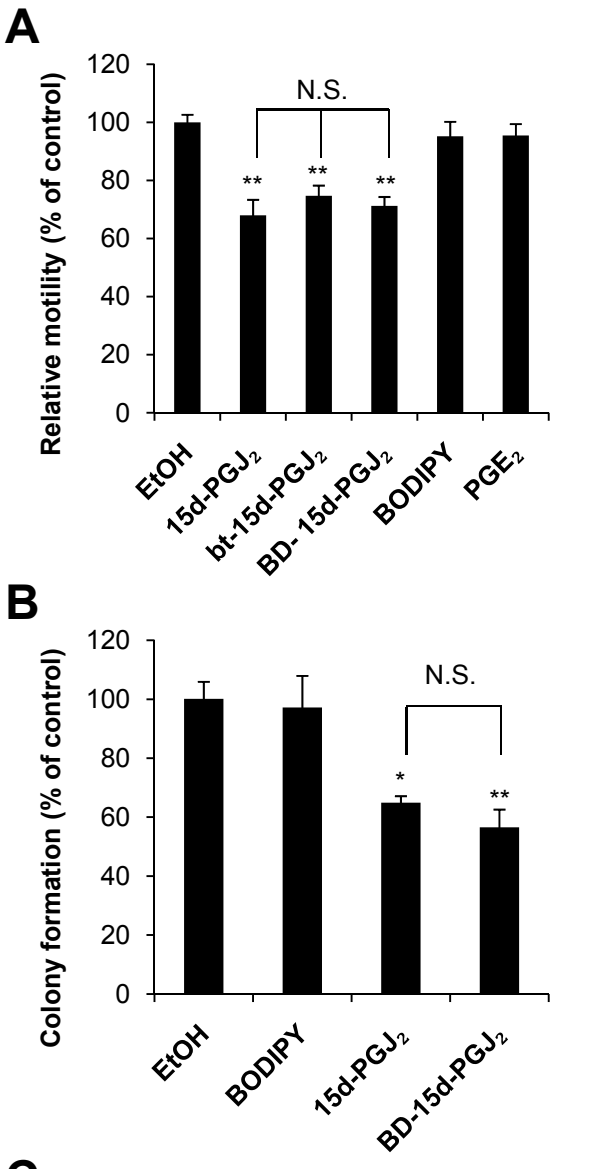
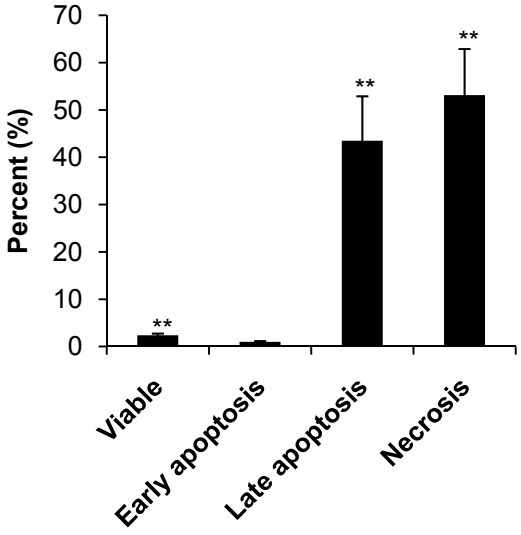
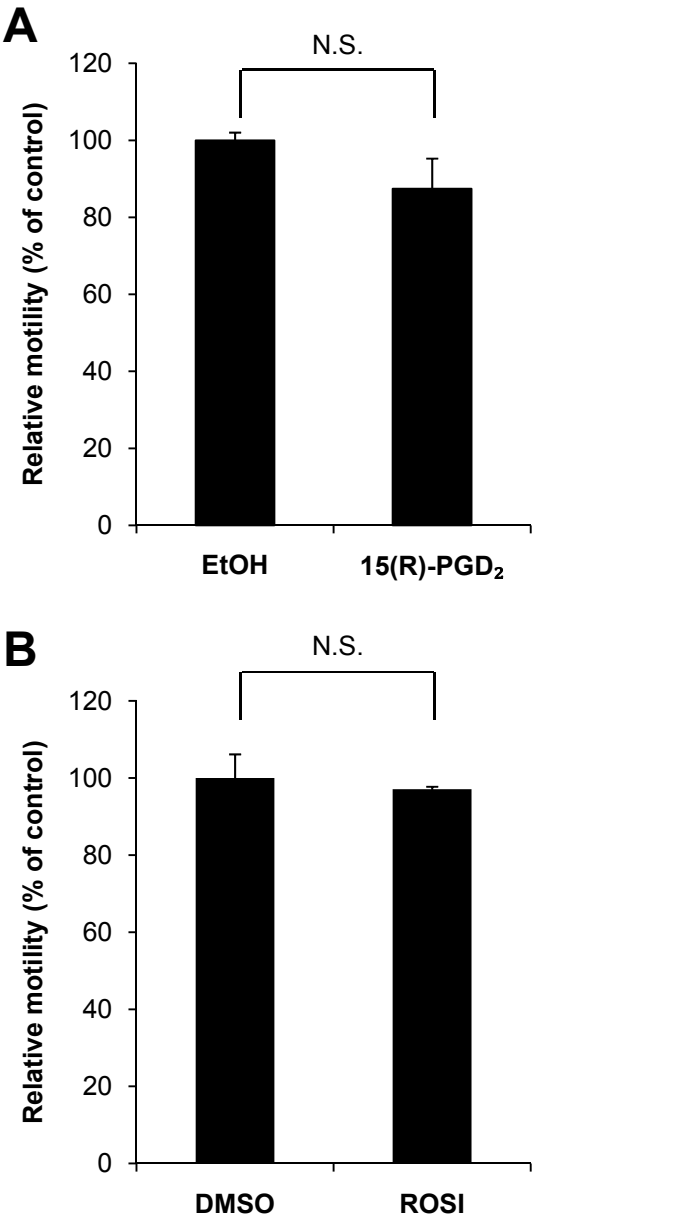


