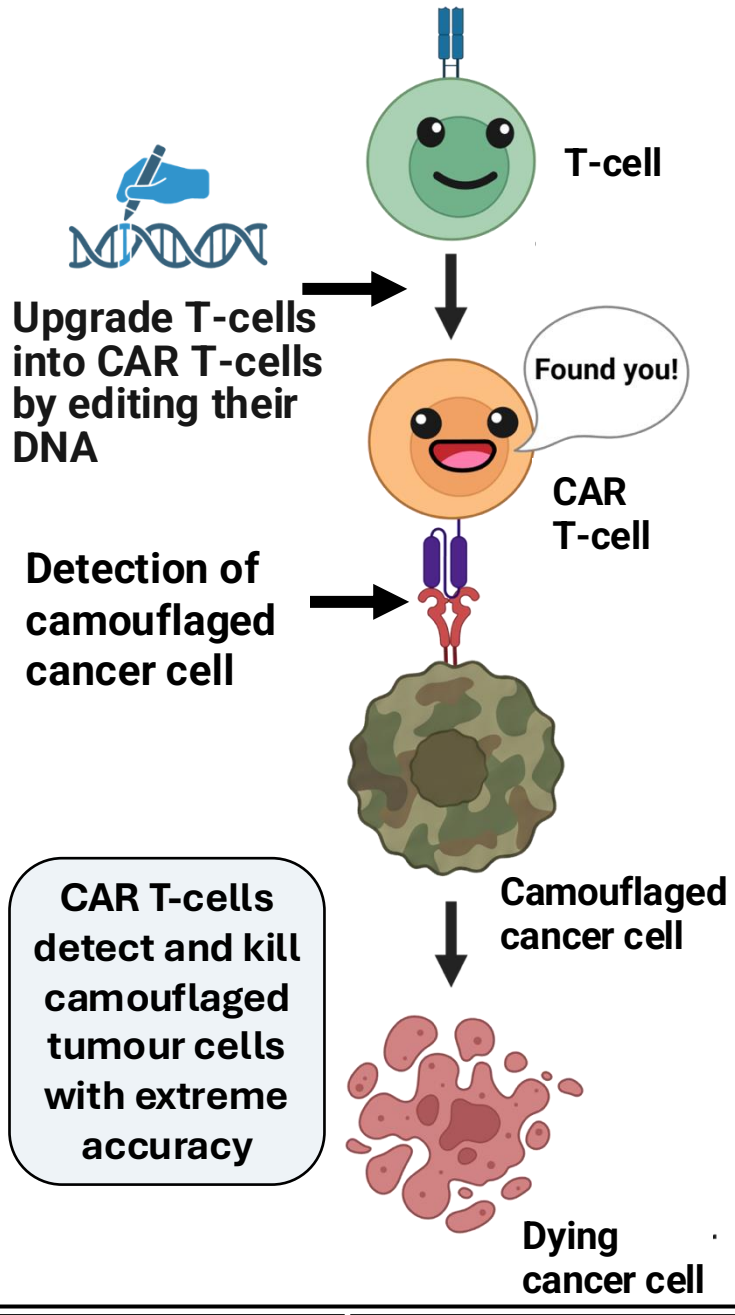



"Baby" Naïve T-cells are activated in lymph nodes, becoming equipped to fight cancer

In the lymph node they also multiply, ensuring enough soldiers are available to fight

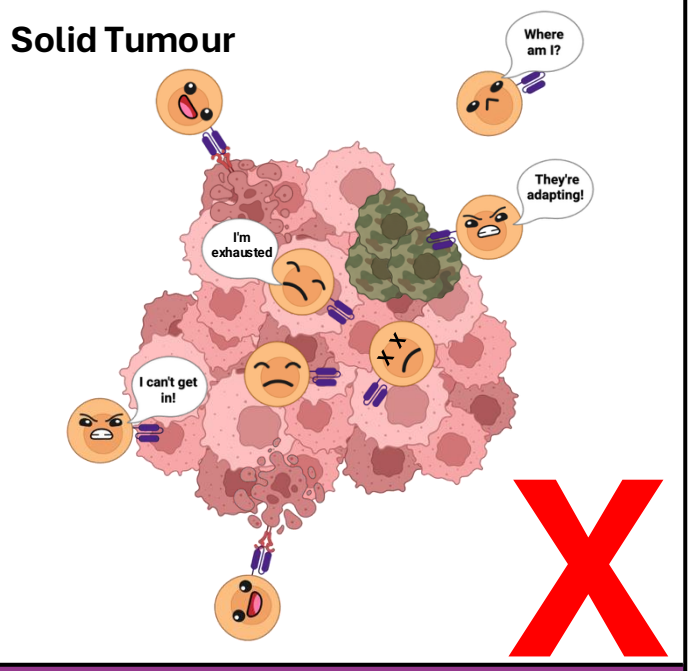
Unfortunately, cancer cells can evolve to hide from T-cells

