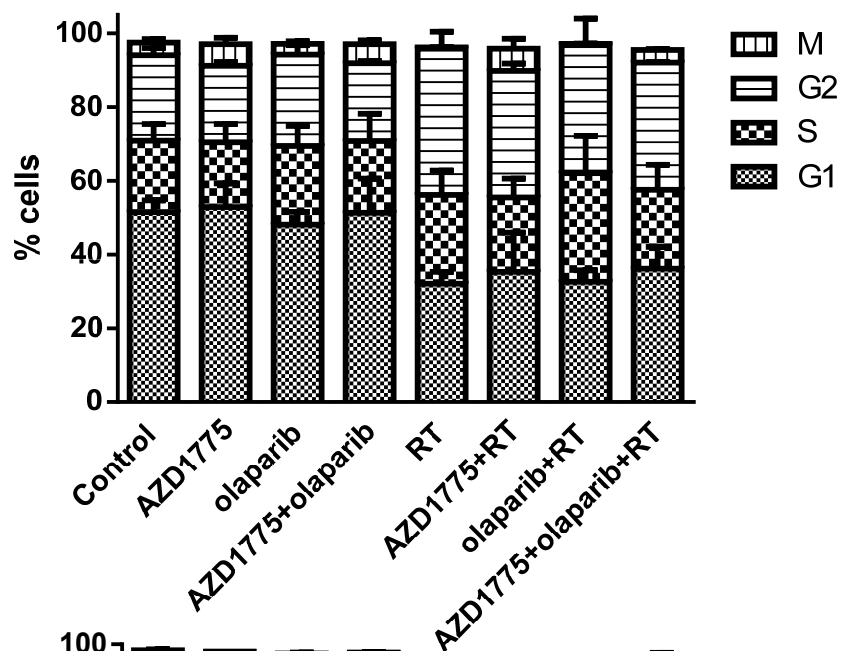
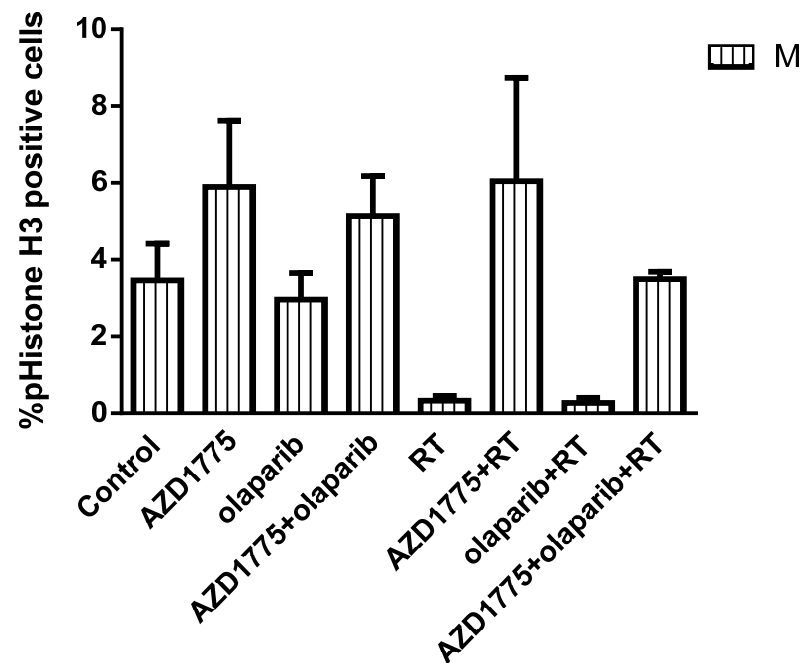


