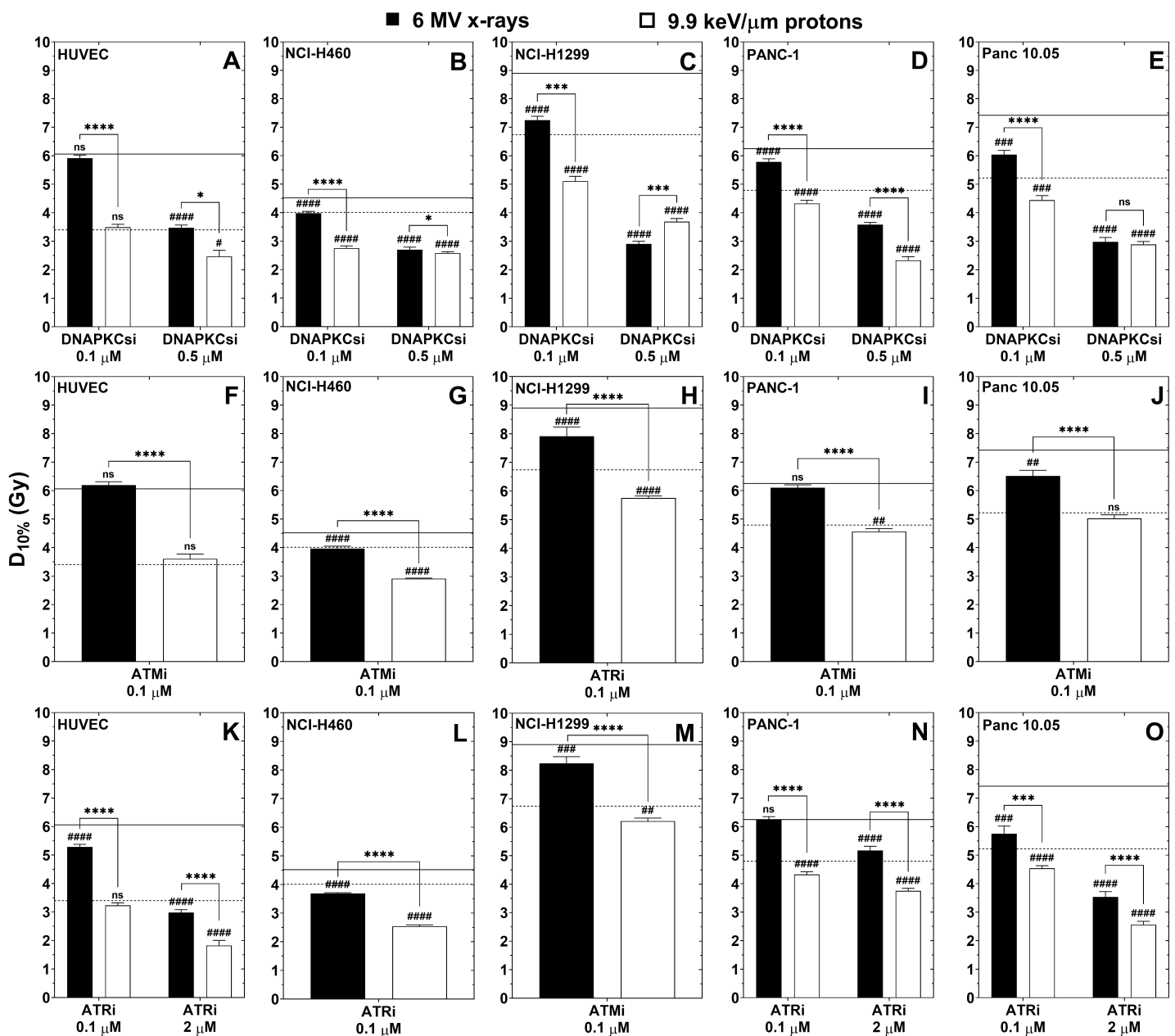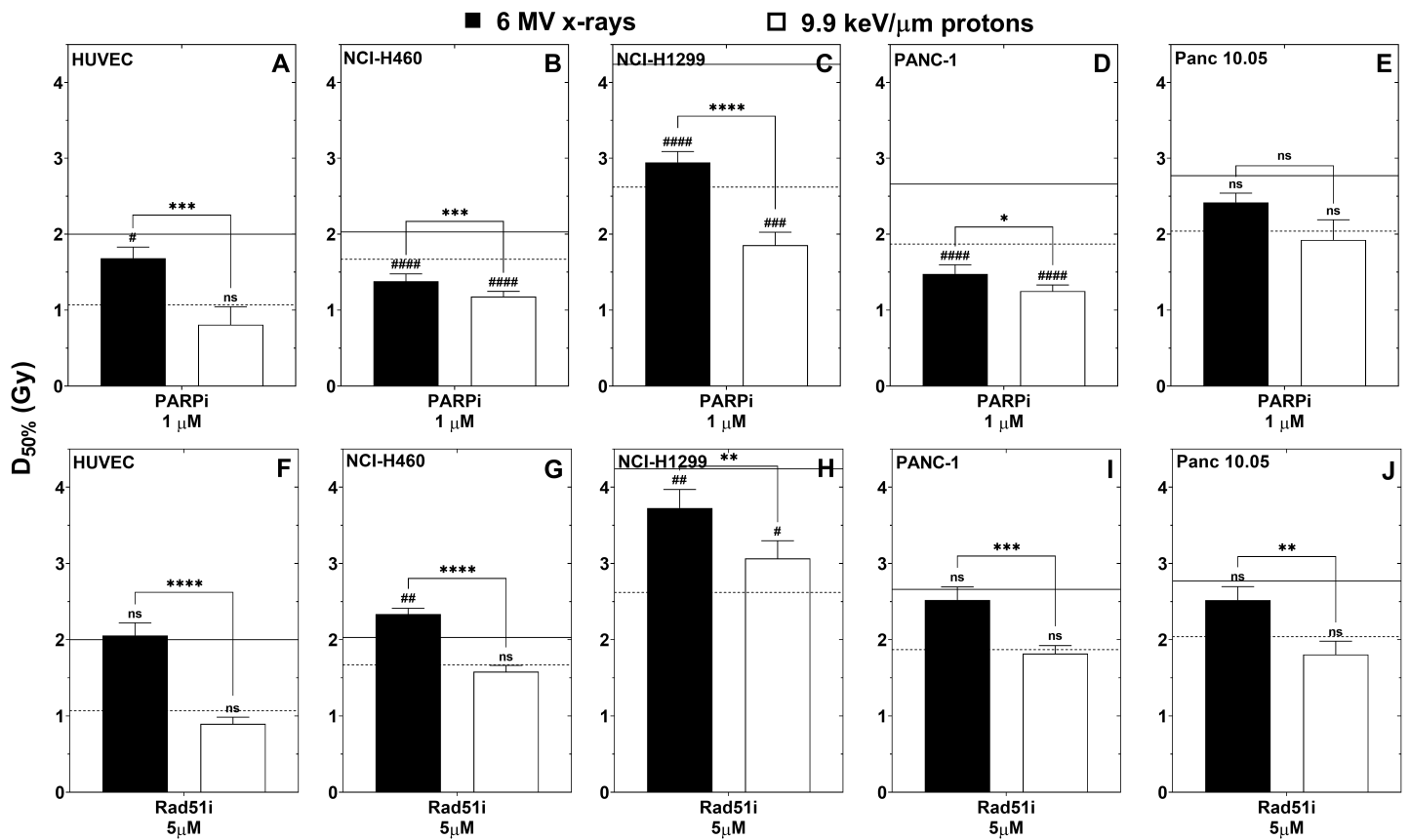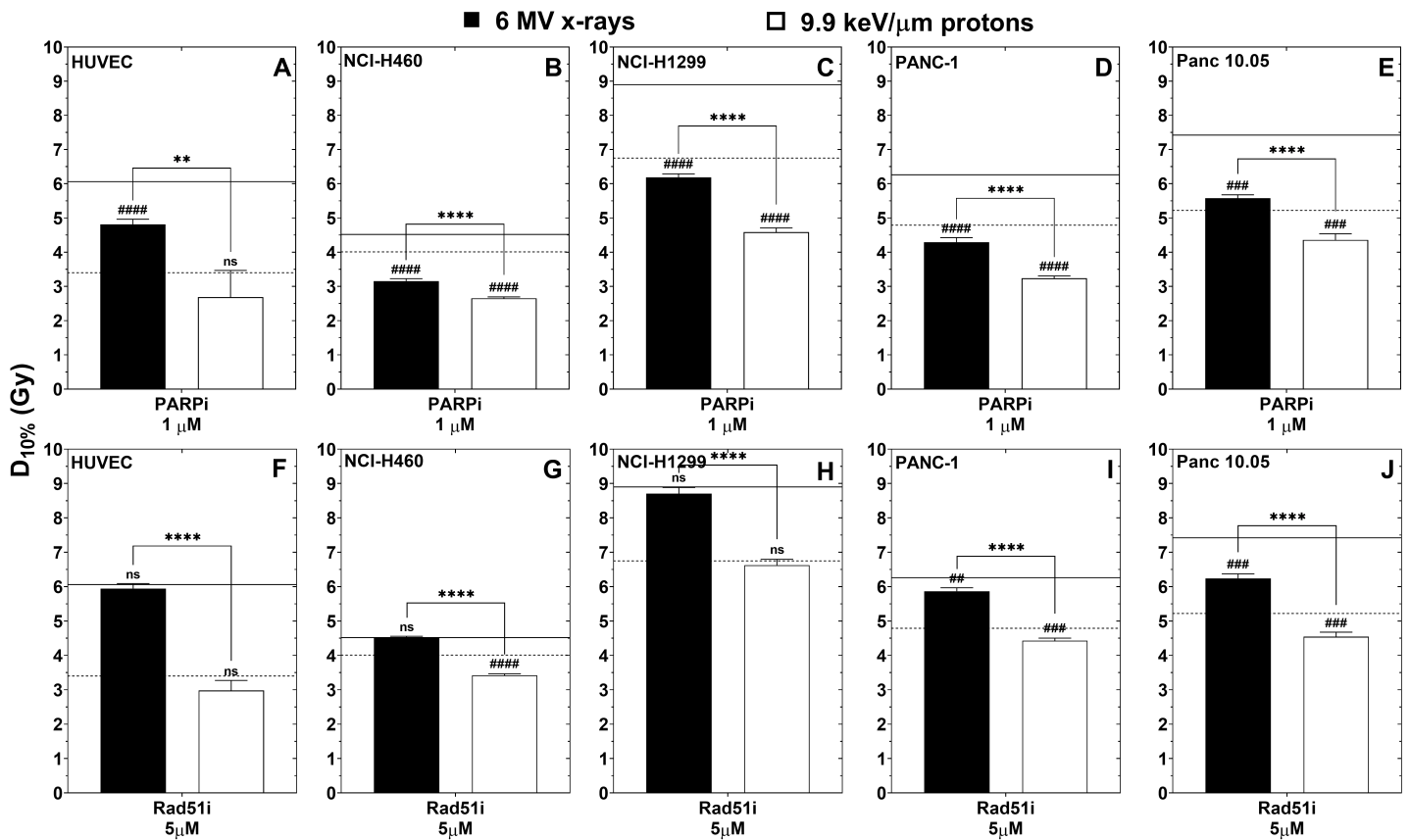Supplementary Figure 1: $D_{50\%}$ for combination of DNA repair inhibitors with x-rays or protons. (A-D) RT+DNAPKcsi; (F-J) RT+ATMi; and (K-O) RT+ATRi for HUVEC, NCI-H460, NCI-H1299, PANC-1 and Panc 10.05 cell lines. Lines represent responses to x-rays (solid) and protons (dashed) when treated with DMSO. Number (N) of biological repeats for each condition is given in Figure 2. Significance denotes differences between x-rays and protons with a given inhibitor (*) or differences between a given inhibitor/radiation pair and its respective radiation type with DMSO (respective line) (#). Error bars represent the standard deviation. ns: non-significant; * or #: p<0.05; ** or ##: p<0.01; *** or ###: p<0.001; and **** or ####: p<0.0001.

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Supplementary Figure 2: $D_{10\%}$ for combination of DNA repair inhibitors with x-rays or protons. (A-D) RT+DNAPKcsi; (F-J) RT+ATMi; and (K-O) RT+ATRi for HUVEC, NCI-H460, NCI-H1299, PANC-1 and Panc 10.05 cell lines. Lines represent responses to x-rays (solid) and protons (dashed) when treated with DMSO. Number (N) of biological repeats for each condition is given in Figure 2. Significance denotes differences between x-rays and protons with a given inhibitor (*) or differences between a given inhibitor/radiation pair and its respective radiation type with DMSO (respective line) (#). Error bars represent the standard deviation. ns: non-significant; * or #: p<0.05; ** or ##: p<0.01; *** or ###: p<0.001; and **** or ####: p<0.0001.

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Supplementary Figure 3: $D_{50\%}$ for combination of DNA repair inhibitors with x-rays or protons. (A-D) RT+PARPi; and (F-J) RT+Rad51i for HUVEC, NCI-H460, NCI-H1299, PANC-1 and Panc 10.05 cell lines. Lines represent responses to x-rays (solid) and protons (dashed) when treated with DMSO. Number (N) of biological repeats for each condition is given in Figure 3. Significance denotes differences between x-rays and protons with a given inhibitor (*) or differences between a given inhibitor/radiation pair and its respective radiation type with DMSO (respective dotted line) (#). Error bars represent the standard deviation. ns: non-significant; * or #: p<0.05; ** or ##: p<0.01; *** or ###: p<0.001; and **** or ####: p<0.0001.

Supplementary Figure 4: $D_{10\%}$ for combination of DNA repair inhibitors with x-rays or protons. (A-D) RT+PARPi; and (F-J) RT+Rad51i for HUVEC, NCI-H460, NCI-H1299, PANC-1 and Panc 10.05 cell lines. Lines represent responses to x-rays (solid) and protons (dashed) when treated with DMSO. Number (N) of biological repeats for each condition is given in Figure 3. Significance denotes differences between x-rays and protons with a given inhibitor (*) or differences between a given inhibitor/radiation pair and its respective radiation type with DMSO (respective dotted line) ($^{\#}$). Error bars represent the standard deviation. ns: non-significant; * or #: p<0.05; ** or ##: p<0.01; *** or ###: p<0.001; and **** or ####: p<0.0001.