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Supplemental Information

Chimeric Antigen Receptor-Engineered Human

Gamma Delta T Cells: Enhanced Cytotoxicity

with Retention of Cross Presentation

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Supplementary Figure 1.

Transduction efficiency of V δ 2⁺ T cells as measured by % QBend10⁺ comparing timing of viral transduction (day 3 or day 5). As a positive control PBMC stimulated by CD3 and CD28 antibodies were transduced on day 3 following stimulation.



Supplementary Figure 2. $\alpha\beta$ and V $\delta2^+$ GD2-CAR T cells specifically lyse SupT1 cells genetically modified to express tumor antigen GD2, but not SupT1 cells genetically modified to express anaplastic lymphoma kinase (ALK) antigen in 4-hour ⁵¹Cr release assay. GD2-CAR transduced (TD) $\alpha\beta$ and V $\delta2^+$ T cells were sorted to >95% purity by fluorescence activated cell sorting (FACS). Non-transduced (NTD) cells were sorted by magnetic-activated cell sorting (MACS). Mean of 4 donors in triplicate. Error bars represent SEM.



Supplementary Figure 3. Percentage T cell migration towards supernatant taken from three neuroblastoma neurosphere lines derived from primary patient tissue. Migration calculated as ((number of migrated cells in the specific condition - number of migrated cells in the negative control for that condition) / number of migrated cells in the positive control) x 100.