Electronic Supplementary Material (ESI) for Biomaterials Science.

Supporting Information

Supramolecular Nanomedicine for Selective Cancer Therapy via Sequential Responsiveness to Reactive Oxygen Species and Glutathione

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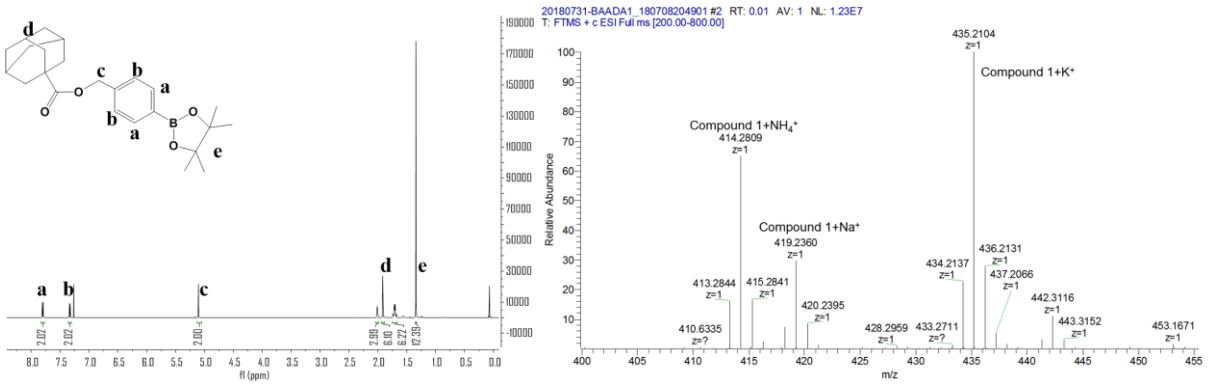

Figure S1. ^{1}H NMR and mass spectrum of compound **1**.

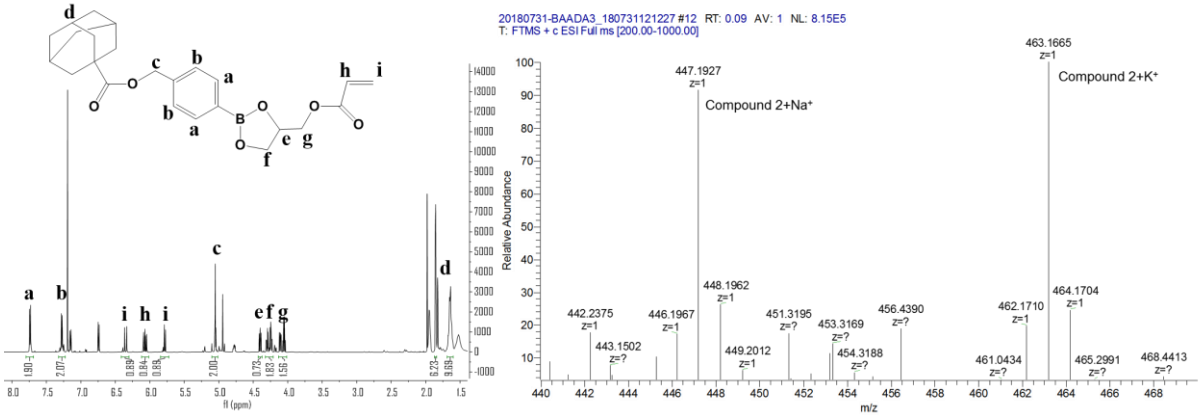

Figure S2. ^{1}H NMR and mass spectrum of compound **2**.

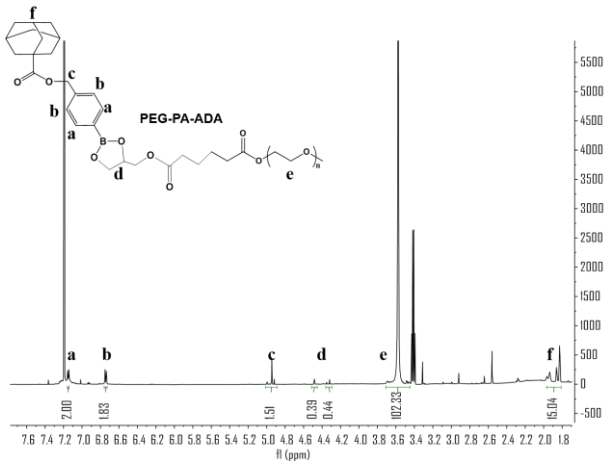

Figure S3. ^{1}H NMR spectrum of PEG-PA-ADA.

