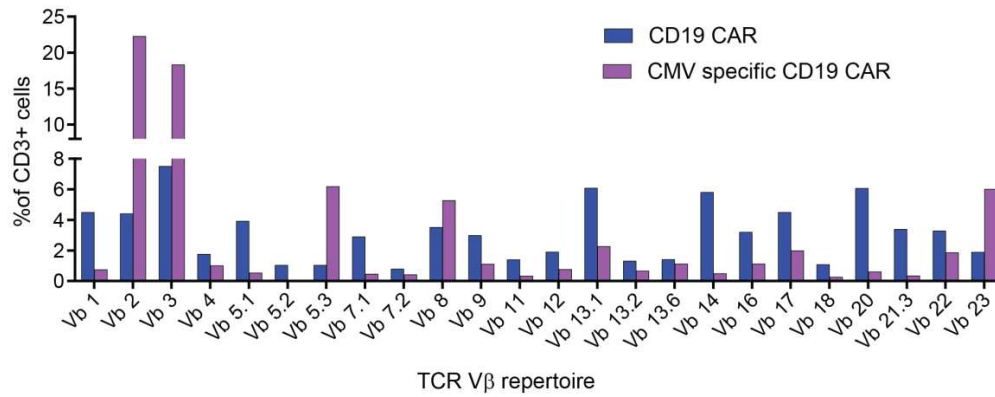


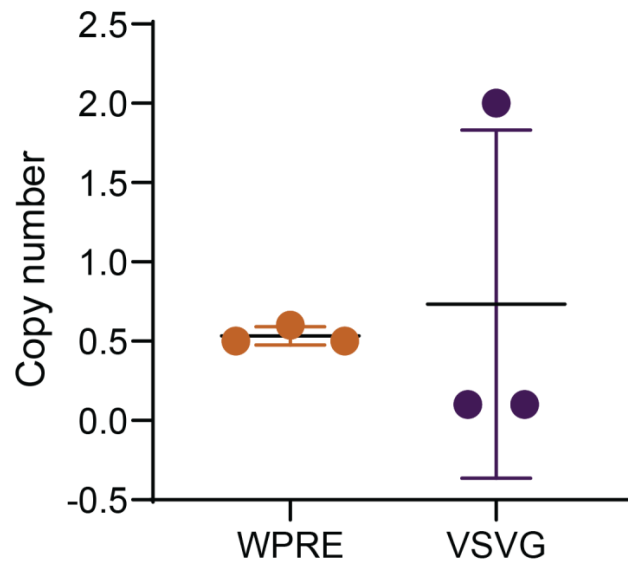
Supplemental Table 1. CAR+ T cells in final products

HD	%CAR
HD187	22.4
HD272	27.0
HD032	16.5
HD 33.8	15.2
HD542	12.9
HD187.2	26.3
HD 570	63.1
HD 585	32.2
HD 597	30.4
HD 607	23.8
Average (mean±SD)	27.0±14.2

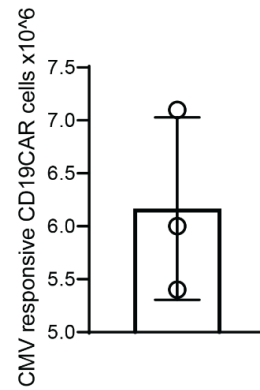
CAR, chimeric antigen receptor; HD, human donor; SD, standard deviation



Supplemental Figure 1. Expanded CMV-CD19CAR T cells exhibited polyclonal features. The propagated CMV-CD19CAR T cells and conventional CD19CAR T cells from the same donor were subjected to a flow cytometry-based Vβ repertoire analysis.



Supplemental Figure 2. WPRE and VSVG copy number of large-scale manufactured CMV-CD19CAR T cells. gDNA was extracted from the T cells in final products and qPCR for the vector's WPRE sequence and lentiviral envelope pCMV-G for VSVG was performed. Vector copy numbers WPRE/cell and VSV-G/50ng gDNA in three manufactured cell products are presented (Mean±SD).



Supplemental Figure 3. Dual functionality of CMV-CD19CAR T cells against CD19 and CMV pp65 antigens.

Propagated CMV-CD19CAR T cells were stimulated overnight with CMVpp65-pulsed PBMC. The frequency of intracellular IFN γ in EGFR+ T cells were analyzed with flow cytometry. Absolute number of CMV responsive CD19CAR T cells was calculated based on percentage of CAR in the final products and total number cells of products. Data from 3 representative CMV-CD19CAR T cell products are depicted (Mean \pm SD).