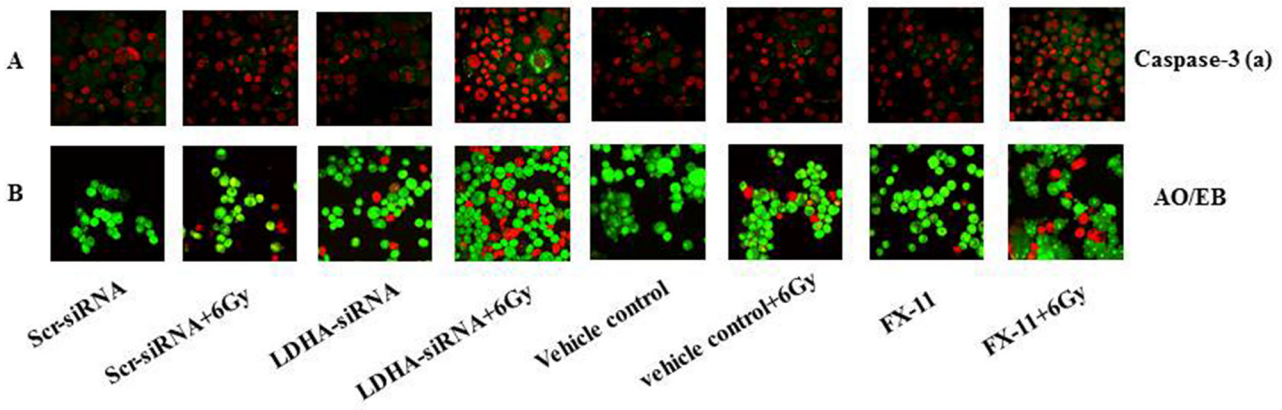
# Proteomic identification of the lactate dehydrogenase A in a radioresistant prostate cancer xenograft mouse model for improving radiotherapy

## SUPPLEMENTARY FIGURE AND TABLES




**Supplementary Figure S1: Confirmation of apoptosis after different treatments by fluorescence staining.** Expression of Caspase-3 (active) (apoptosis) and cell morphology were examined after different treatments by immunofluorescence staining. **A.** The staining intensity of Caspase-3 (active) was up-regulated in combination of LDHA KD or inhibitor and RT treated cells compared to single treatments or vehicle treatments. **B.** The apoptotic cells were also visualized by AO/EB staining. In Caspase-3 (active) study, green indicates viable cells while red indicates non-viable cells. In AO/EB experiment, condensed and fragmented nuclear chromatin characteristic of apoptosis is clearly seen in treated cells using acridine orange/ethidium bromide staining and confocal microscopy (red) while control-treated cells appeared normal (green). Magnification x 600 in all images.

**Supplementary Table S1: Intensity of expression of vasculature, hypoxia, EMT, CSC and glycolysis markers in PC3 and PC3-RR s.c. xenografts by IHC**

| Name of xenograft | IHC intensity | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | CD31 | VEGFR2 | HIF-1α | N-Cadherin | E-Cadherin | CD44 | Oct4 | GLUT-1 | PKM1/2 | LDHA |
| PC3 | 0~1 | 0~1 | 0~1 | 0~1 | 1~2 | 0~1 | 0~1 | 1~2 | 0~1 | 0~1 |
| PC3-RR | 1~2 | 2~3 | 1~2 | 2~3 | 0~1 | 1~2 | 2~3 | 2~3 | 1~2 | 2~3 |

**Notes:** IHC staining scores: 0=negative; 1=weak; 2=moderate; 3=strong.

**Supplementary Table S2: Significantly differentially expressed proteins between PC-3 and PC-3RR xenografts.**

**See Supplementary File 1**

**Supplementary Table S3: Significant signaling pathways associated with CaP radioresistance identified by Ingenuity Pathways Analysis.**

**See Supplementary File 2**