

Supporting Information

Tumor pH and Intracellular Reduction Responsive Polypeptide Nanomedicine with Sheddable PEG Corona and Disulfide-Cross-Linked Core

Yue Ding¹, Chang Du¹, Jiwen Qian¹, Linzhu Zhou¹, Yue Su¹, Rong Zhang^{2,*}, Chang-Ming Dong^{1,2,*}

¹School of Chemistry and Chemical Engineering, Shanghai Key Laboratory of Electrical Insulation and Thermal Aging, Shanghai Jiao Tong University, Shanghai 200240, P. R. China

²Joint Research Center for Precision Medicine, Shanghai Jiao Tong University Affiliated Sixth People's Hospital South Campus, Shanghai Fengxian Central Hospital, Shanghai 201400, P. R. China

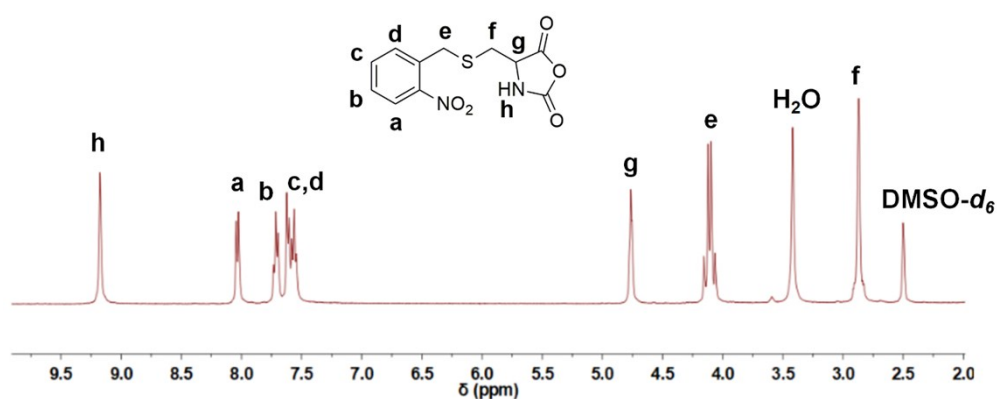


Fig. S1 Synthesis and ¹H NMR spectra of L-NBC-NCA (DMSO-*d*₆).

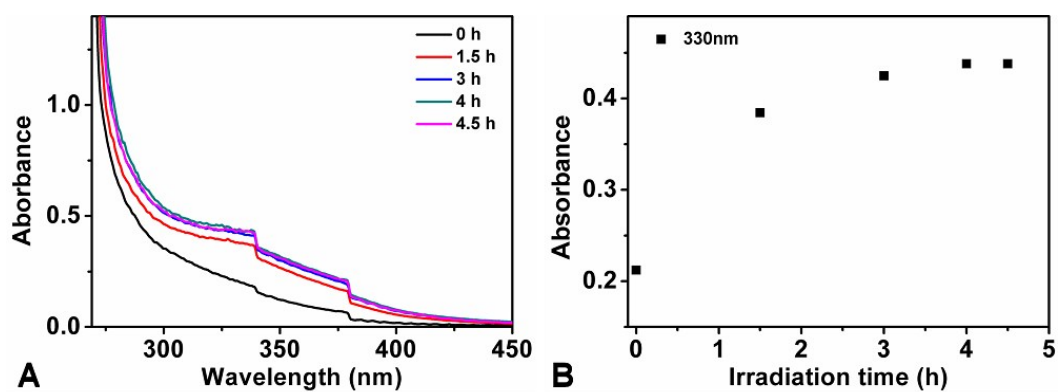


Fig. S2 UV-vis data of 0.5 mg/mL CCL₂₁ nanoparticles in DMF/CH₃CN (v: v = 4: 1) solution after 365 nm irradiation of different times (A) and the absorbance at 330 nm on irradiation time (B).