Supplementary Figure 1



Supplementary Figure 2



Supplementary Figure 3

Supplementary Figure 1: Comparison of tagged 15d-PGJ_2 analogs to 15d-PGJ_2. JC cells were scratched with a sterile pipet tip and then treated with 0.3 μM 15d-PGJ_2, bt-15d-PGJ_2, BD-15d-PGJ_2, BODIPY, and PGE_2 or ethanol (EtOH). Cell migration into the cell-free area was assessed after 8 h and quantified (A). JC cells were treated with 3 μM BODIPY, 15d-PGJ_2, BD-15d-PGJ_2 or EtOH (16 h), and colony formation was assessed (B). JC cells were treated with BODIPY or BD-15d-PGJ_2 (0.24 μM, 30 min) and then fixed, permeabilized and stained with 2 units of Alex Fluor® 633 Phalloidin to visualize F-actin (red channel). Nuclei were visualized with DAPI (blue channel). Representative images of red and blue channel merged images are shown from samples prepared in triplicate (C). EtOH was used as a vehicle control. Values represent means ± SEM, n = at least 3. * $p < 0.05$, ** $p < 0.01$ compared to vehicle control. N.S. = No significant difference was observed between 15d-PGJ_2 and tagged analogs.

Supplementary Figure 2: Effect of 15d-PGJ_2 on apoptotic and necrotic cell death. The viability of JC cells treated with 15d-PGJ_2 (20 μM) for 16 h was assessed using PI and Annexin V flow cytometry. The percentage of cells which were viable (PI negative and Annexin V negative), early apoptotic (PI negative and Annexin V positive), late apoptotic (PI positive and Annexin V positive), and necrotic (PI positive and Annexin V negative) is shown. Ethanol was used as a vehicle control. Values shown represent means ± SEM, n = 6-9. ** $p < 0.01$ compared to vehicle control.

Supplementary Figure 3: Effects of DP2 and PPARγ agonists on F-actin cytoskeletal arrangement and migration. Cell migration was assessed using a scratch assay in JC cells treated with 15(R)-PGD_2 (0.24 μM, Panel A), ROSI (2 μM, Panel B) or appropriate vehicle control. Cell migration into the cell-free area was assessed after 8 h. JC cells were also treated with 15d-PGJ_2 (0.3 μM), 15(R)-PGD_2 (0.24 μM), Rosiglitazone (ROSI, 2 μM) or vehicle control for 30 min and then fixed, permeabilized and stained with 2 units of Alex Fluor® 633 Phalloidin to visualize F-actin (red channel). Nuclei were visualized with DAPI (blue channel). Representative images of red and blue channel merged images are shown from samples prepared in triplicate (C). Ethanol (EtOH) and DMSO were used as vehicle controls. Values shown represent means ± SEM, n = 3. No significant difference (N.S.) was observed between vehicle control and agonist treated cells.