

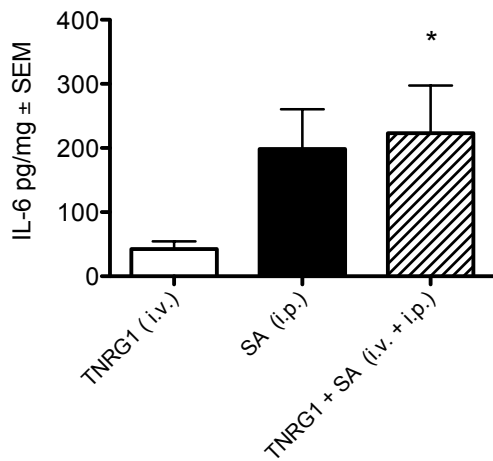


**Supplemental Figure 1. Polymicrobial infections with *C. albicans* and *S. aureus* must both originate from the peritoneal cavity to promote mortality and increased dissemination**

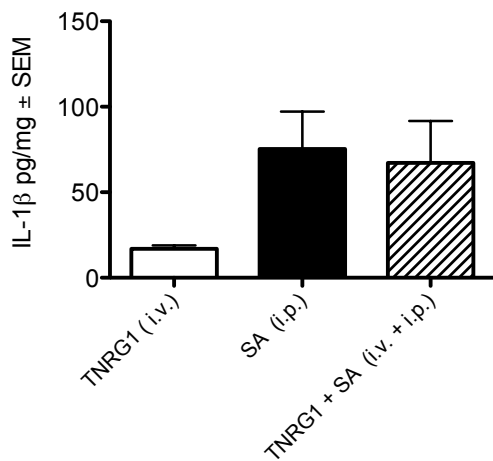
Mice (n=5 mice/group) were injected i.p. with 0.2 mL of  $4 \times 10^8$  CFU/mL *S. aureus* alone ( $8 \times 10^7$  CFU), i.v. with 0.2 mL of  $5 \times 10^6$  CFU/mL *C. albicans* strain TNRG1 alone ( $1 \times 10^6$  CFU), or both, resulting in a co-infection originating via different routes of inoculation. At 24 h p.i., *C. albicans* (open circles) and *S. aureus* (closed circles) CFUs were quantified in **(A)** peritoneal lavage fluid, **(B)** spleen, and **(C)** brain homogenates. Results are expressed as the median CFU. Data shown are cumulative of two repeat experiments. Data were analyzed using the Mann-Whitney U test; \*  $p < 0.05$  for TNRG1 vs. TNRG1 + SA, °  $p < 0.05$  for SA vs. TNRG1 + SA.

## Peritoneal lavage

### A

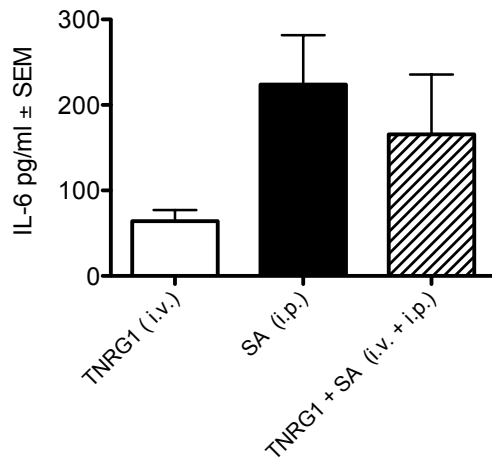


### B

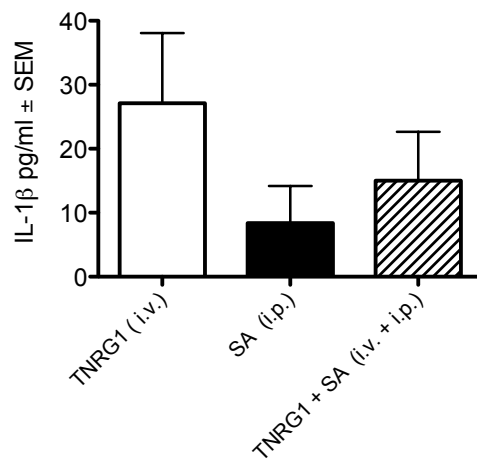


## Serum

### C



### D



**Supplemental Figure 2. Local and systemic pro-inflammatory cytokines from intraperitoneal/intravenous polymicrobial infection**

Mice (n=5 mice/group) were inoculated as described in Supplemental Figure 1.

At 24 h p.i., mice were sacrificed and IL-6 and IL-1 $\beta$  were analyzed in the **(A-B)** peritoneal lavage and **(C-D)** serum. Cytokine concentrations were analyzed in mice infected with *C. albicans* TNRG1 strain alone i.v. (white bar), *S. aureus* alone i.p. (black bar), and both pathogens combined i.p./i.v. (striped bar).

Dashed line represents cytokine levels in naïve mice. Results are expressed as the mean cytokine level  $\pm$  SEM. Data shown are cumulative of two repeat experiments. Data were analyzed using the unpaired Student's t test; \*  $p < 0.05$  for IL-6 CA vs. CA/SA.