# Supplementary Figure 1.

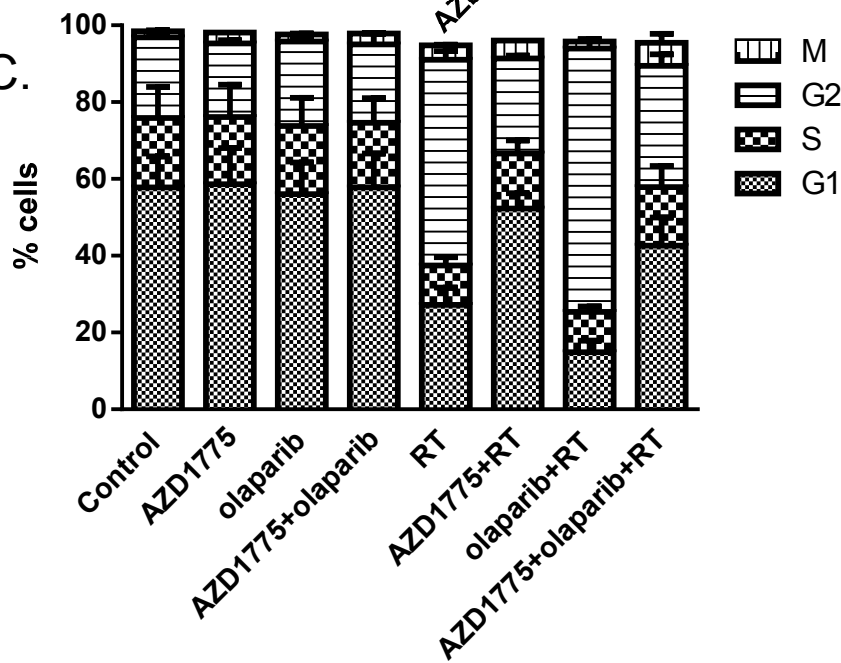
A.



B.

