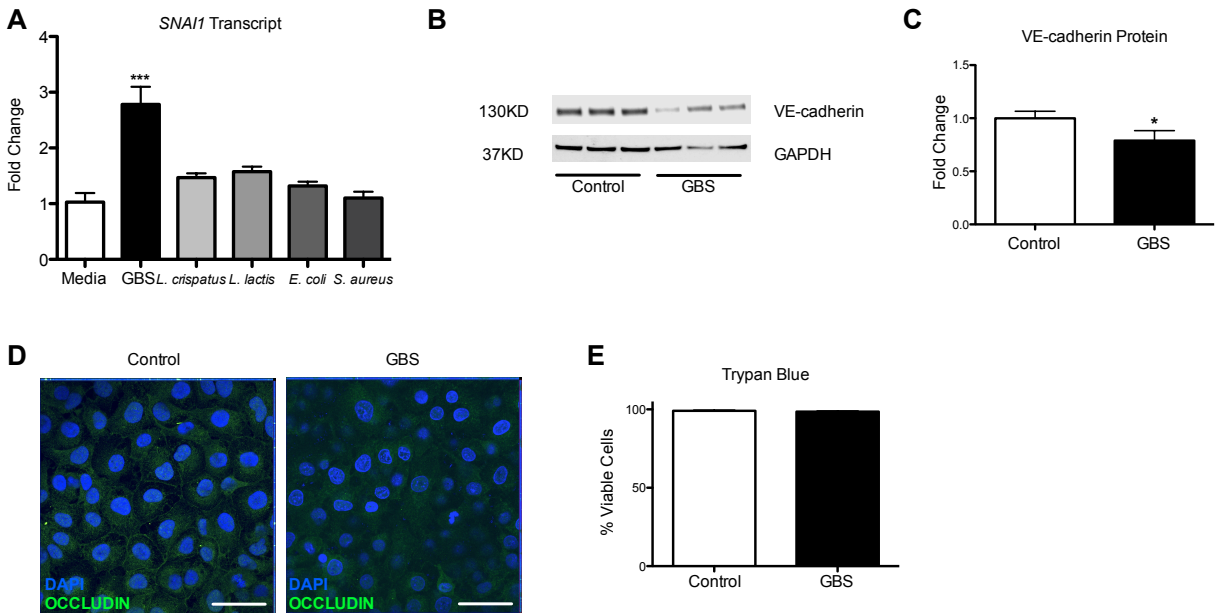
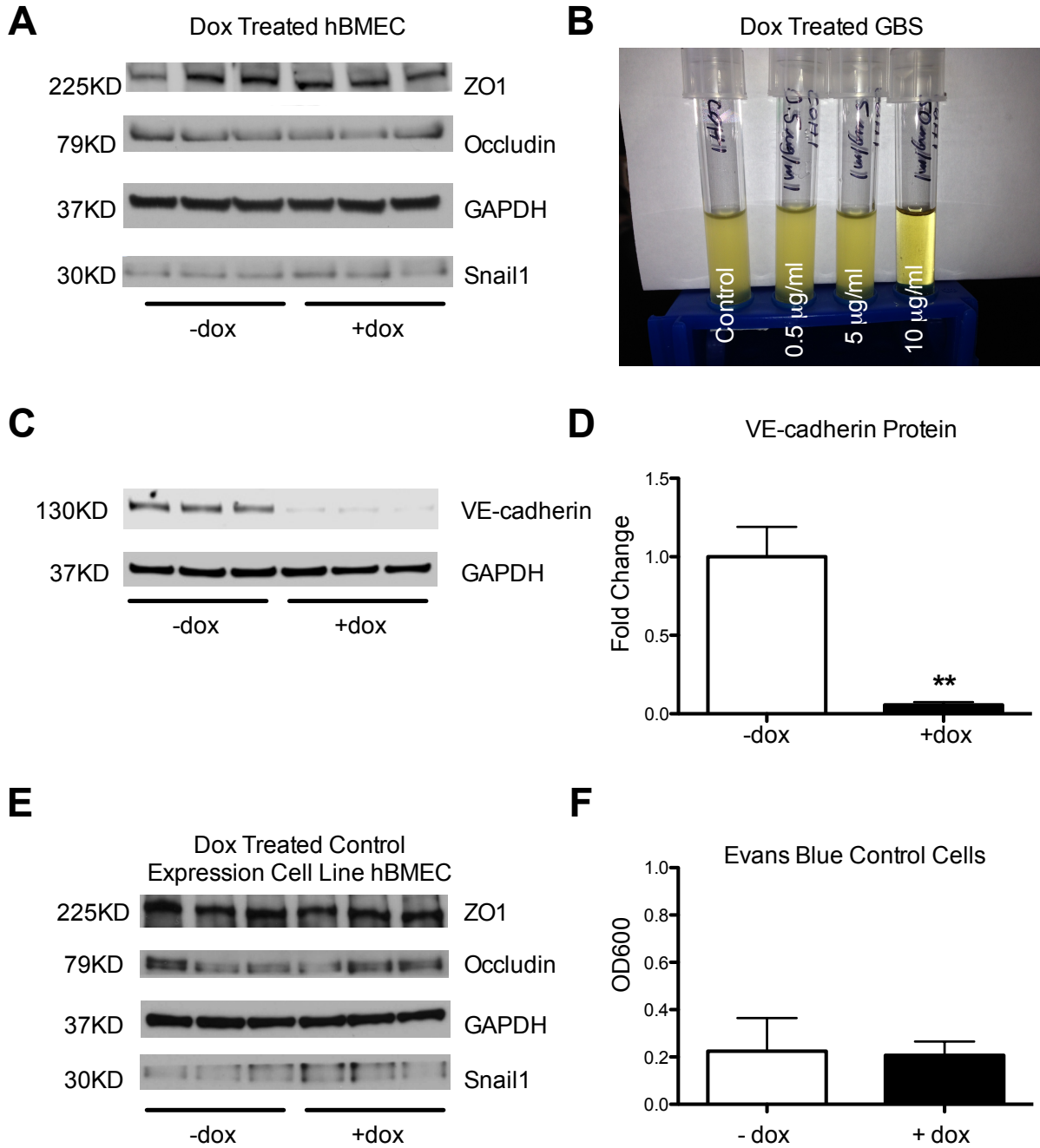


