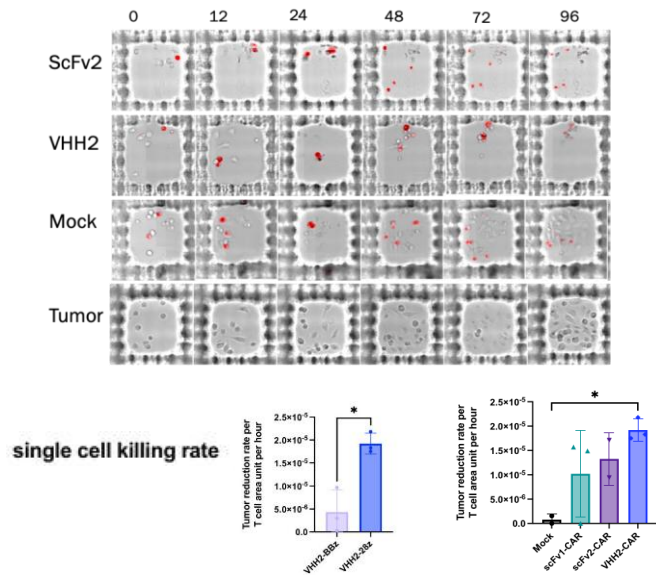


Single-cell analysis reveals intrinsic killing capacity, differentiating constructs based on killing rate (k_{eff}) independent of cooperative effects.

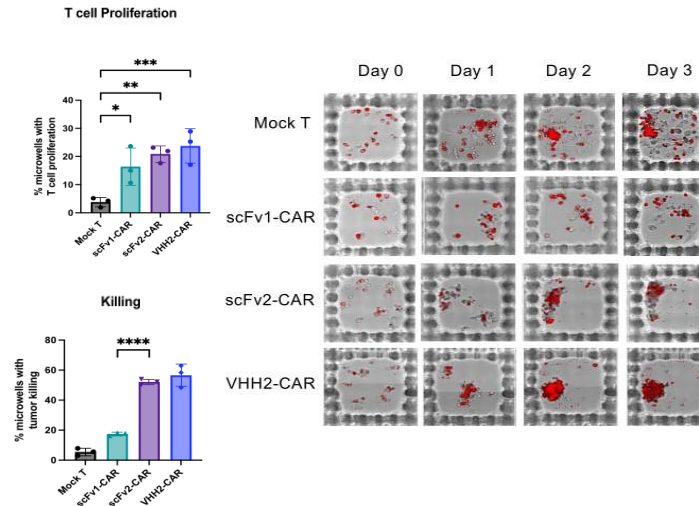
High effector density assays quantify proliferation and population-level clearance, highlighting robust "wolf-pack" killing.

Correlating *in vitro* kinetic profiles with *in vivo* tumor control and survival data.

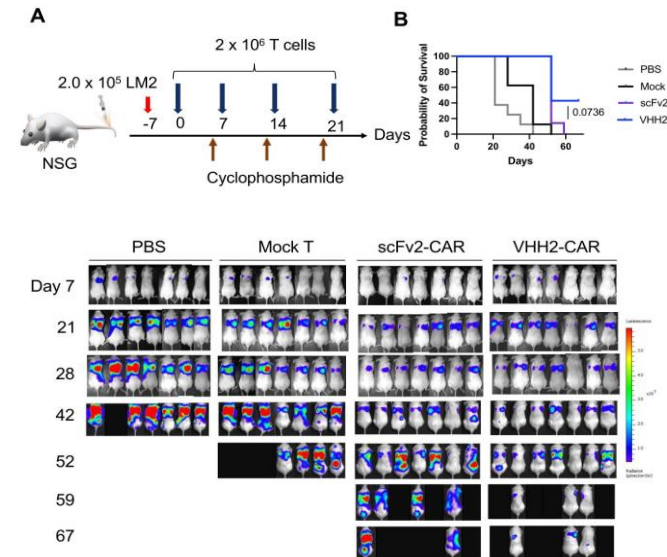
Single-Cell Killing Kinetics (E:T 1:10)



Collaborative Killing & Proliferation (E:T 20:10)



In Vivo Validation



$$d\text{Tumor}/dt = r^{\text{Tumor}} \cdot \text{Tumor} - k_{eff} \cdot \text{Tcell} \cdot \text{Tumor}$$

(Classical Predator-Prey Model)

Based on the Lotka-Volterra equations;
Parameter fitted from 144-hour of 3000 microcultures starting with a single T cell with various number of tumor, $R^2 \geq 0.95$.

