## Supplementary Figure 1: polyfunctionality of reactive T cells in TIL infusion products.



CD4<sup>+</sup>



A total of  $2 \times 10^5$  TILs were cultured with  $2 \times 10^5$  cells from tumor digest or tumor cell lines, in the presence of 1 µL/mL Golgiplug (BD Biosciences). After 5 hours of incubation, cells were stained using anti-CD8 antibody (clone SKI, BD Biosciences) and live/dead marker (Fixable Violet Dead Cell Stain Kit, (Invitrogen)). Intracellular cytokine production was detected after fixation and permeabilization with a Cytofix/Cytoperm kit (BD Biosciences) and antibodies against IFN- $\gamma$  (clone B27), IL-2 (clone Mq1-17H12), and TNF $\alpha$  (clone Mab11), all from BD Biosciences. Cells were analyzed on a LSR2 SORP flow cytometer and data was processed using Flowjo\_V10 software.