

Supporting information

Gamma radiation responsive side-chain tellurium-containing polymer for cancer therapy

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Additional Figures:

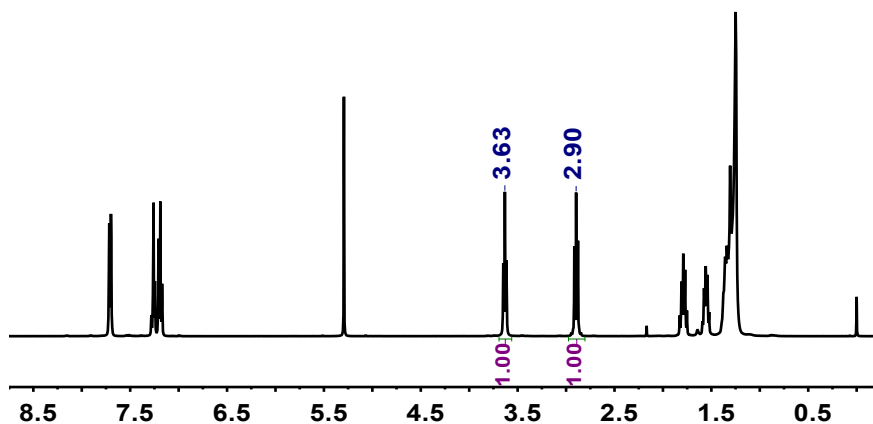


Figure S1. ^1H NMR spectrum of Ar-Te-OH (400 MHz, CDCl_3 , 298K).

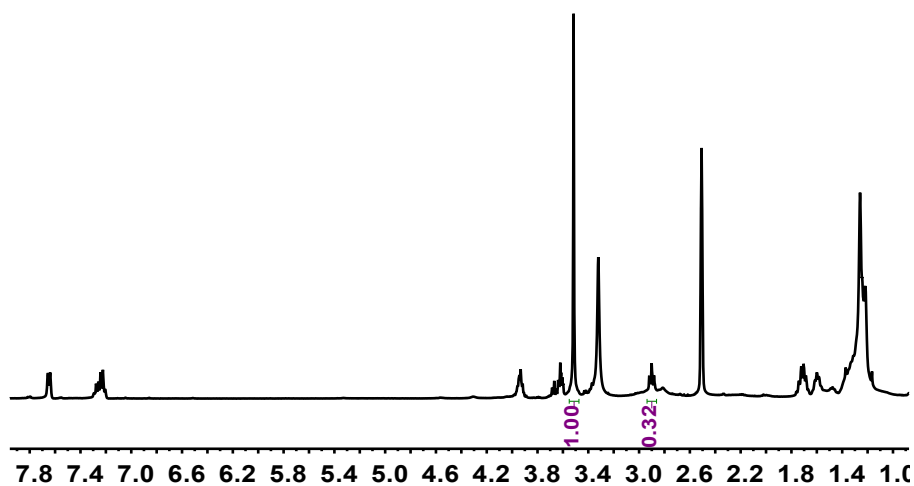


Figure S2. ^1H NMR spectrum of PEG-PAA-Te (400 MHz, DMSO-D_6 , 298K).

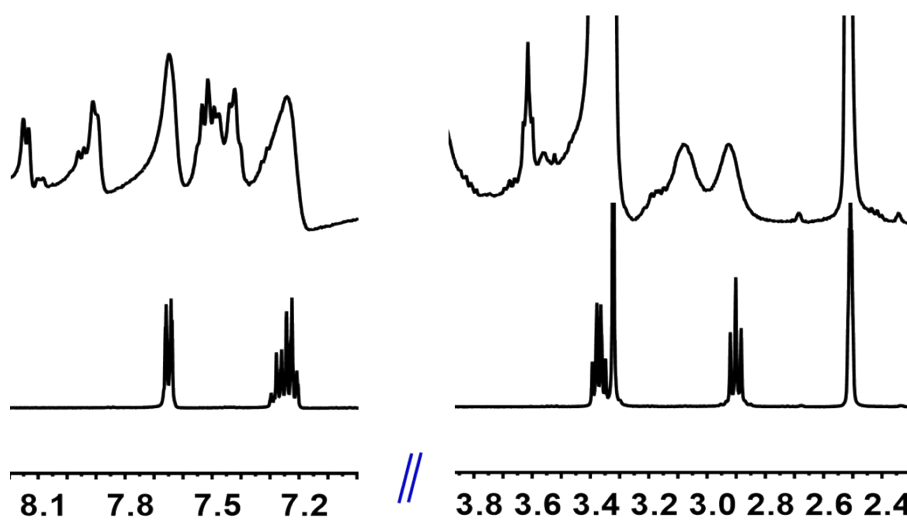


Figure S3. ^1H NMR spectrum of the Ar-Te-OH coordination with CDDP (400 MHz, DMSO-D_6 , 298K). The peak 3.15 ppm was the α proton of tellurium after the coordination with CDDP

