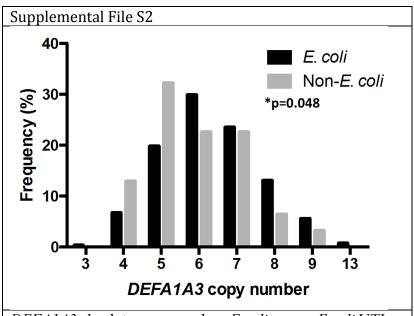
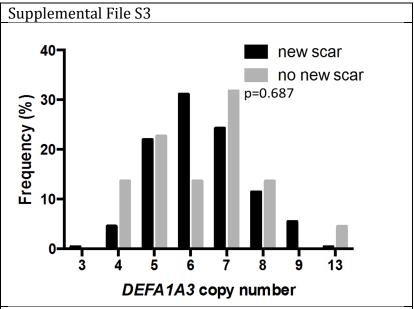


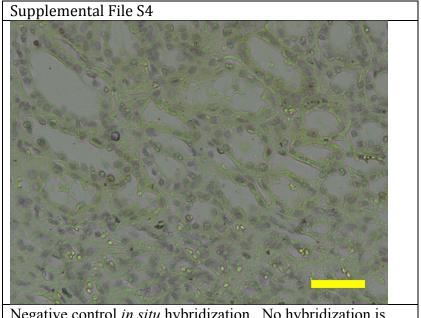
S1A: *DEFA1A3* absolute copy number was significantly lower in male RIVUR compared to control patients (p=0.028). S1B: When copy number was subdivided into low, medium and high groups, male patients followed pattern similar to female patients (Figure 1) with RIVUR segregating into the low copy number group; these differences did not reach significance secondary to a small sample size (N=14 RIVUR patients and 30 controls).



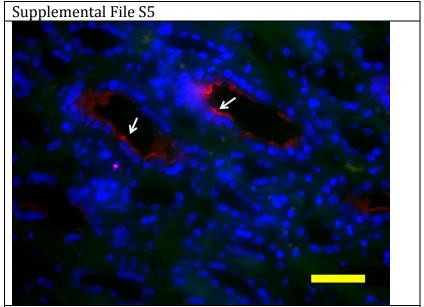
DEFA1A3 absolute copy number, *E.coli vs* non *E.coli* UTI. RIVUR patients who had non-*E.coli* UTIs averaged lower copy number than those with *E.coli* UTIs (p=0.048).



DEFA1A3 absolute copy number and renal scarring. No significant *DEFA1A3* absolute copy number difference was discovered between RIVUR patients that acquired a renal scar and those who did not (p=0.69).



Negative control *in situ* hybridization. No hybridization is present in negative control for DEFA1A3 in situ. Scale bar = $50\mu m$



Negative control IF. No staining is present in negative control for HNP1-3 IF. Red apical staining for aquaporin 2 (arrows) is present in collecting ducts. Scale bar = $50\mu m$