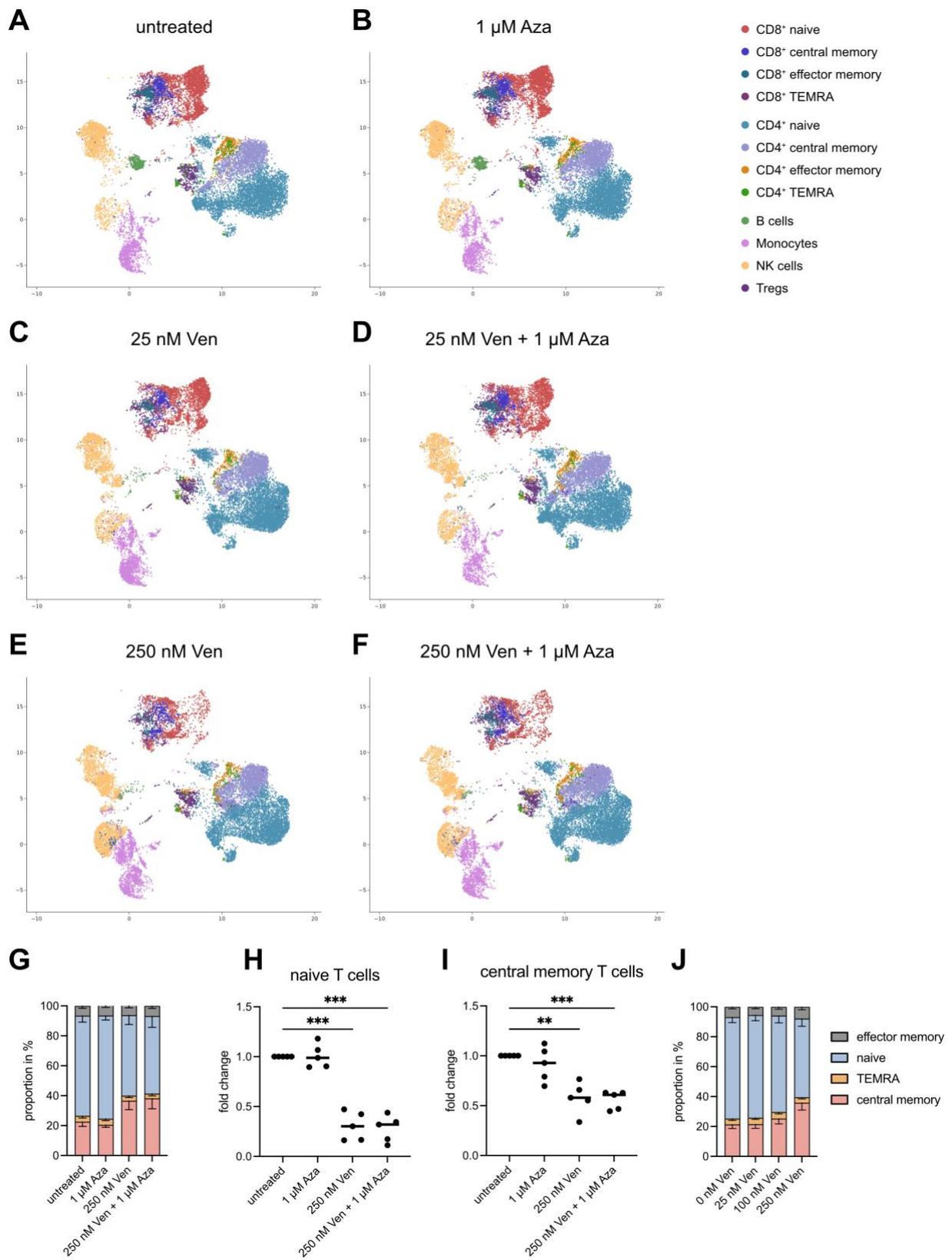
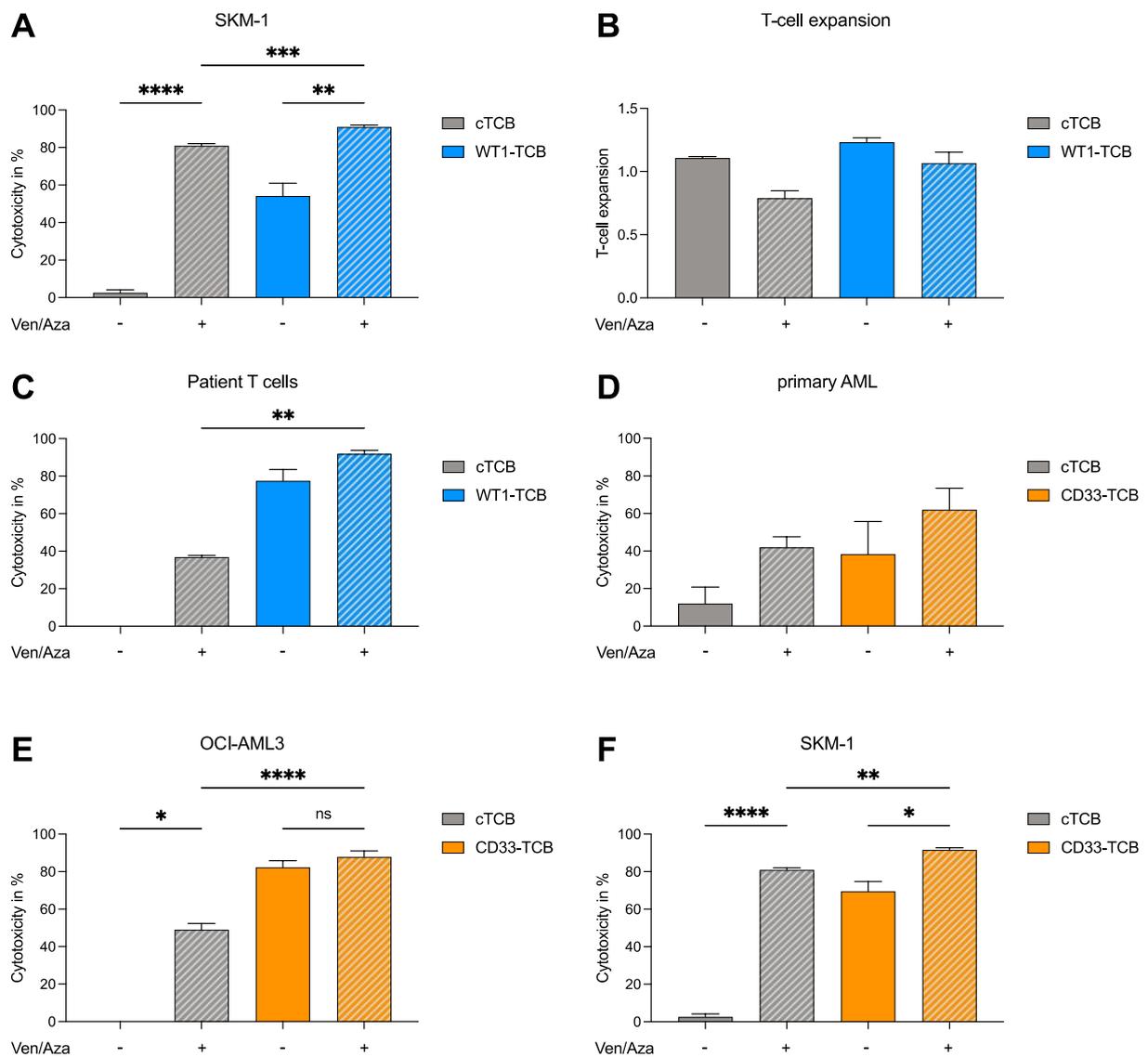


