Supplemental Figure 1. Early administration of anti-PD1 fails to improve CLP survival in cancer animals.

Anti-PD-1 monoclonal antibody (clone: 29F.1A12) and isotype control were given to cancer septic animals at Day 0, 2, 4 and 6 post-CLP as an early administration strategy. The survival curve was followed for 7 days. N=18 in each group.

Supplemental Figure 2. PD-L1 expression on different APCs during sepsis

Cancer sham or septic animals were sacrificed at 24 hours post surgery, the splenocytes were gated on different cell subsets to determine PD-L1 expression. N=4-5.
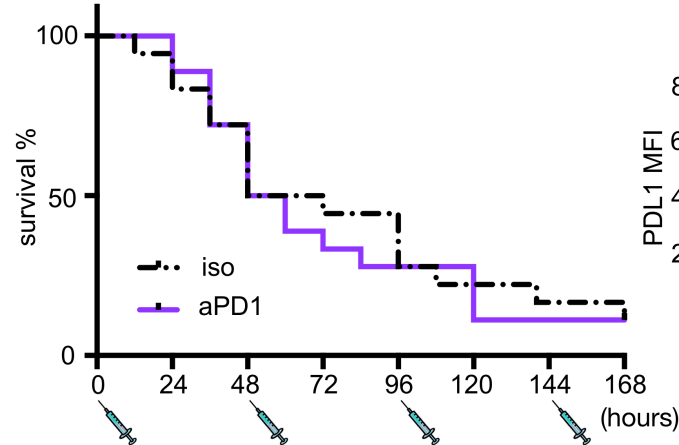
Supplemental Figure 3. Complete CITRUS phenotype table of changed CD8+ T cells

PH sepsis and CA sepsis CD8+ T cell data set were analyzed by CITRUS (Figure 5). The phenotypes of five different nodes that are identified by CITRUS program is shown. The purple histogram represents total CD8+ T cells(background), and the red histogram represents the specific cluster.
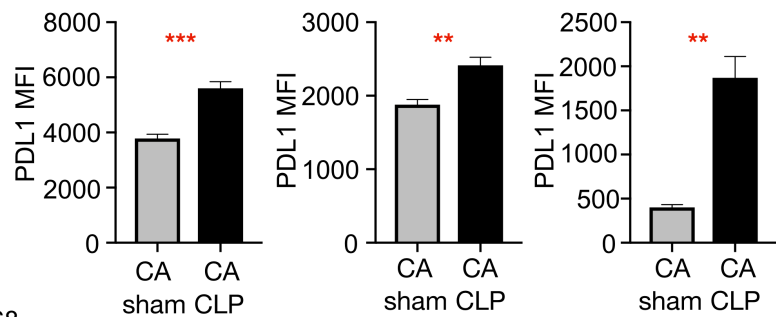
Supplemental Figure 4. CITRUS identified changed CD4+ populations that are elevated in cancer septic animals.