### 2) T-cells can be upgraded to CAR T-cells which detect & kill camouflaged tumours without lymph node training




CAR T-cells detect and kill camouflaged tumour cells with extreme accuracy

### 3) CAR T-cells are highly effective in treating blood cancers, but their success in solid tumours is limited

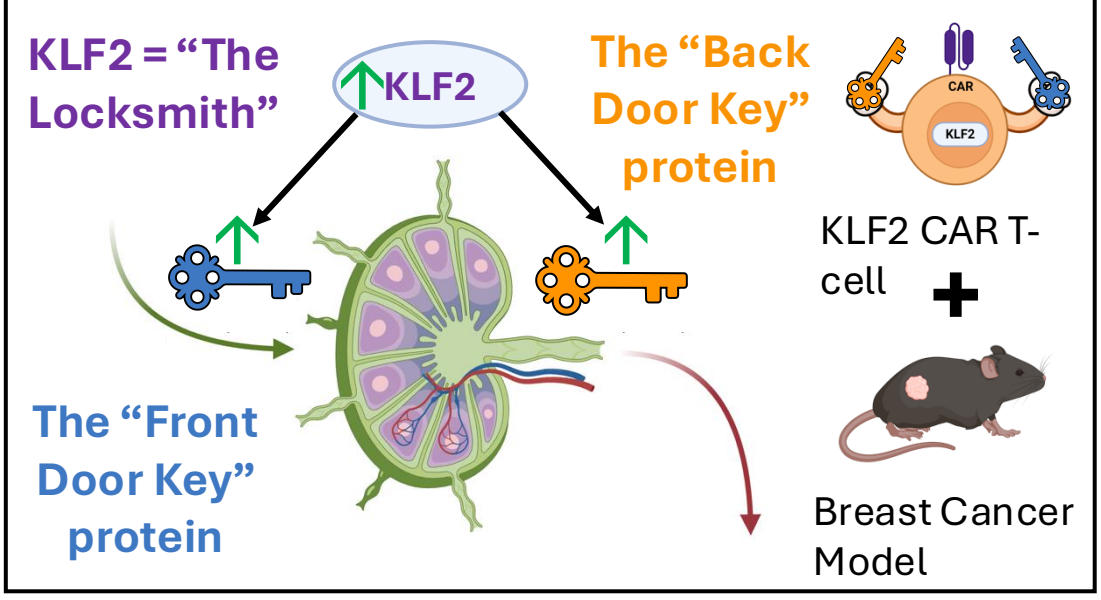



## 2. AIMS & HYPOTHESIS

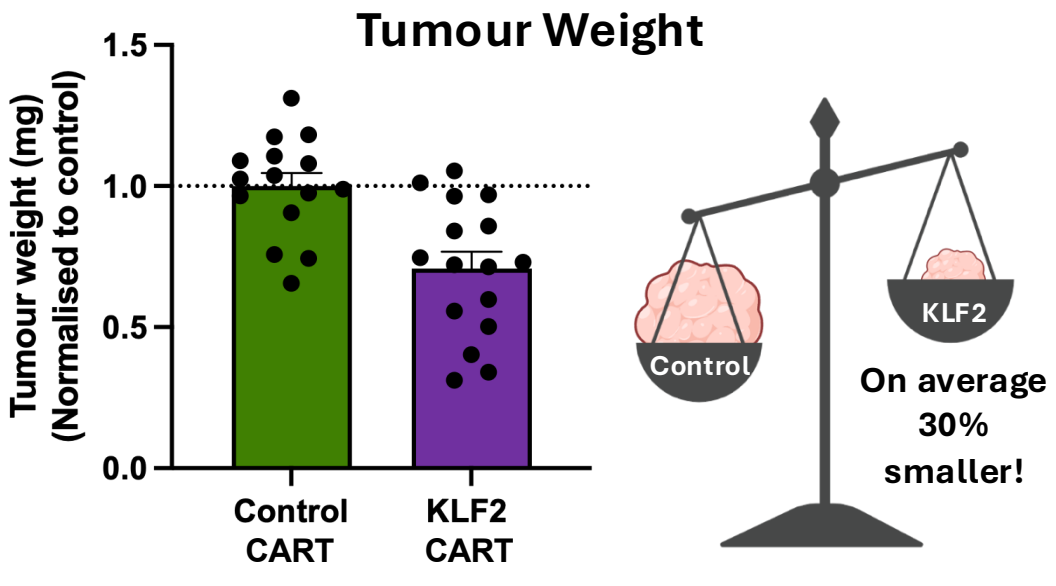
**Aim:** Assess whether lymph nodes can be leveraged to improve CAR T-cell therapy against solid tumours

**Hypothesis:** Promoting CAR T-cell transit through lymph nodes will improve their efficacy against solid tumours

## 3. METHODS




## 4. RESULTS: KLF2 Improves CAR T-cells




## 5. FUTURE DIRECTIONS

