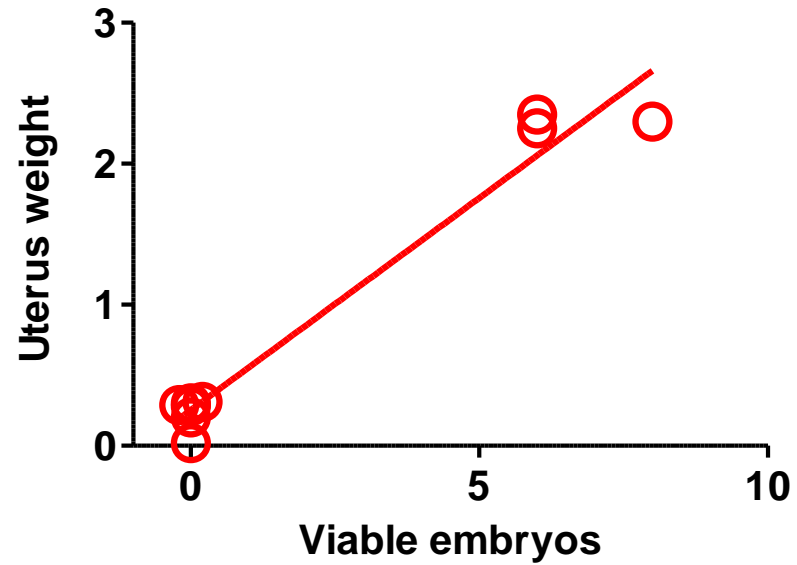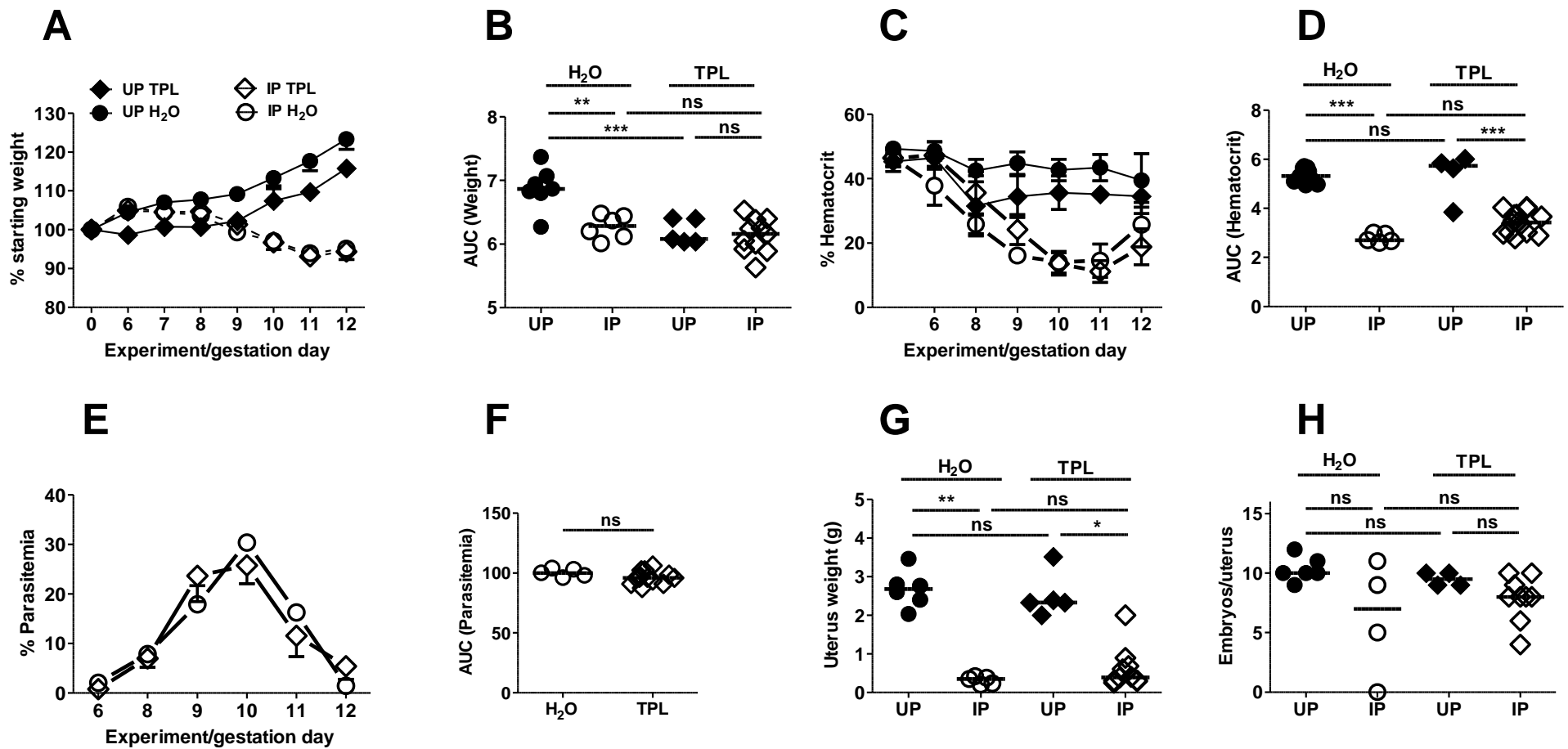**Fig S1**: Course of *P. chabaudi AS* infection and pregnancy outcome in intraperitoneally-delivered N Actetylcysteine (NAC) and PBS-treated (control) mice from ED6 to ED12. Percent weight change **(A)** with area under the curve (AUC) **(B)** are indicated. Percent hematocrit **(C)** and AUC **(D)** also depict anemia in infected pregnant (IP) vs uninfected pregnant (UP) mice. Percent parasitemia **(E)** and AUC **(F)** are comparable in mice (Mann Whitney U test). Uterus weight **(G)** and embryo viability **(H)** do not show any improvement of pregnancy outcome in mice receiving treatment versus those treated with PBS. A Kruskal-Wallis test followed by Dunn's Multiple Comparison was used to verify statistical significance between the four experimental groups (UP NAC (closed diamond); UP PBS (closed circle); IP NAC (open diamond), and IP PBS (open circle). Data depicted in panels A-F cumulatively represent 6 independent experiments (n=26 mice) sacrificed at ED12; panels G and H represent 5 independent experiments (n=21 mice) sacrificed at ED10. *P<0.05; **P<0.01; ***P<0.001; ns=not statistically significant.
