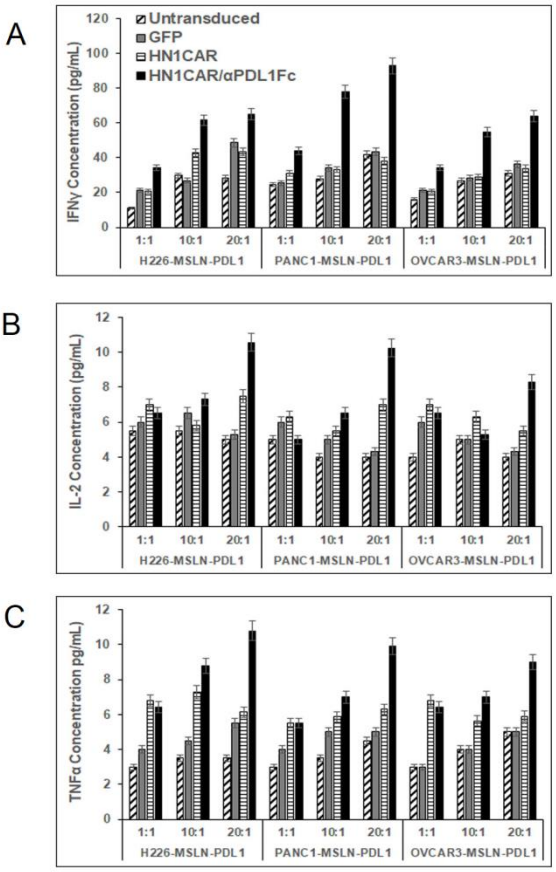
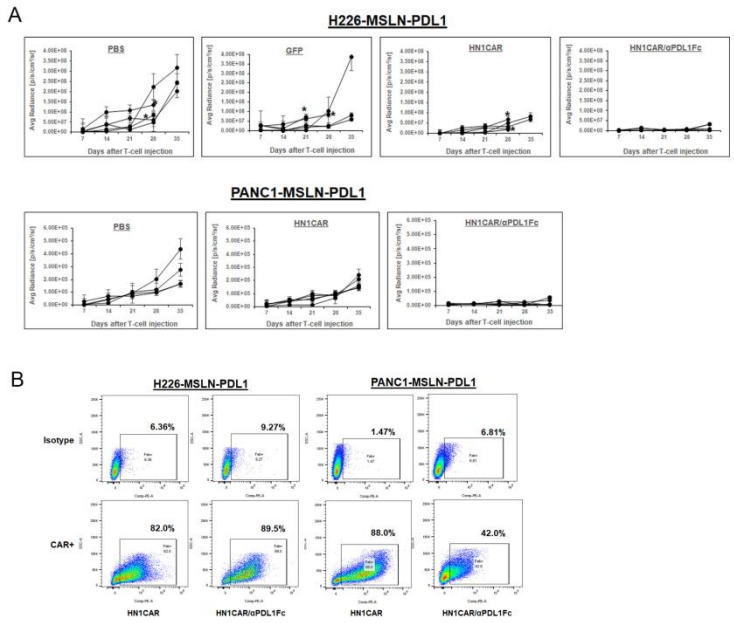
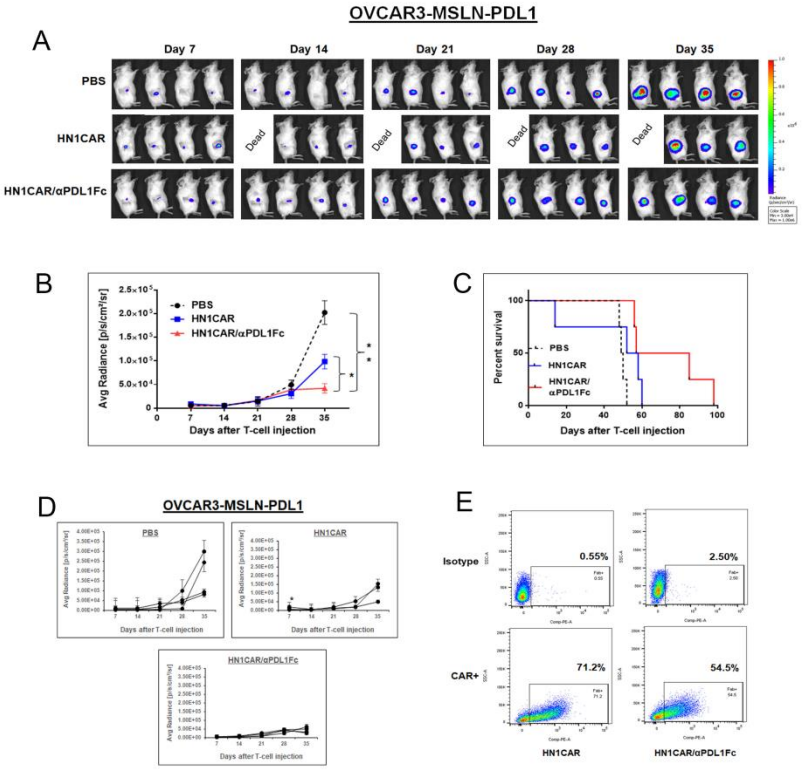
Supplementary Files



Supplementary figure 1: A-C) The ability of HN1CAR/αPDL1Fc-T and control T cells to release IFNγ, IL-2 and TNFα were analyzed by Luminex after 24 hours of co-culture with H226-MSLN-PDL1, PANC1-MSLN-PDL1 or OVCAR3-MSLN-PDL1 target cells at 1:1, 10:1 and 20:1 (E:T) ratios. Error bars are the standard error. All experiments were done in triplicates.



Supplementary figure 2: A) The tumor growth curves of the individual mice in each group are shown for H226-MSLN-PDL1 and PANC1-MSLN-PDL1 inoculated NSG mice shown in Figure 6. Error bars are the standard error. B) Expression of CAR was examined on human primary T cells transduced with HN1CAR and HN1CAR/αPDL1Fc viral particles by flow cytometry one day before injecting in mice. Transduction efficiencies are indicated in %.



Supplementary figure 3: A) NSG mice were grouped and injected on their right flanks with 1x106 OVCAR3-MSLN-PDL1 luciferase cells. On day 3rd, the mice were treated with 5x106 indicated CAR-T cells or 100 µL of PBS (4 mice each group). Tumor growth was quantified by bioluminescence imaging (BLI) after 90 seconds of luciferin injection via tail vail on day 3 (data not shown) 7, 14, 21 and 35 after CAR-T injections. B) The graph showing the mean of 4 mice for each group. **p-val<0.005; *p-val<0.01 at the time point on day 35th. Error bars are standard error. C) Kaplan-Meier survival curve showing the percent survival. The p-value was less than 0.02 calculated by Mantel-Cox test and the median survival for HN1CAR/αPDL1Fc was around 71 days while 50-55 days for controls. D) The tumor growth curves of the individual mice in each group shown in Figure A. Error bars are standard error. F) Expression of CAR was examined on human primary T-cells transduced with HN1CAR and HN1CAR/αPDL1Fc viral particles by flow cytometry one day before injecting in mice. Transduction efficiencies are indicated in %.