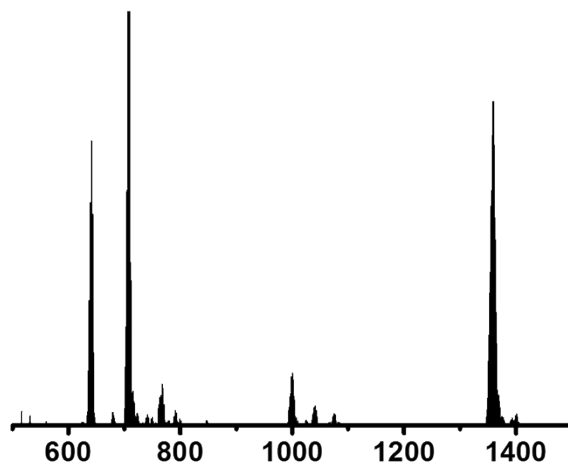


Figure S4. ESI-Mass signals for the coordination complexes.

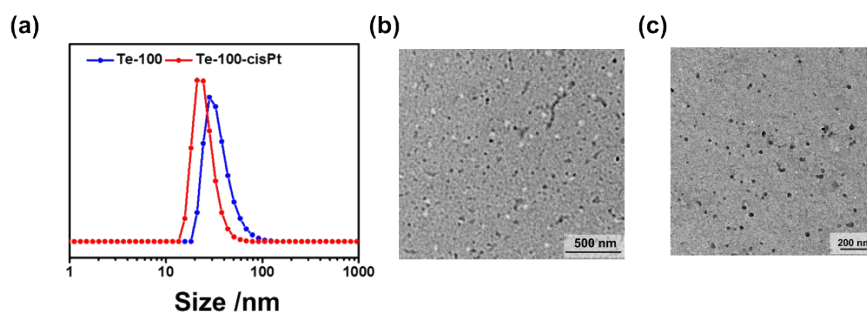


Figure S5. Characterization of the PEG-*b*-PAA-*g*-Te nanoparticles. (a) The size of the NPs before and after they were coordinated with CDDP, as measured by DLS. TEM images of (b) NPs-Te and (c) NPs-Te-Pt.

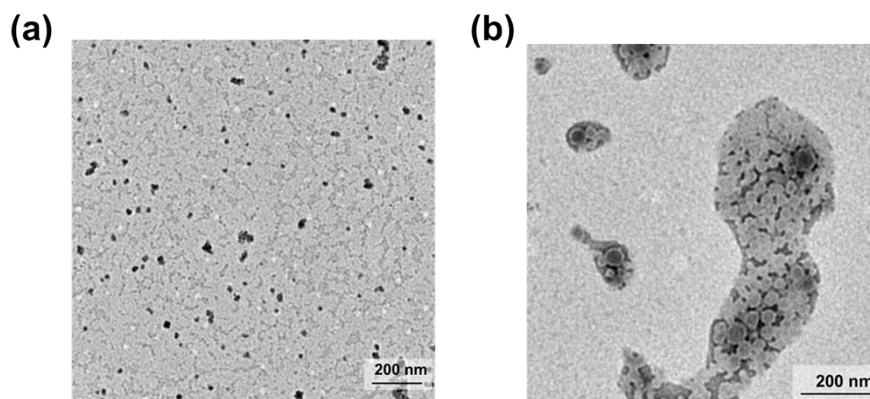


Figure S6. TEM images of 0.5 mg/mL PEG-*b*-PAA-*g*-Te/Pt after 2 Gy radiation (a) and 5 Gy radiation (b).