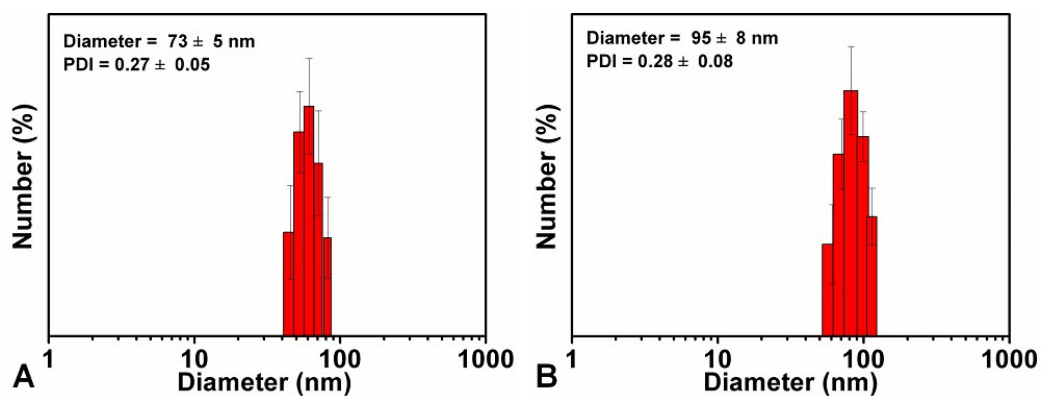


Fig. S3 DLS data for both the NCL₂₁ (A) and NCL₇₉ (B) nanoparticles.

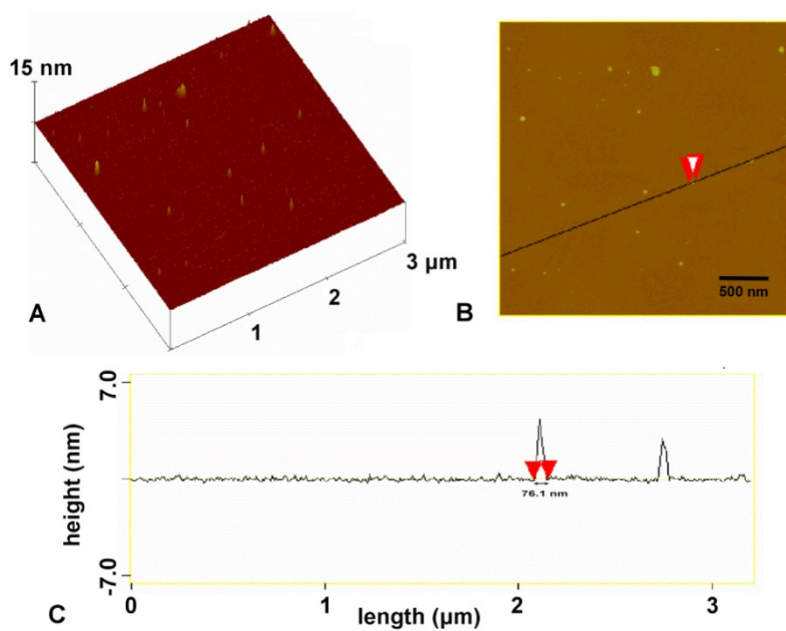


Fig. S4 The AFM images of CCL₇₉ nanoparticles.

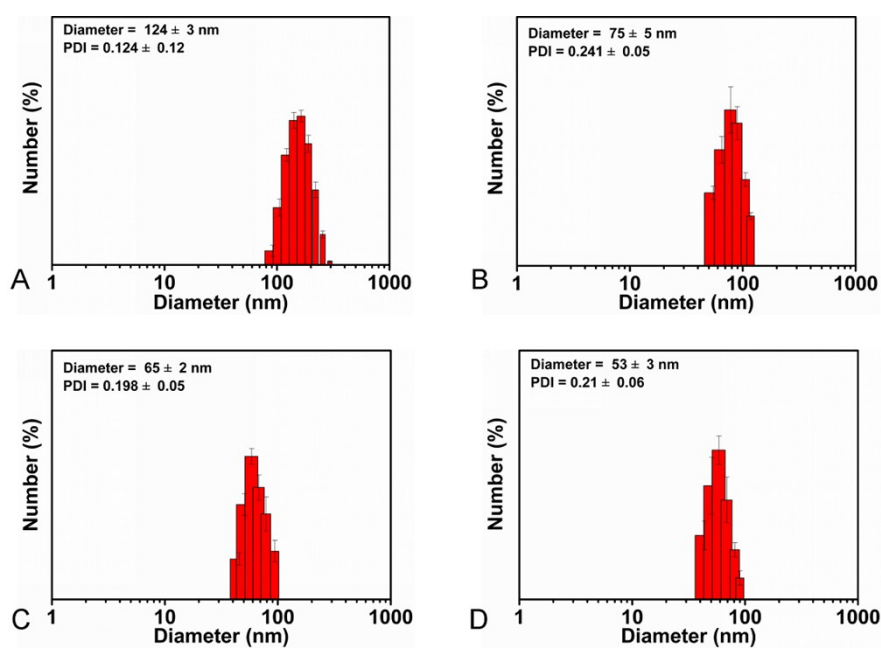


Fig. S5 DLS data for CCL₂₁ nanoparticles when incubated at pH 7.4 (A), pH 7.4 + 10 mM DTT (B), pH 6.5 (C) and pH 6.5 + 10 mM DTT (D) for 24h.

