

Supplemental Figures – Yip et al.

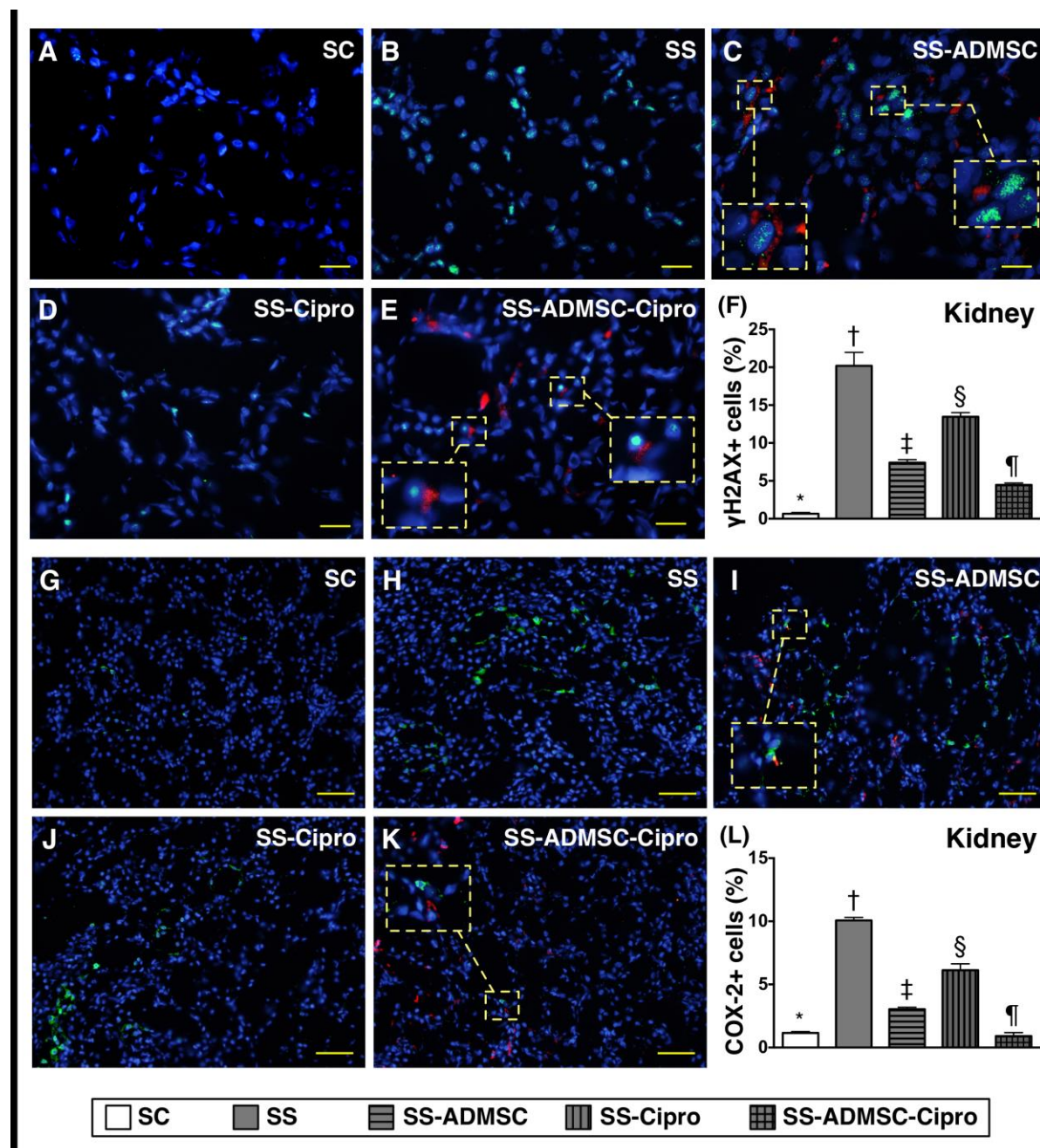


Figure S1. Immunofluorescent (IF) microscopic findings of DNA damaged and inflammatory cells in kidney parenchyma by day 5 after sepsis induction