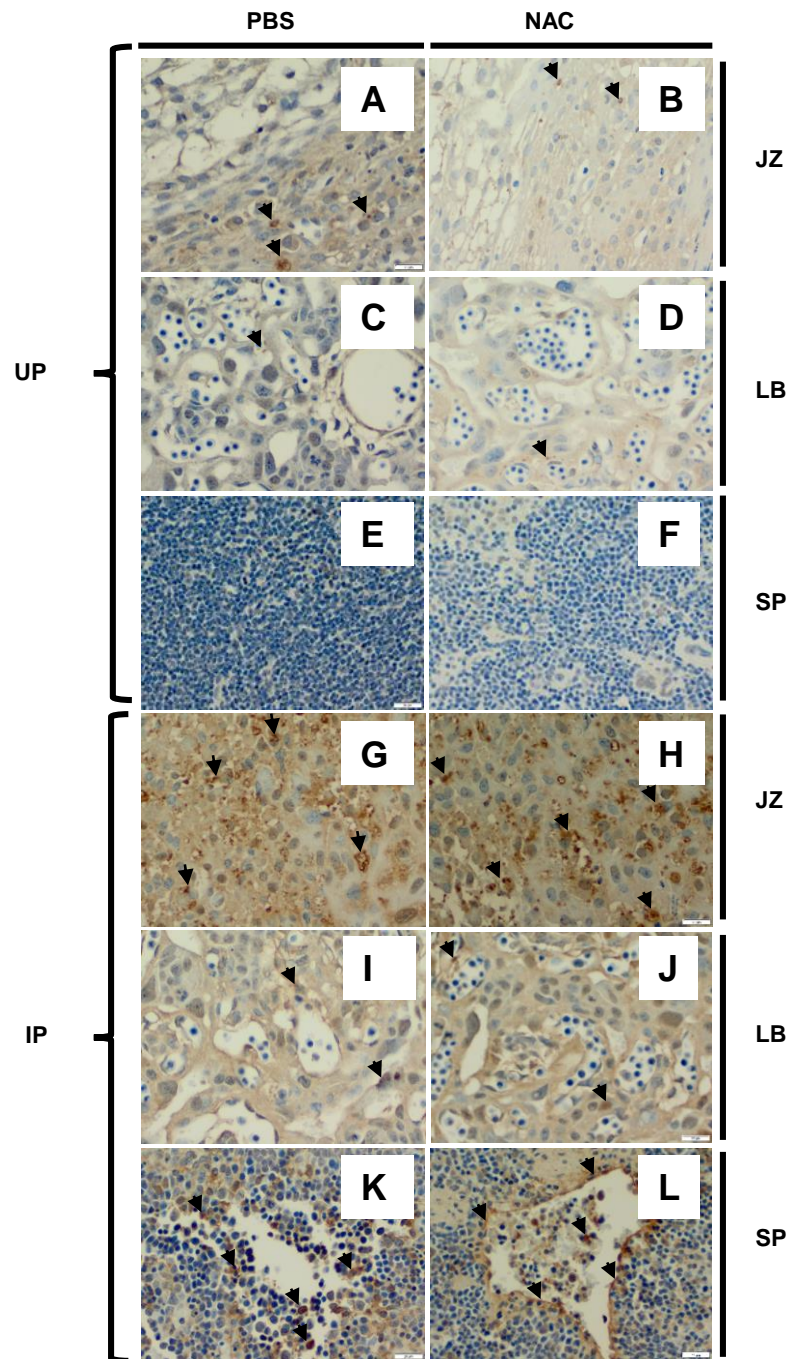
Fig S2. Representative immunostaining for 4-hydroxynonenal (HNE), marker of lipid peroxidation, in ED10 placenta and spleen from mice injected with N-acetyl cysteine (NAC) or control (PBS). Uninfected pregnant (UP) junctional zone (JZ; A, B), labyrinth (LB; C, D) and spleen (SP; E, F) show little staining regardless of treatment. Heavy staining is observed regardless of treatment in infected pregnant (IP) junctional zone (JZ; G, H), labyrinth (LB; I, J) and spleen (SP; K, L). This experiment was performed with samples from mice generated in 5 independent experiments.

Fig. S3: Correlation of embryo viability and uterus weight in tempol-treated *P. chabaudi* AS-infected mice. The correlation is highly significant: r = 0.8584, P = 0.0045 by Spearman's correlation test.

Fig. S4: Course of *P. chabaudi AS* infection and pregnancy outcome in orally-delivered Tempol (TPL) from ED6 to ED12 in B6 mice. Percent weight change **(A)** and area under the curve (AUC) **(B)** are indicated. Also depicted are percent hematocrit **(C)** and AUC **(D)** as well as percent parasitemia **(E)** and AUC **(F)** are comparable in mice orally-delivered TPL versus mice under drinking water (Mann Whitney U test). Pregnancy outcome as indicated by uterus weight **(G)** shows relative improvement with TPL and the number of embryo per uterus remains unchanged **(H)**. A Kruskal-Wallis test followed by Dunn's Multiple Comparison test was used to verify statistical significance between the four experimental groups (uninfected pregnant (UP)-TPL (closed diamond); UP-H_2O (closed circle); infected pregnant (IP)-TPL (open diamond), and IP-H_2O (open circle). Data depict 31 mice generated in 9 independent experiments. Number of embryo/uterus varies across the groups (Kruskal-Wallis test, P=0.0451); pairwise post-hoc tests are not significant. *P<0.05; **P<0.01; ***P<0.001; ns=not statistically significant.