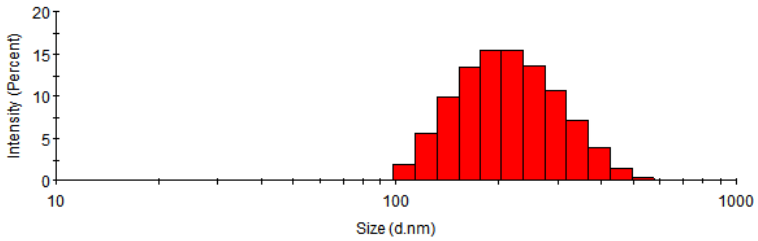

Figure S4. DLS of PPA-CS NPs.

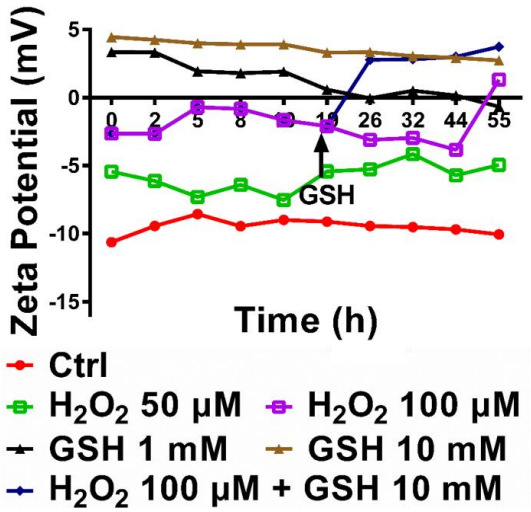

Figure S5. Time-evolved zeta potential of PPA-CS NPs treated with various H2O2 and GSH conditions.

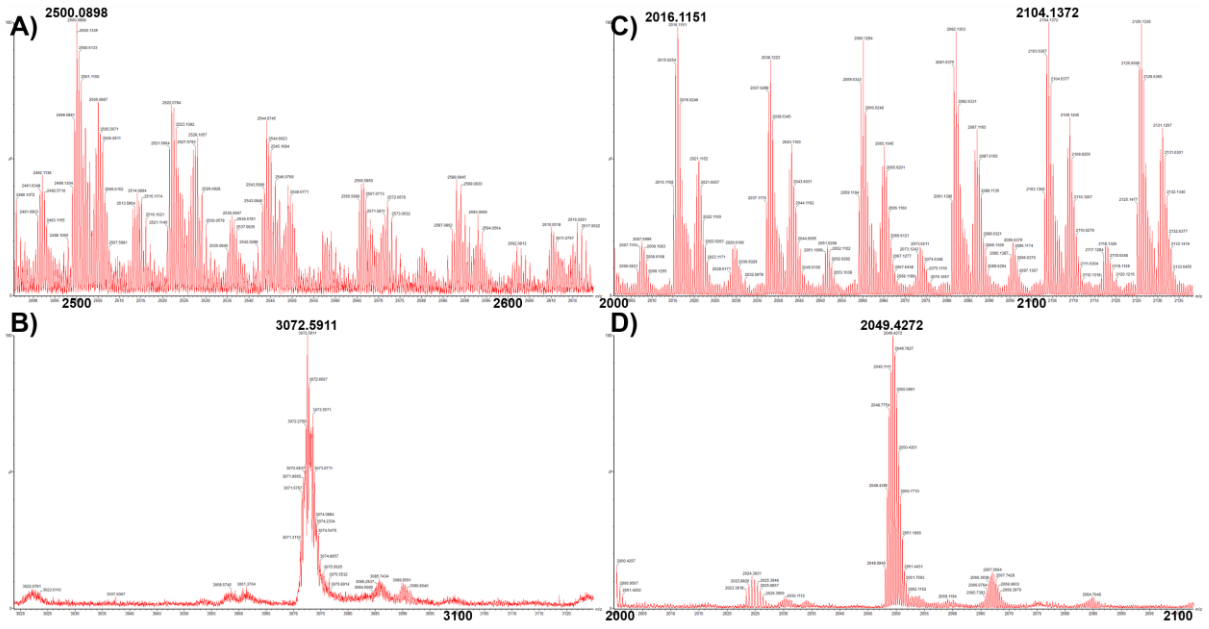

Figure S6. Mass spectra of (A) PPA, (B) SSPLA, (C) PPA after reaction with ROS, and (D) SSPLA after reaction with GSH.

