



### Supplementary Figure S6

(A) Immunoblotting for BRCA1 expression in control and BRCA1-reconstituted MDA-MB-436 cells. (B) Cell viability assays in human TNBC cell lines treated with increasing doses of olaparib for 7 days. IC<sub>50</sub> values were derived using non-linear regression. Error bars represent SEM of 2-4 independent experiments. Statistical analyses were performed using one-way ANOVA with Sidak's post-hoc test. Representative survival curves are shown on the right. Error bars on the curves represent SD from 3 technical replicates. (C) Human TNBC cell lines were treated with the same doses of olaparib for 72h and subjected to immunoblotting pTBK1<sup>Ser172</sup>, total TBK1 and STING. (D) Immunoblotting for STING expression in parental and PARPi-resistant MDA-MB-436 cells. (E) MDA-MB-436 control and BRCA1-reconstituted cells were treated with 0 or 1 μM olaparib for 24h and subjected to immunofluorescence staining for pIRF3 and γ-H2AX. The number of cells displaying >5 γ-H2AX foci was quantified, and statistical analysis was performed using two-way ANOVA with Tukey's post-hoc test. pIRF3 corrected integrated density/cell was expressed as fold change versus DMSO. Statistical analysis was performed using Kruskal-Wallis test with Dunn's post-hoc test. Error bars represent SEM of 3 independent experiments. Representative images of DAPI (blue), γ-H2AX (green) and pIRF3 (red) stained cells are shown below (20x magnification) on the right panel. Scale bar, 8 μm. (F) HCC1937 cells were treated with 0 or 10 μM olaparib for 72h and subjected to flow cytometric analysis of pIRF3 expression and qPCR analysis of IFNβ, CCL5 and CXCL10 mRNA level (normalized to GAPDH internal control). Error bars represent SEM of 3-4 independent experiments. Statistical analysis was performed using unpaired t-test (left panel) or one-sample t-test (right panel).