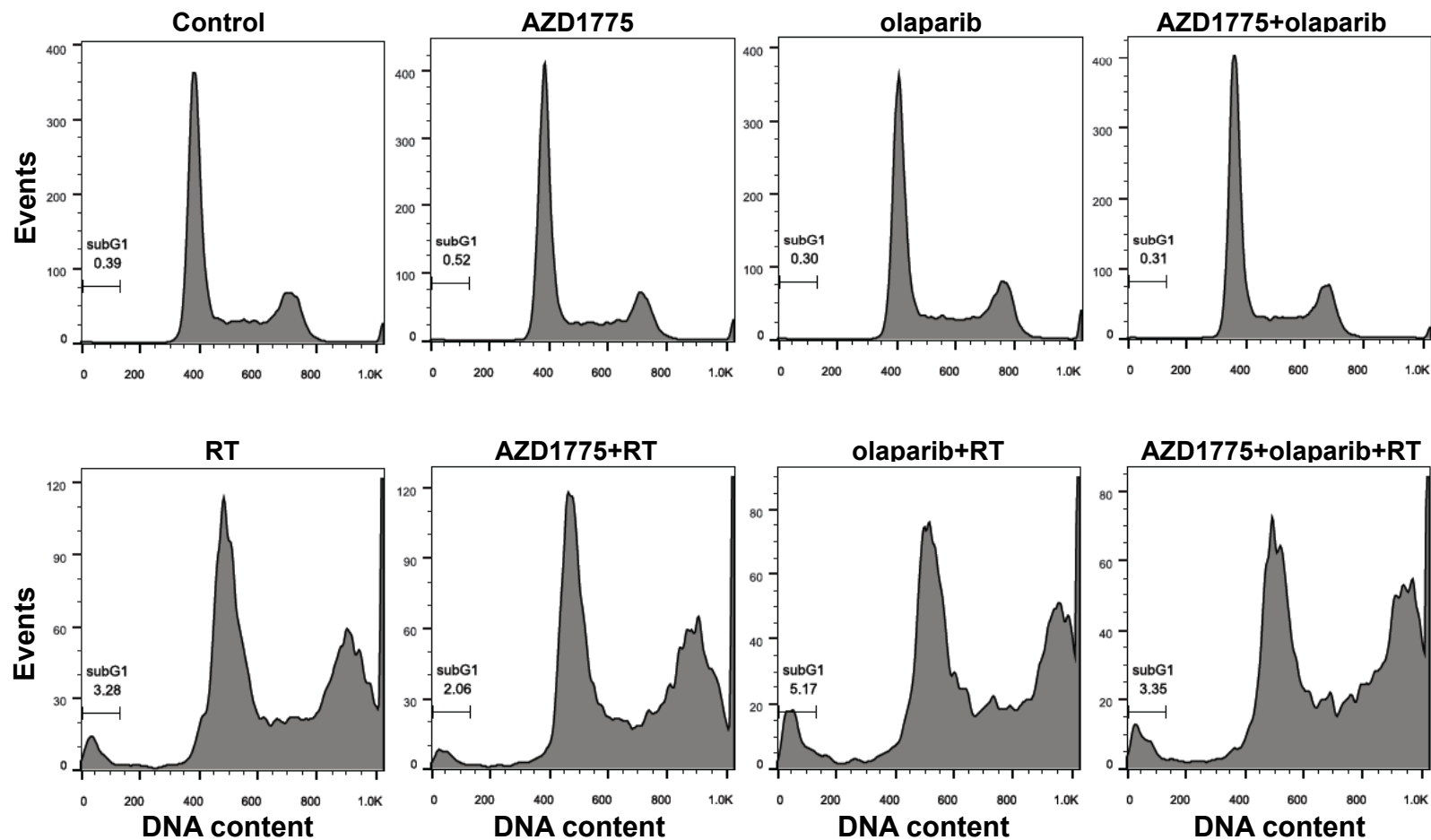


C.



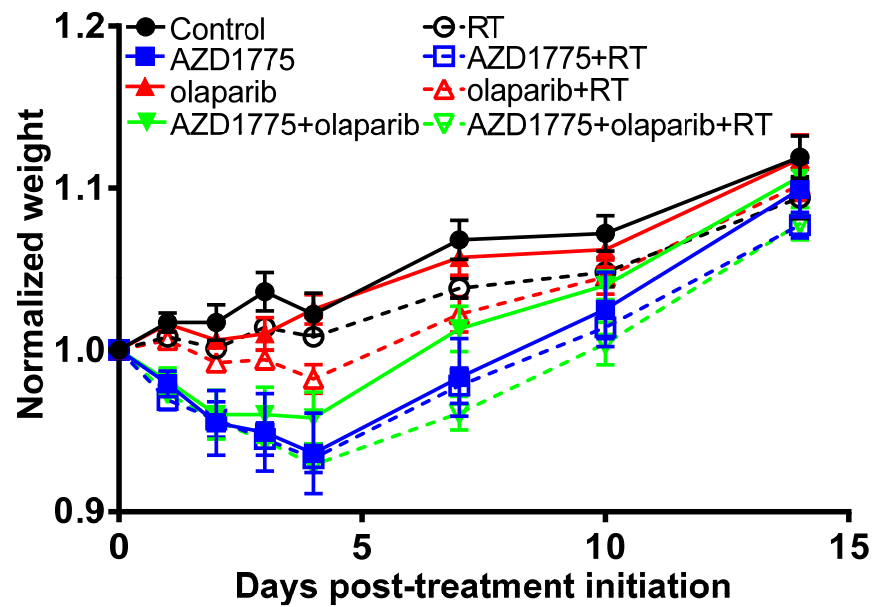
Supplementary Figure 1. The effects of AZD1775 and olaparib on the radiation-induced G2 checkpoint. MiaPaCa-2 cells were treated with AZD1775 and olaparib for 1 hour pre- and 6 (A and B) or 16 (C) hours post-RT (6Gy) and analyzed for pHistone H3 and DNA content by flow cytometry. The mean percentages of cells in each phase of the cell cycle are indicated. Data are the mean  $\pm$  SD of  $n = 2$  experiments. Panel B illustrates only the mitotic cells from panel A. A representative figure is shown in Fig. 3.

## Supplementary Figure 2.



**Supplementary Figure 2. Sub-G1 DNA content following AZD1775, olaparib, and radiation treatments.** MiaPaCa-2 cells were treated with AZD1775 and olaparib for 1 hour pre- and 24 hours post-RT (6Gy). At 48 hours post-RT cells were analyzed for sub-G1 DNA content by propidium iodide staining and flow cytometry. Data are from a single representative experiment.

### Supplementary Figure 3.



**Supplementary Figure 3. Weight loss associated with combined treatment with AZD1775, olaparib, and radiation.** Athymic nude mice were treated as described in Figure 6. Weights were normalized to the first day of treatment and are the mean  $\pm$  SE of 5-8 mice per treatment group.