Supplementary Figures

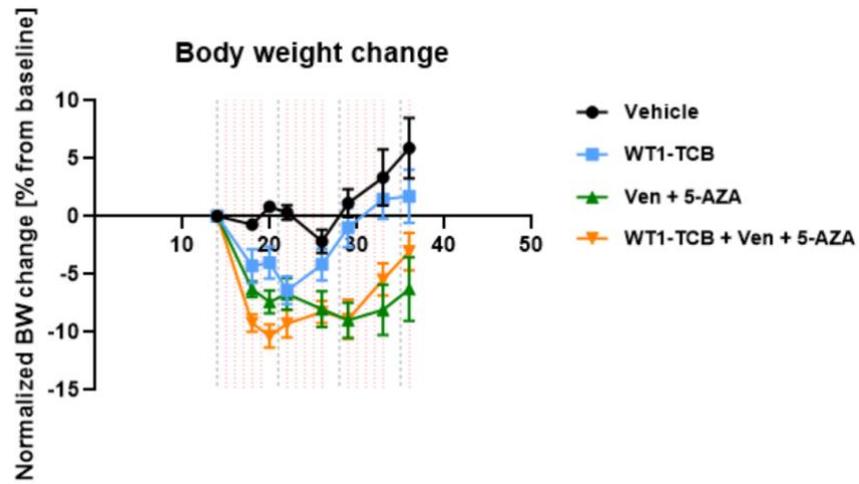


Supplementary Figure 1. Ven/Aza has limited impact on the T-cell compartment. High dimensional clustering by Cytolution of HD PBMCs (A) left untreated, or treated for three days with (B) 1 μ M Aza (C) 25 nM Ven (D) 25 nM Ven and 1 μ M Aza (E) 250 nM and (F) 250 nM Ven and 1 μ M Aza (all $n=3$). (G) Subset distribution in purified HD T cells after three days treatment with Ven/Aza. Fold change in viable naïve (H) and central memory (I) HD T cells after three days treatment with Ven/Aza relative to untreated controls (all $n=5$). (J) Subset distribution after three days in purified HD T cells in response to Ven-dose titration ($n=6$). Data represents the mean \pm SEM. Statistical analysis: One-way ANOVA with Dunett's post hoc test, ** $p<0.01$, *** $p<0.001$



Supplementary Figure 2. The combination of Ven/Aza and TCBs increases cytotoxicity.

(A) Lysis of SKM-1 cells and (B) T-cell expansion compared to day 0 in cytotoxicity assays with HD T cells mediated by cTCB and WT1-TCB after three days in the presence or absence of Ven/Aza. (n=3-6). (C) Lysis of OCI-AML3 cells in cytotoxicity assays with T cells from AML patients isolated after their first cycle of Ven/Aza (n=3). Lysis of (D) primary AML cells (n=4), (E) OCI-AML3 cells (n=3) and (F) SKM-1 cells (n=6) in cytotoxicity assays with HD T cells mediated by cTCB and CD33-TCB in the presence or absence of Ven/Aza. Bars represent the mean \pm SEM. Statistical analysis: One-way ANOVA with Tukey post hoc test, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$



Supplementary Figure 3. Body weight changes in the in vivo experiment evaluating the combination of Ven/Aza and WT1-TCB.

Body weight changes are calculated relative to the start of treatment ($n=15$ per treatment group).