Figure 1. Simvastatin pre-treatment did not enhance S. aureus bacterial clearance C57BL/6 mice. Mice (n=8-16 per group) were pre-treated with 1000ng/g simvastatin (+Simva) or given ethanol control (-Simva). Both treatment groups were given gentamicin (10mg/kg) post S. aureus infection. Whole blood was isolated from control and simvastatin-treated mice 24 hours (A) and 48 hours (B) post infection and plated on TSA plates. Colony forming units were counted on each plate after 24 hours. No statistical difference was determined in the number of colony forming units between treatment groups as determined by student’s t-test.
Figure 2. Simvastatin pre-treatment does not significantly reduce TNF-α levels in aureus-infected C57BL/6 mice. Mice were pre-treated with 1000ng/g simvastatin (+Simva) or given ethanol control (- Simva). Both treatment groups were given gentamicin (10mg/kg) post S. aureus infection. Serum was isolated all treatment r 24 hours (A) and 48 hours (B) post infection and used for TNF-α ELISA. No statis difference was found in TNF-α concentration between treatment groups.
Figure 3. Simvastatin pre-treatment does not decrease tissue factor expression in S. aureus-infected human HUVEC. *S. aureus* infection increases the expression of tissue factor in DMSO cells. Human umbilical vein endothelial cells (HUVEC) were pre-treated with 1μM simvastatin (Simva) or 0.01% dimethyl sulfoxide (DMSO) for 24 hours prior to *S. aureus* infection. The percentage of tissue factor positive cells in the total cell population was measured via flow cytometry. No statistical difference was observed between infected cells pre-treated with simvastatin or DMSO as determined by one-way ANOVA with post hoc analysis. * p<0.05
Figure 4. Simvastatin pre-treatment does not significantly decrease tissue factor expression in S. aureus-infected human HUVEC cells. Human umbilical vein endothelial cells (HUVEC) were pre-treated with 1μM simvastatin (Simva) or 0.01% dimethyl sulfoxide (DMSO) for 24 hours prior to S. aureus infection. The percentage of tissue factor positive cells in the total cell population was measured via flow cytometry. No statistical difference was observed between infected cells pre-treated with simvastatin or DMSO as determined by one-way ANOVA with post hoc analysis. Adapted from figure 3.