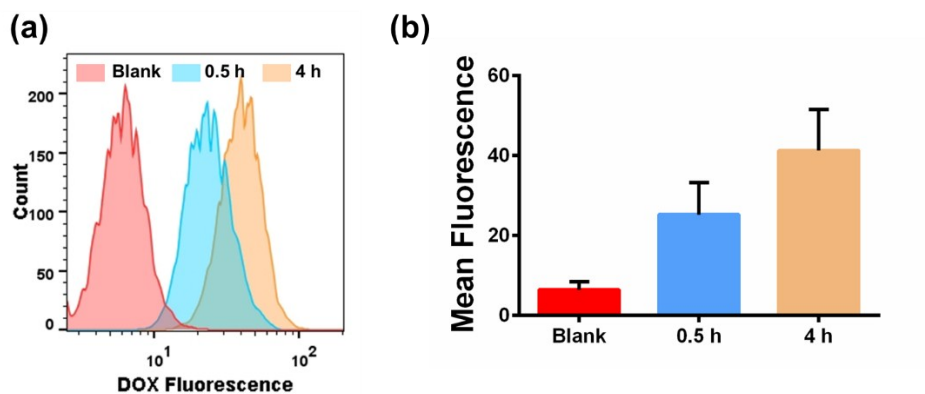


Figure S7. Cellular uptake. Flow cytometry images (a) and statistics (b) of the MDA-MB-231 cells treated with PEG-*b*-PAA-*g*-Te/Dox at different time points.

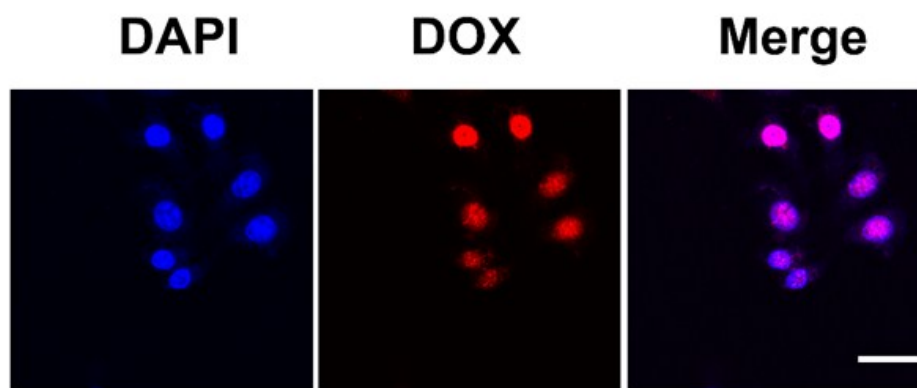


Figure S8. The confocal microscopic images of MDA-MB-231 cells treated with free Dox.

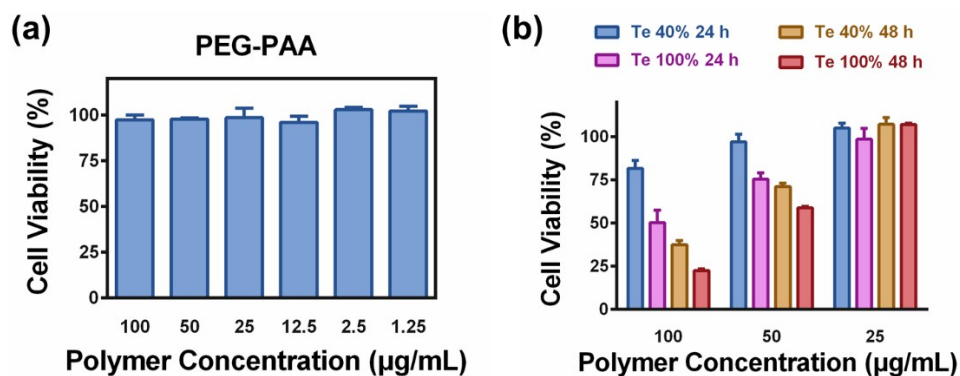


Figure S9. Cytotoxicity of the different nanoparticles in vitro. (a) Different concentrations of PEG-*b*-PAA. (b) Different grafting ratios of PEG-*b*-PAA-*g*-Te.