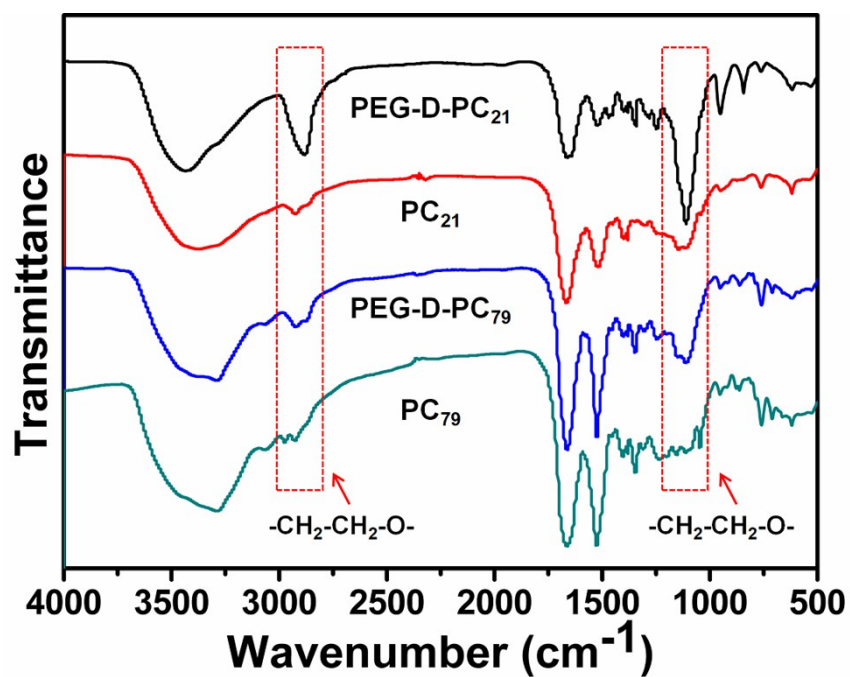


Fig. S6 FT-IR spectra of PEG-D-PC and the residual PC.

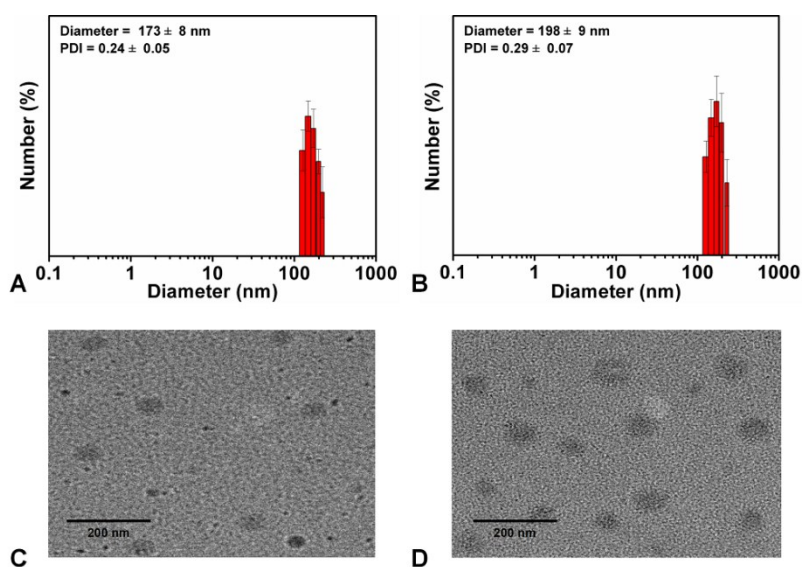


Fig. S7 DLS and TEM data for both the CPT-loaded CCL₂₁ (A, C) and CCL₇₉ (B, D) nanoparticles.