



**Supplementary Figure S2**

Gating strategy used in flow cytometric analysis of T cells from harvested tumors. Debris was excluded on SSC vs FSC plot, and zombie aqua-positive i.e. non-viable cells were gated out. Live cells were analyzed for expression of CD45, CD3, CD8 and CD4 markers. CD3 expression was also analyzed out of CD45<sup>+</sup> cells. A CD4 vs CD8 plot was used to distinguish CD8<sup>+</sup>CD4<sup>-</sup> and CD4<sup>+</sup>CD8<sup>-</sup> T cells out of CD45<sup>+</sup> cells. FoxP3 (Tregs) and granzyme B expression was analyzed out of CD4<sup>+</sup>CD8<sup>-</sup> and CD8<sup>+</sup>CD4<sup>-</sup> T cells, respectively. Representative black-colored density plots are shown for (A) vehicle-treated or (B) olaparib-treated stained samples. Blue-colored density plots are from isotype controls.