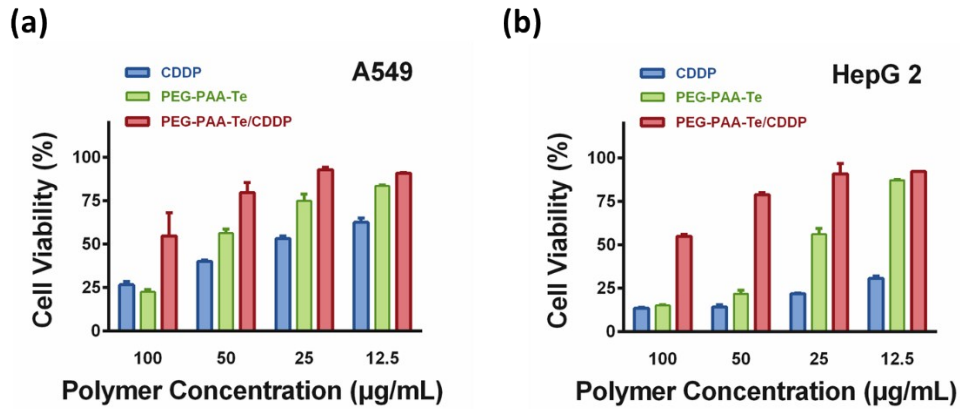


Figure S10. Cytotoxicity of the nanoparticles on different cells *in vitro*. (a) A549 cell. (b) HepG2 cells.

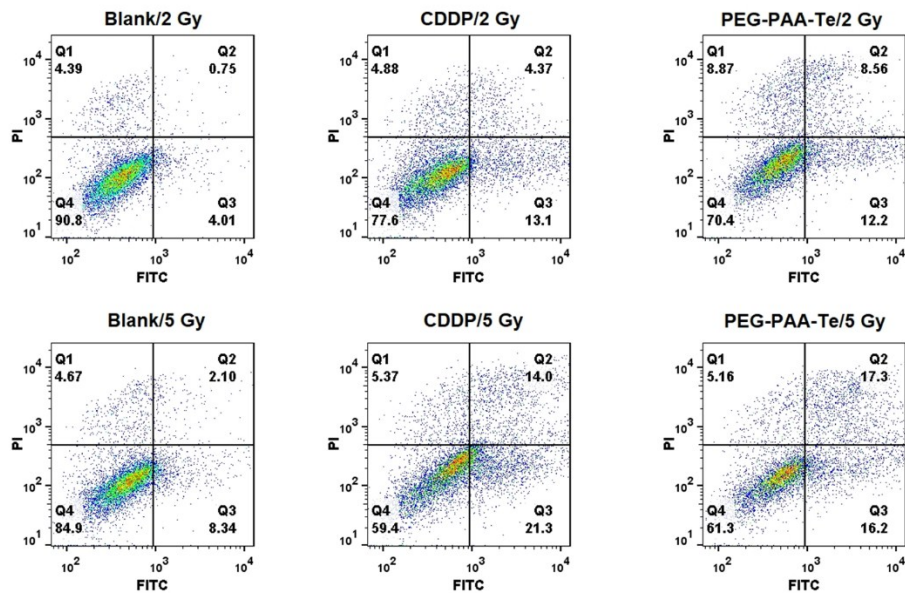


Figure S11. Flow cytometry measured the cell apoptosis. The sum of the Q₂ and Q₃ areas indicated the cell apoptosis.

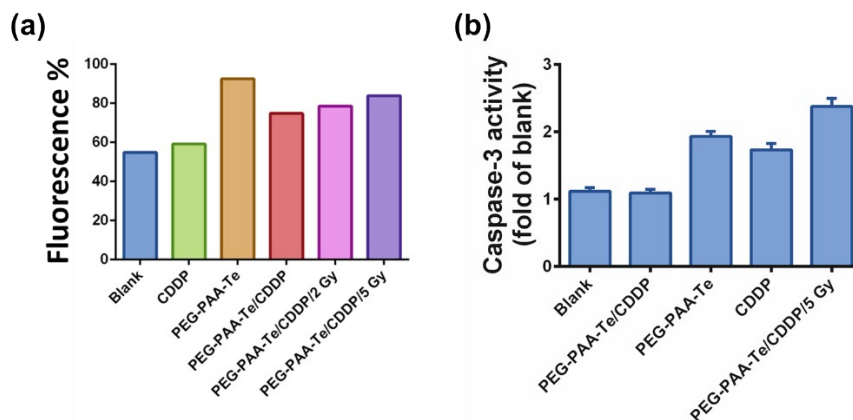


Figure S12. Flow cytometry statistics (a) of the MDA-MB-231 cells treated with the different nanoparticles. (b) Caspase-3 activity after treatment with 100 µg/mL nanoparticles.