Cerium Oxide Nanoparticles Sensitize Pancreatic Cancer to Radiation Therapy through Oxidative Activation of the JNK Apoptotic Pathway

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Supplementary Materials

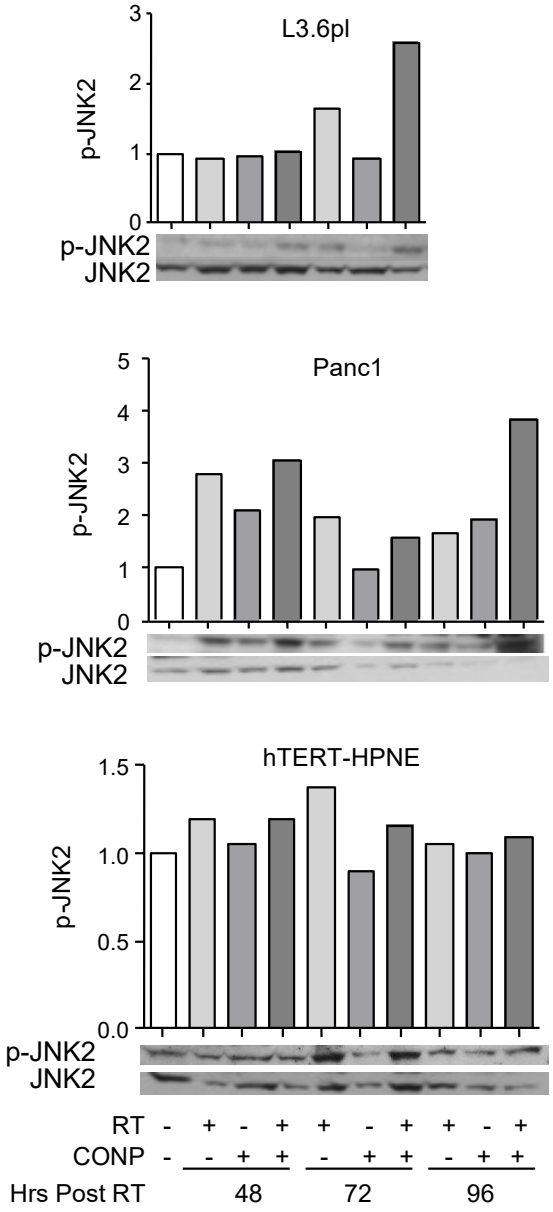

Figure S1. CONP Pre-Treatment Drives RT-Induced JNK2 Activation in Pancreatic Cancer Cells. Cells were treated with 10 μM CONPs for 24 h followed by exposure to 0 or 5 Gy RT for additional hours as indicated prior to western blot. (Supplemental to Figure 2B.)

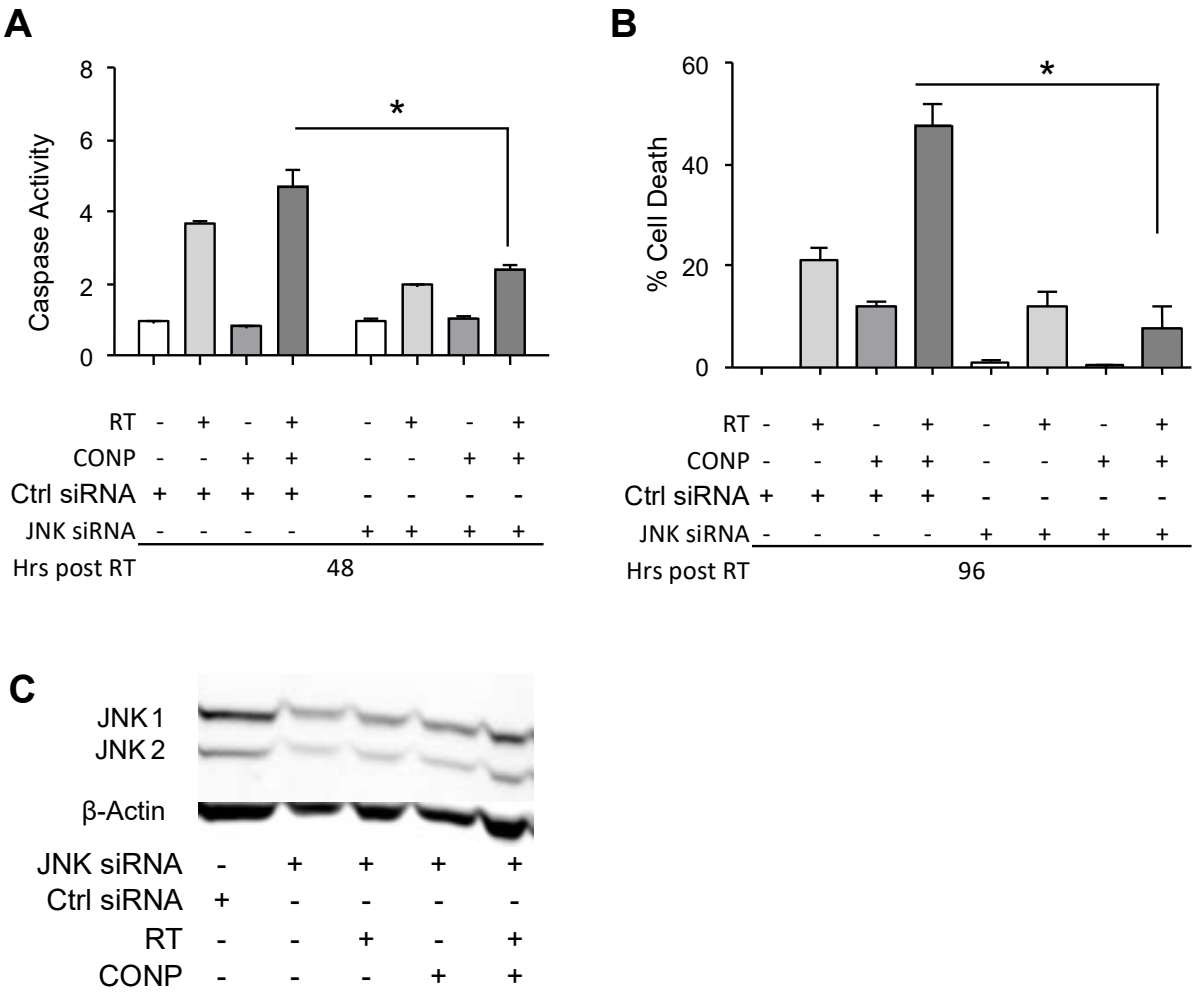

Figure S2. CONPs Do Not Drive RT-Induced Apoptosis in the Absence of JNK Expression. Panc1 cells were transfected with siRNA for 24 hours and treated with 0 or 10 μM CONPs for additional 24 hours followed by exposure to 0 or 5 Gy RT. After the 24 and 96 hours, the cellular caspase activity (**A**) and viability (**B**) were determined, respectively. Results were normalized to untreated control siRNA group. The control viability value was set as 100% viability. The % cell death was calculated by subtracting % viability from 100%. Effective JNK silencing (**C**) was confirmed by western blot for total JNK protein levels 24 hours post siRNA treatment. (Supplemental to Figure 6.)