



Figure 5 – Figure Supplement 2. Estrogen-induced genes associated with cell proliferation are regulated in both mammary gland and neutrophil population. A-B, Mice at INV D1 was treated with anti-Ly6G antibody (Ly6G) or isotype control (IgG). 24h later, they were treated with vehicle control (Ctrl) or E2B for 24h; A, Heatmap representation of genes associated to epithelial cell proliferation identified from the GO over-representation analysis (≥ 2 and ≤ -2 -fold) of the DESeq2 analysed RNA-Seq data; B, E2B induces proliferative gene expression independent of neutrophil presence; qPCR validation of estrogen-induced expression of *Areg*, *c-Myc*, *Olfm4*, and *Ereg* relative to *Rplp0* (Ctrl+IgG n=3, Ctrl+Ly6G n=3, E2B+IgG n=3, E2B+Ly6G n=3). C, *Ereg* and *Olfm4* were induced by estrogen in both mammary neutrophil and non-neutrophil population; Mice at INV D2 was treated with Ctrl or E2B for 24h. Gene expression of *Ereg* and *Olfm4* analysed in both Ly6G+ and Ly6G- population by qPCR analysis (Ctrl n=5, E2B n=5). Data represented as mean \pm SEM.