**Supp Figure 1**



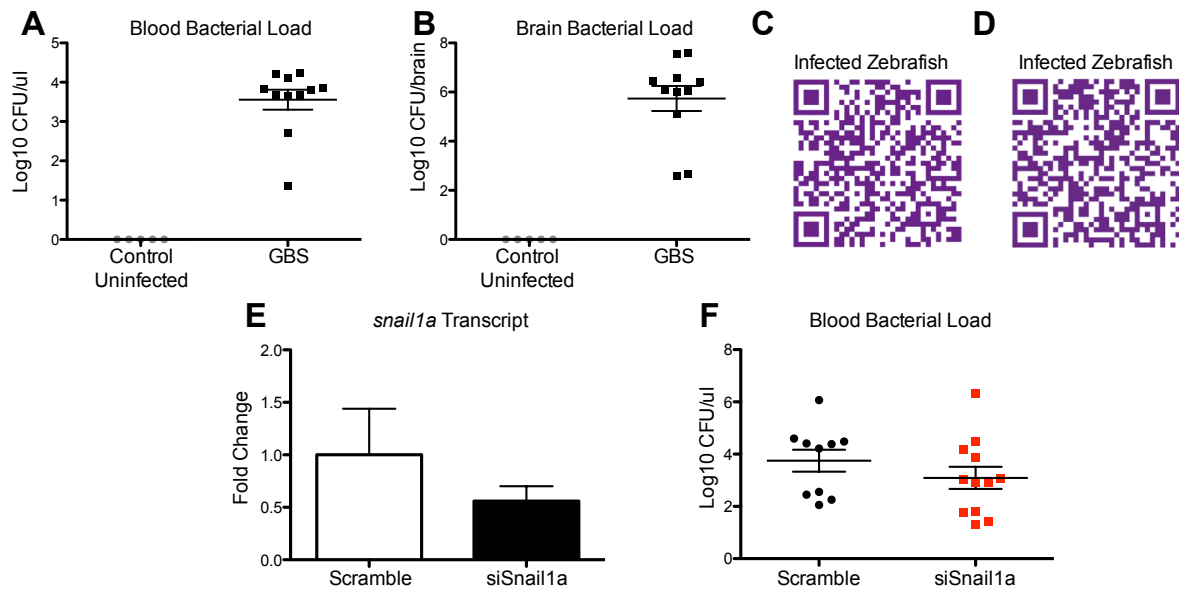
**Supplement Figure 1.** Non-pathogenic bacteria and *S. aureus* do not induce *SNAIL1* in hBMEC (A). GBS infection of hBMEC results in a loss of VE-cadherin (B-C). Staining of hBMEC for Occludin. GBS treated hBMEC exhibit less Occludin staining (D). GBS treatment of hBMEC does not reduce viability as seen with Trypan blue exclusion staining (E). Experiments were performed at least three times in triplicate; bars represent the standard error of the mean of at least three biological replicates (A,E) for protein analysis standard deviation of a representative experiment (C). Students t test (C) and One way ANOVA (A) were used to determine significance. \*  $p < 0.05$ , \*\*\*  $p < 0.001$ .