Previously healthy animals and cancer animals were subjected to CLP and euthanized at 24 hours post CLP. Splenocytes were stained with different markers. CD3+CD4+ T cells were pre-gated in Flowjo and exported to Cytobank. CD4+ data sets were exported into CITRUS algorithm and PAMR association model with minimum FDR was selected. (A) CITRUS plot of abundance and significantly changed cluster were automatically generated by CITRUS. (B) The abundance summary plot of the changed nodes between PH CLP and CA CLP groups. (C) Phenotype histograms of the nodes that are increased in cancer septic animals. N=10-11.
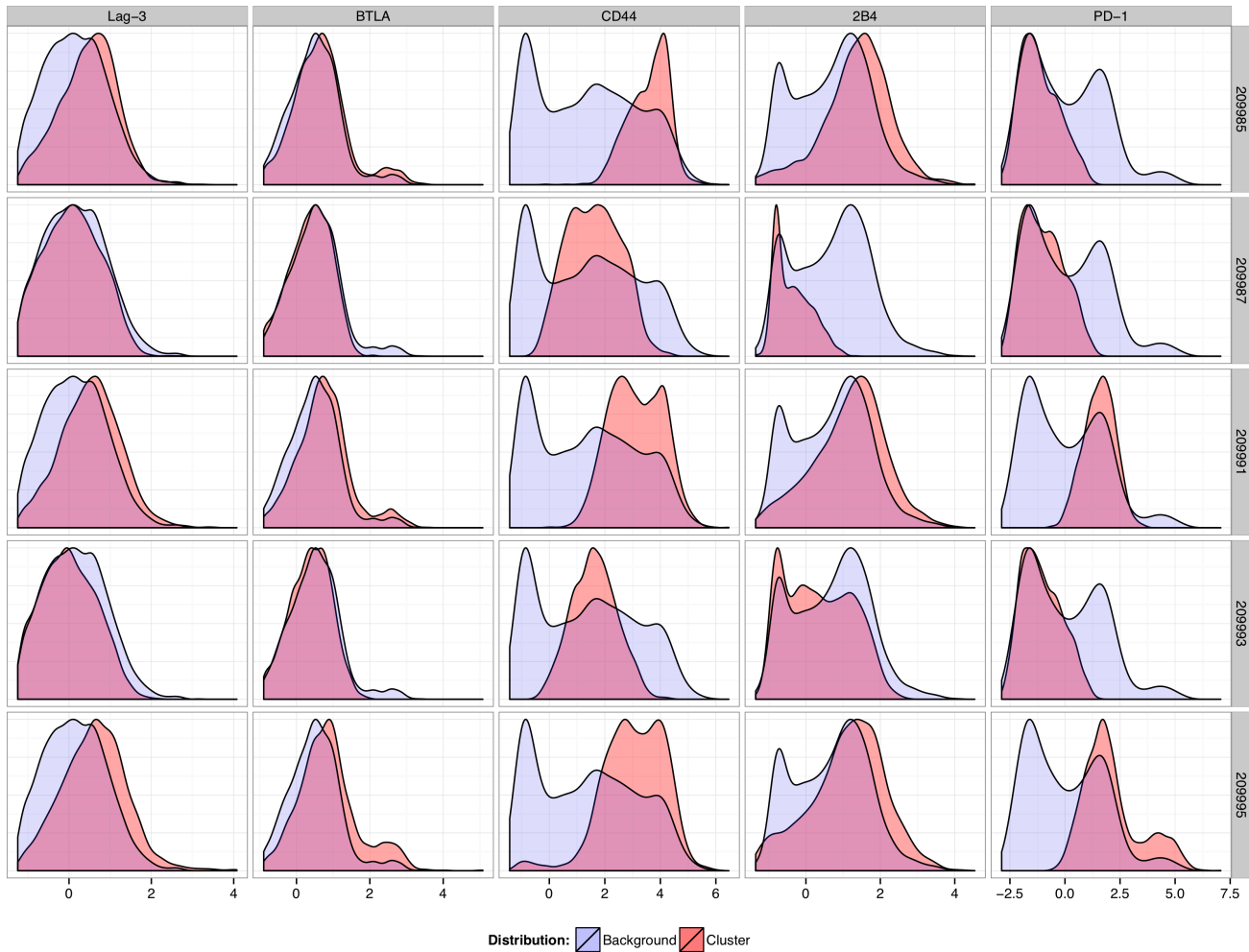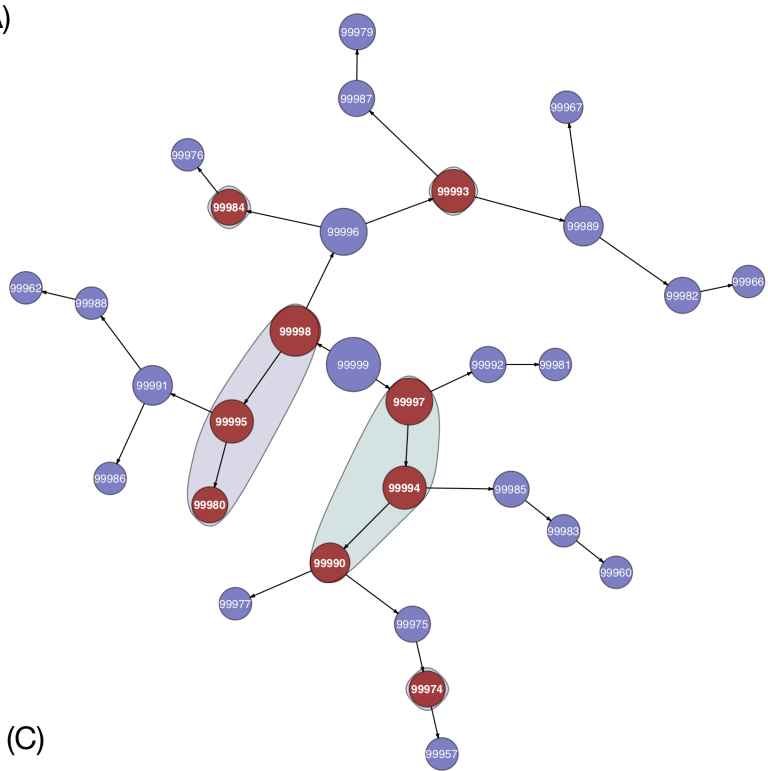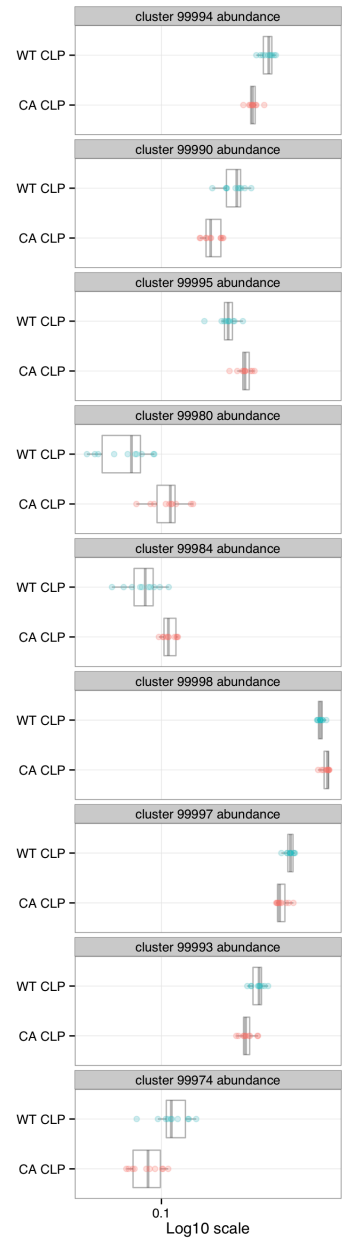
Sup. Figure 1

Sup. Figure 2

Sup. Figure 3.

Distribution: Background Cluster

Sup. Figure 4

(A)

(B)

(C)