CD40 and CD80/86 act synergistically to regulate inflammation and mortality in polymicrobial sepsis

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Online Data Supplement

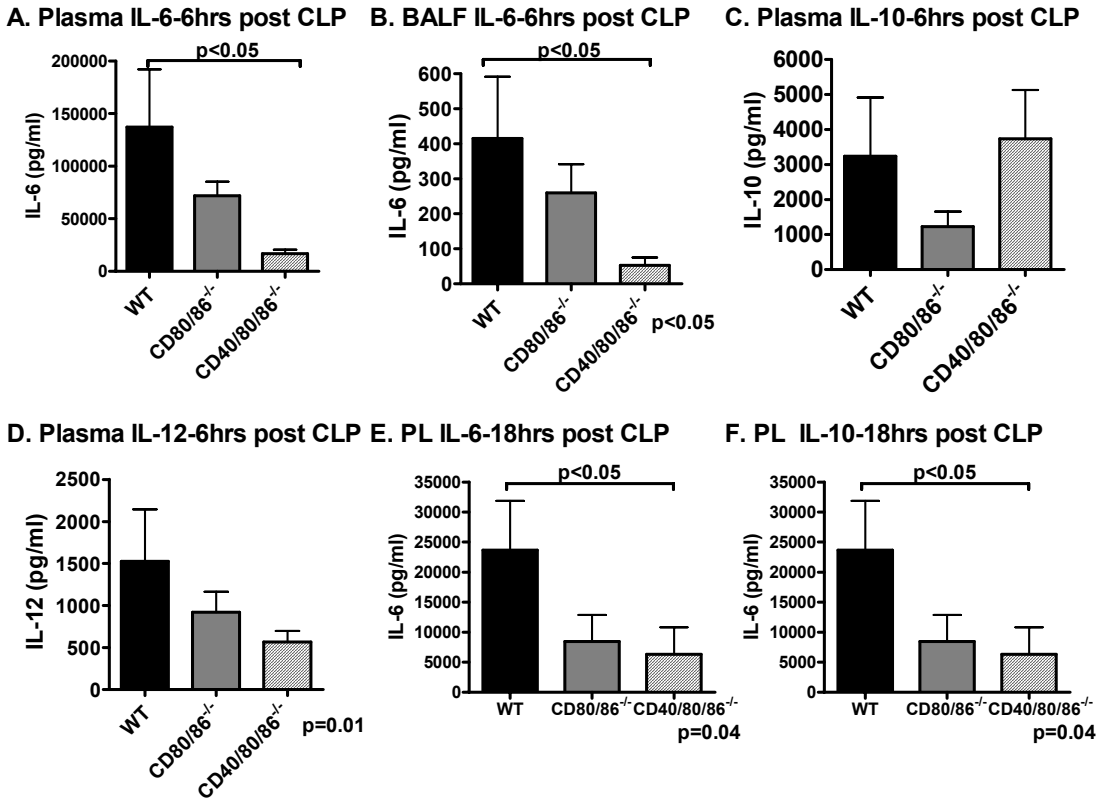
Figure Legends for Supplementary Figures

Supplementary Figure E1- CD40/80/86$^{-/-}$ mice have attenuated cytokine production after CLP. WT CD80/86$^{-/-}$ and CD40/80/86$^{-/-}$ mice underwent 19ga CLP and harvested 6hrs post CLP. Plasma and BALF collected and analyzed for IL-6 (panel A and B), plasma IL-12 (Panel C) and plasma IL-10 (Panel D) by commercially available ELISA. Panels E and F- Peritoneal lavage IL-6(E) and IL-10(F) 18hrs post CLP. 4-5 mice/group. Data analyzed by non-parametric ANOVA, p-values at bottom of each graph. Statistically significant group comparisons are presented with brackets.

Supplementary Figure E2- Monocyte costimulatory molecule expression returns to normal in septic individuals with improvement in severity of illness. Panel A. Representative Dot plot for CD40 on circulating monocytes in a healthy control and septic subject. Monocytes were initially identified by FSC/SSC characteristics and subsequently gated on CD14. Gates were determined by cells stained with Isotype mAB. **Panels B-D** 14 septic subjects had blood drawn for FACS analysis for CD40 (Panel B), CD80 (Panel C) or CD86 (Panel D) on Days 1,3-5, 7 and 14 or until hospital discharge. At each point severity of illness was assessed by APACHE II score. Data is presented with costimulatory molecules expression of left Y-axis and APACHE II on right. For CD40 and CD80 normalization in costimulatory molecule expression

paralleled improvement in APACHE II while an inverse relation was observed for CD86.

Supplementary Figure E1



Supplementary Figure E2