A to E) IF microscopic (400x) finding for identification of γ -H2AX+ cells (green color), the red color indicated the transfused ADMSC that already mobilized to kidney parenchyma. The γ -H2AX+ cells (green color) and implanted ADMSCs (red color) in smaller dotted line square were magnified to larger dotted line square in **(C)** and **(E)**. **F)** * vs. other groups with different symbols (*, †, ‡, §, ¶), $p < 0.0001$. The scale bars in right lower corner represent 20 μ m. **G to K)** IF microscopic (200x) finding for identification of Cox-2+ cells (green color), the red color indicated the transfused ADMSC that already mobilized to kidney parenchyma. The COX-2+ cells (green color) and implanted ADMSCs (red color) in smaller dotted line square were magnified to larger dotted line square in **(I)** and **(K)**. **L)** * vs. other groups with different symbols (*, †, ‡, §, ¶), $p < 0.0001$. The scale bars in right lower corner represent 50 μ m. All statistical analyses were performed by one-way ANOVA, followed by Bonferroni multiple comparison post hoc test. Symbols (*, †, ‡, §, ¶) indicate significance (at 0.05 level). SC = sham control; SS = sepsis syndrome; ADMSC = adipose-derived mesenchymal stem cell; Cipro = ciprofloxacin.

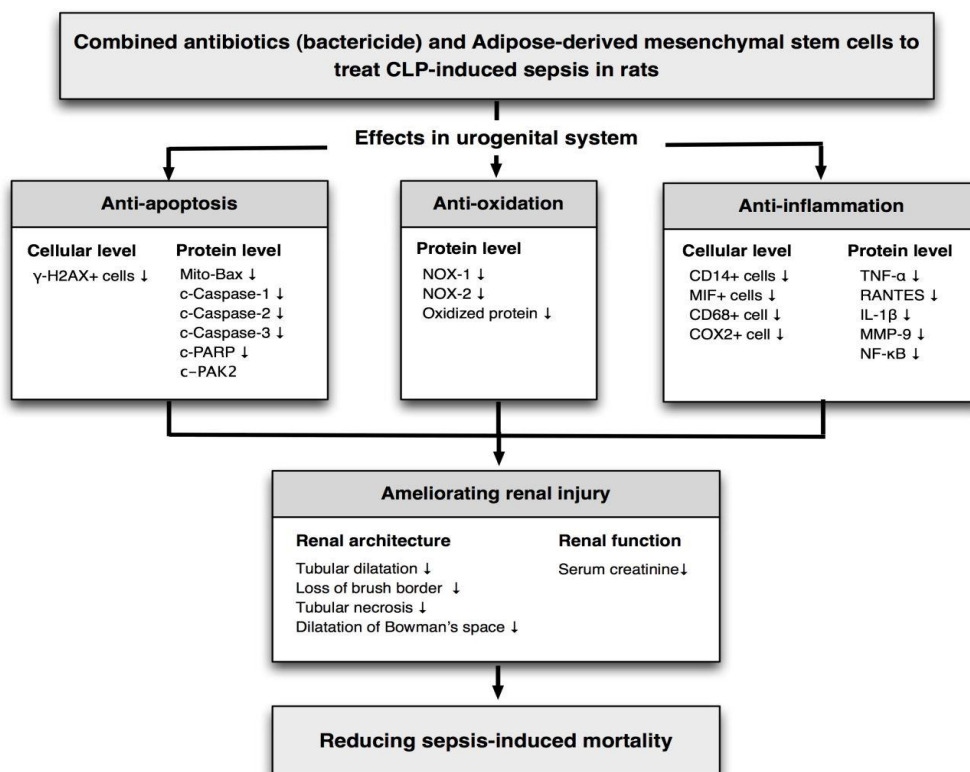


Figure S2. Proposed mechanisms underlying the positive therapeutic effects of combined ADMSC and antibiotic therapy on acute sepsis syndrome

CLI = cecal-ligation puncture; c-PARP = cleaved poly (ADP-ribose) polymerase (PARP); PAK2 = p21

protein (Cdc42/Rac)-activated kinase 2; NOX = NADPH oxidase; MIF = macrophage migratory inhibitor

factor; TNF = tumor necrotic factor; RANTES = regulated on activation, normal T cell expressed and

secreted; IL-1β = interleukin; MMP = matrix metalloproteinase; NF-κB = nuclear factor.