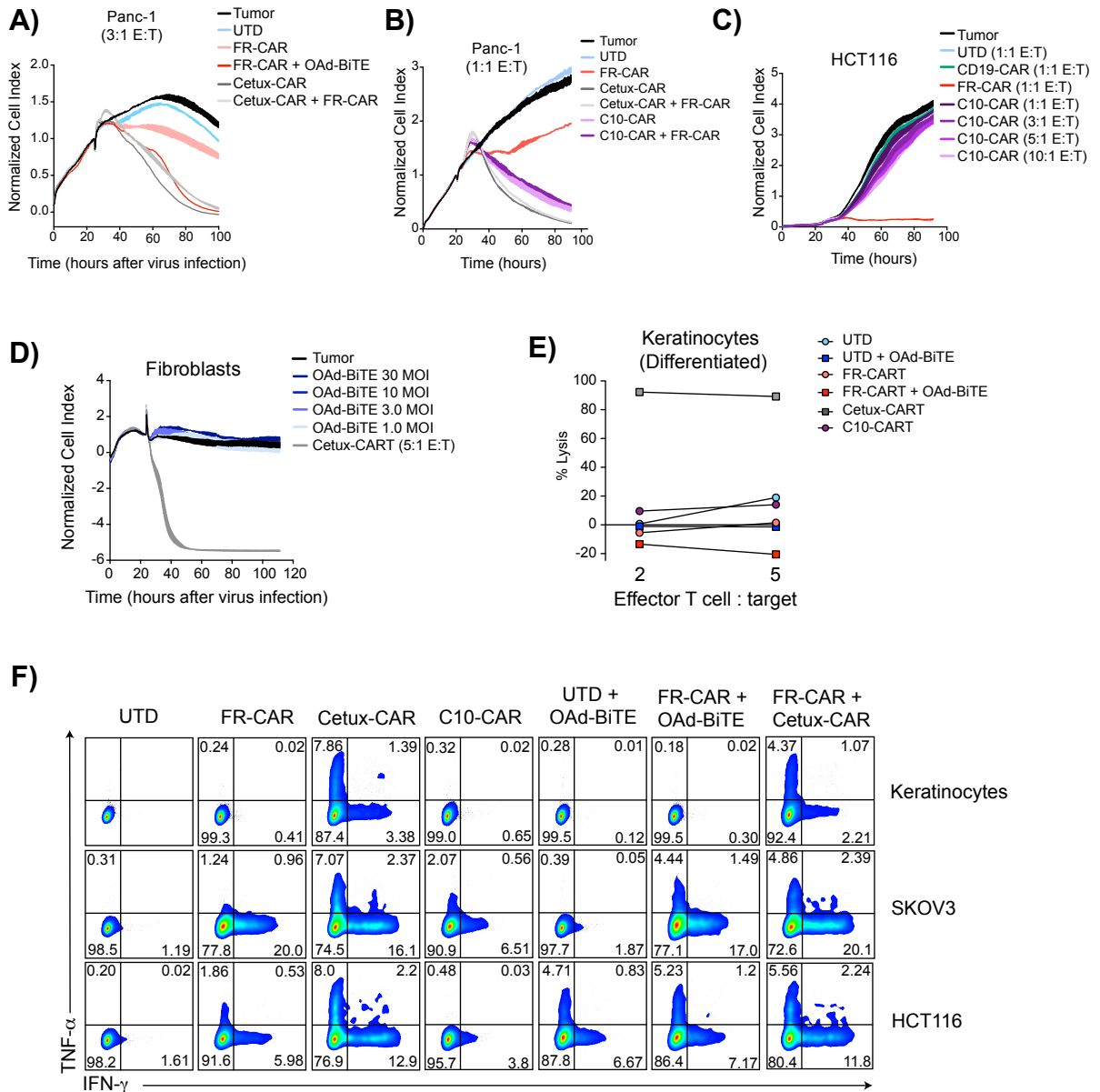
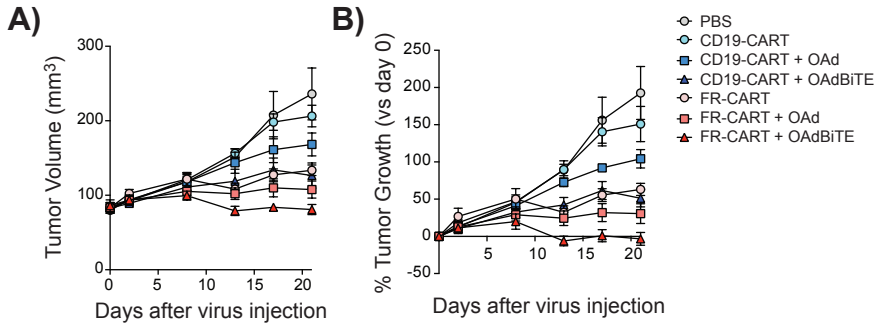


## Supplementary Figure 1



**Supplementary Figure S1. Therapeutic index of EGFR-targeting CART cells and the OAd-BiTE. (A-D)** A real-time cytotoxicity assay was used to evaluate the lysis of target- cells when cocultured with T cells. The mean  $\pm$  SD of duplicates is shown. **(A)** Combination of FR-CART cells with OAd-BiTE or Cetux-CART cells shows enhanced tumor killing in Panc-1 cells (FR<sup>Low</sup>EGFR<sup>High</sup>). **(B)** Combination of FR-CART cells with the EGFR-targeting CARs, C10 (low affinity) and cetux (high affinity), show enhanced antitumor effect in Panc-1 cells. **(C)** The C10-CART cells are unable to mediate killing of HCT116 tumor cells even at high ratios (10:1 E:T). **(D)** No significant lysis of keratinocytes was observed at increasing doses of OAdBiTE overtime. **(E)** Differentiated keratinocytes (confluent, 0.5mM calcium) were infected with virus and 24 hours later T cells were added at effector-to-target (E:T) ratios of 2 or 5. Specific cytolysis was determined 48 hours after T cell coculture using a flow cytometry-based assay. **(F)** Intracellular cytokine staining in T cells after coculture with human primary or tumor cells for 20 hours at an E:T ratio of 2.

## Supplementary Figure 2



**Supplementary Figure S2: The Combination of FR-CART cells and OAd-BiTE mediates tumor regression in mice bearing pancreatic xenograft tumors.** NSG mice bearing 30-day established Panc-1 tumors were treated with OAd-BiTE ( $5 \times 10^8$  vp) or PBS. 3 days later, animals were treated with an intravenous injection of  $5 \times 10^6$  FR-CART cells. **(A)** Mean tumor volumes  $\pm$  SEM with  $n=5-7$  are plotted. **(B)** Percentage of tumor growth indicated as the change in tumor volume at indicated time points versus baseline.