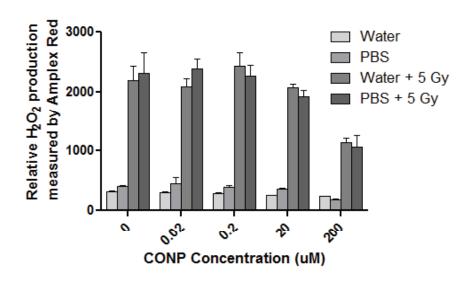
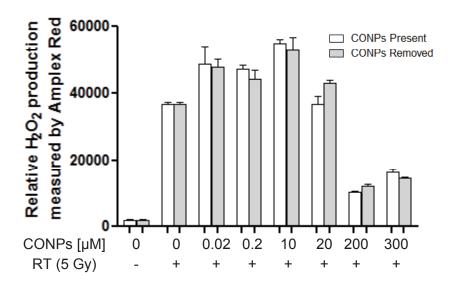


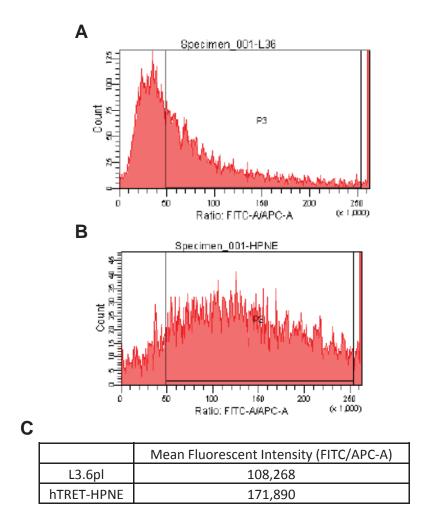
**Figure S1.** Supplemental to Fig. 2 showing all the CONP concentrations and time points examined. CONPs were included in water 0.5 h prior to RT (A & B), 1 h post-RT or 24 h post-RT. Time in hours, time point post-RT.



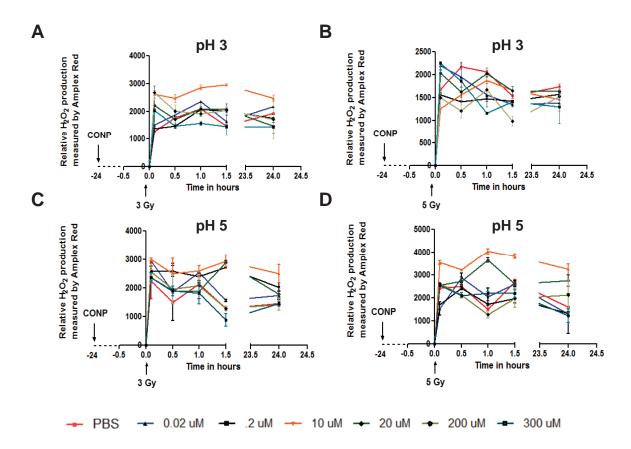
**Figure S2.** Supplemental to Fig. 2A & 2B showing that at neutral pH (7.4) H<sub>2</sub>O<sub>2</sub> production is comparable whether CONPs were suspended in water or in PBS.



**Figure S3.** Supplemental to Fig. 2 & 3 showing CONP presence does not disturb recording of  $H_2O_2$  value by Amplex Red assay. CONPs were either left in the reaction (Present) or removed by centrifugation (Removed) prior to fluorescent analysis of  $H_2O_2$ .



**Figure S4.** Supplemental to Fig. 4 showing that L3.6pl pancreatic cancer cells (A) are more acidic than hTERT-HPNE normal pancreatic epithelial cells (B). The acidity inside the cells was determined as described in Methods and presented as mean fluorescent intensity.



**Figure S5.** Supplemental to Fig. 3 Under acidic conditions showing CONPs lose the SOD mimetic ability to scavenge  $H_2O_2$  resulting in the accumulation of  $H_2O_2$ . Time in hours, time point relative to time 0 when radiation was done.