## Supp Figure 2



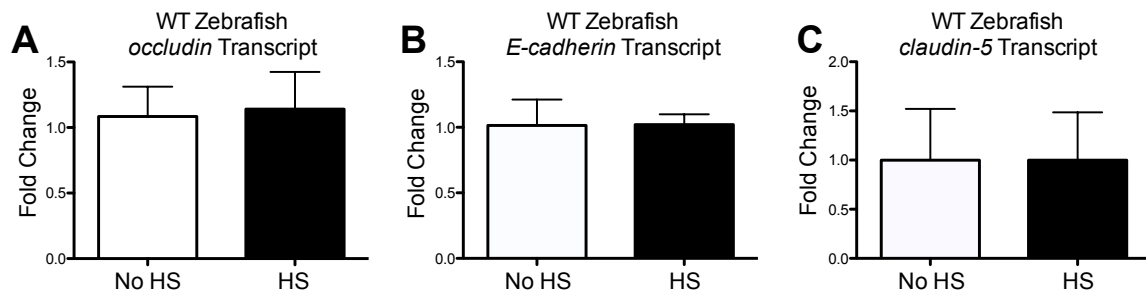
**Supplement Figure 2.** hBMEC treated with doxycycline does not affect tight junction proteins or Snail1 (A). Doxycycline treatment does not kill GBS at the concentrations used for expression induction (2ug/ml) (B). Overexpression of Snail1 results in a loss of VE-cadherin protein (C-D). Control cell line for overexpression Snail1 hBMEC. Immunoblot showing that doxycycline does not have an effect on ZO-1, Occludin, or Snail1 expression (E). Control cell line does not have increased permeability as assessed by Evans Blue permeability assay (F). Experiments were performed at least three times in triplicate; bars represent the standard error of the mean of at least three biological replicates (F) or for protein analysis standard deviation of a representative experiment (D). Students t test was used to determine significance. **\*\***  $p < 0.01$ .

### Supp. Figure 3



**Supplement Figure 3.** Infected fish (n = 11) have recoverable GBS colonies found in the blood and the brain (A-B), but uninfected fish (n = 5) do not. QR codes linked to videos of zebrafish swimming patterns (C-D). Top tank zebrafish are infected and exhibit a slower, lethargic swimming pattern. While the bottom tank of uninfected zebrafish exhibit a normal, quicker swim (C). Infected zebrafish close to endpoint exhibit aberrant swimming behavior such as a spiral, loss of control, swim pattern (D). Injection with si*Snail1a* (n = 11) resulted in a slight decrease in detected *Snail1a* expression in the brains of infected zebrafish when compared to scramble injected fish, (n = 7) (E). si*Snail1a* does not affect GBS blood levels (n = 10) (F). Representative data from one of two independent experiments are shown.

## Supp. Figure 4



**Supplement Figure 4:** Wild type zebrafish were subjected to heat shock (n = 5) or kept at normal temperature as a control (n = 5). No change in expression of *occludin*, *E-cadherin*, or *claudin-5* was observed (A-C). Experiments were performed three times combined data are shown. Students t test was used to determine significance. \*  $p < 0.05$ .