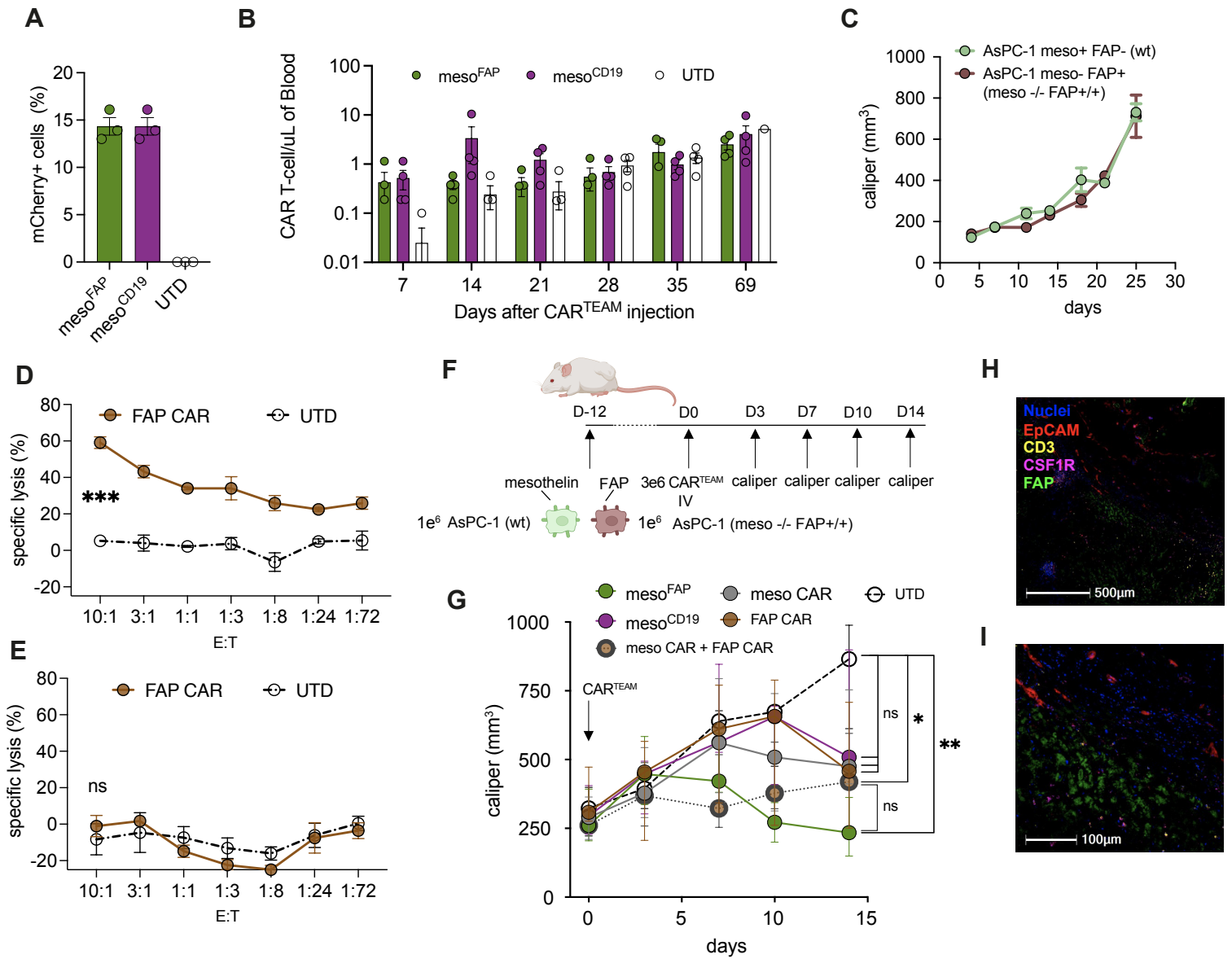


Supplementary Figure S7



Suppl. Fig. S7. Superior anti-tumor effect of meso^{FAP} compared to the combination of meso-CAR and FAP-CAR or meso^{CD19}. **A.** Transduction efficiencies of normalized CAR TEAM including UTD of in vivo experiment from 3 independent donors. **B.** CAR T-cell (human CD3+ mCherry+) quantification in the peripheral blood by flow cytometry at days 7, 14, 21, 28, 35, and 69 indicated as CAR T cell numbers per ul of blood. **C.** Comparable tumor growth in vivo of AsPC-1 meso^{+/+} FAP⁻ (wt) and AsPC-1 meso^{-/-} FAP^{+/+} over time as measured by caliper. **D-E.** Luciferase killing assay of AsPC-1 expressing human FAP (D) and murine FAP expressing cell line (E) treated with anti-human FAP CAR-T cells at varying E:T ratios (stars equal significance at an E:T of 10:1). **F.** Schematic of experimental setup of AsPC-1 and AsPC-1 FAP+ mesothelin ^{-/-} (1:1 ratio) subcutaneously implanted in the flank of NSG mice (created with BioRender.com). Mice were treated intravenously with meso^{FAP}, meso^{CD19}, or meso CAR T-cells including UTD, 12 days after tumor implantation and caliper were measured indicated by arrows. **G.** Tumor volume over time as measured by caliper in mm³. Data represent mean +/- SEM. Stars indicate significance as determined by unpaired two-tailed t-tests of biological triplicates. ** p<0.01, ***p < 0.0001. ns: not significant (panels D,E) Measurements as average tumor volume values (mean +/- SEM, n=3-5, 2-way ANOVA, * p<0.05; ** p<0.01; ns = not significant; (panel G). **H-I.** Representative multiplex immunofluorescence images of liver metastasis of human PDAC. FAP (Green) represents the presence of CAFs. Tumor cells are stained with EpCAM (Red). T cells are identified by CD3 (Yellow). Macrophages are identified by CSF1R (Magenta). Nuclei are shown in blue. Images shown are at 5X (H) and 20X magnification (I).