

**Supplementary Figure S5- ER-negative BT-20 cells do not exhibit increased DNA damage upon E2 treatment, while MCF-7/LTED show weak response.** (A) BT-20 cells were HD x 3 d, then treated  $\pm$  1 nM E2 x 24 h. Cells were fixed and stained for  $\gamma$ H2AX (green) and with DAPI (blue). Representative images are shown.  $\gamma$ H2AX foci were counted in  $\geq$ 100 cells per group. n.s. = not significant by t-test. (B) MCF-7 cells were HD x 3 d. Both cell lines were then treated  $\pm$  1 nM E2 x 24 h. Cells were fixed and stained as in (A).  $\gamma$ H2AX intensity was measured in  $\geq$ 30 cells per group. \* $p$ <0.05, n.s. = not significant by Bonferroni-adjusted posthoc comparison.