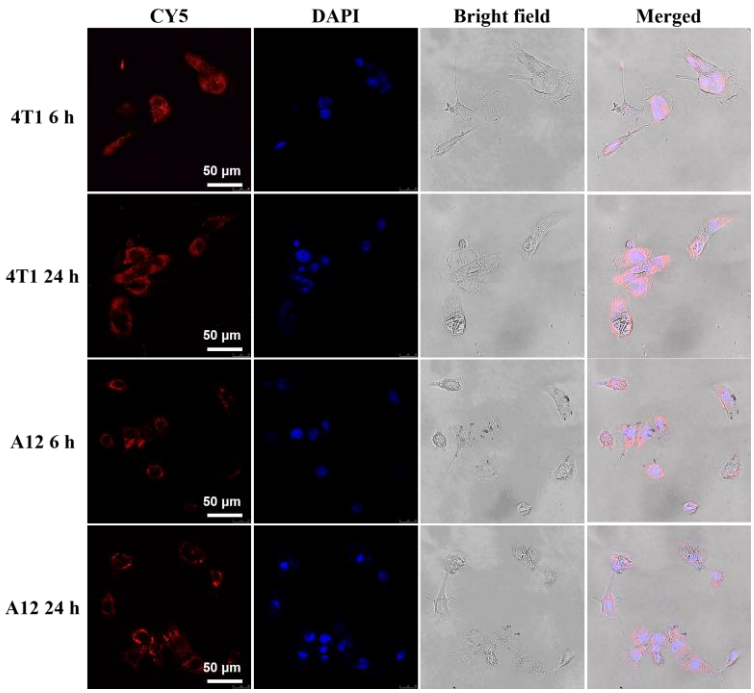

Figure S7. Intracellular uptake and location of CY5@PPA-CS NPs in A12 cells and 4T1 cells, after incubation for 6 and 24 h, respectively, determined by CLSM.

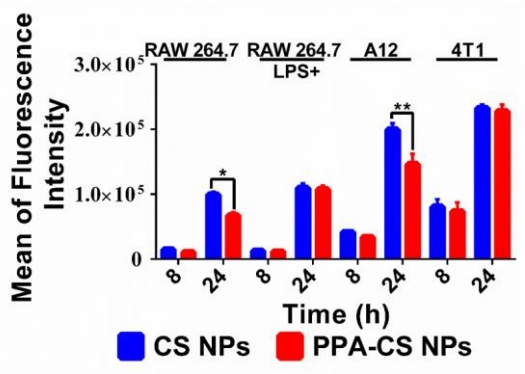

Figure S8. Responsive release of NR@CS NPs and NR@PPA-CS NPs in various cell lines (RAW 264.7, RAW 264.7 LPS+, A12, and 4T1 cells) for different durations (8 and 24 h), respectively, determined by flow cytometry. Unpaired t-test analysis was used for statistical analysis (*P < 0.05; **P < 0.01).

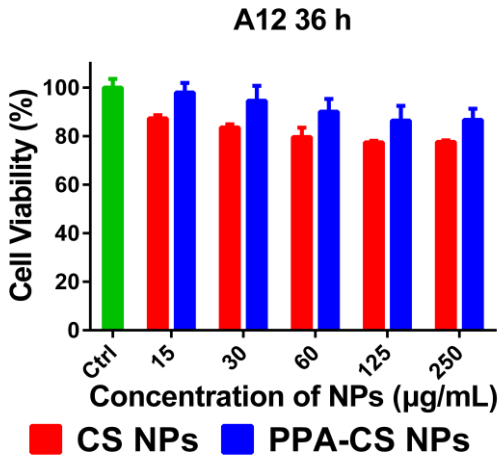

Figure S9. Cytotoxicity of CS NPs and PPA-CS NPs against A12 cells after incubation for 36 h.

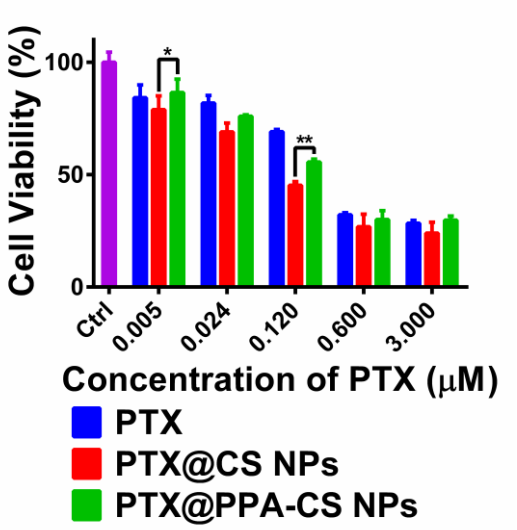

Figure S10. Cytotoxicity of PTX, PTX@CS NPs and PTX@PPA-CS NPs against RAW 264.7 cells for 36 h, respectively. Unpaired t-test analysis was used for statistical analysis (*P < 0.05; **P < 0.01).

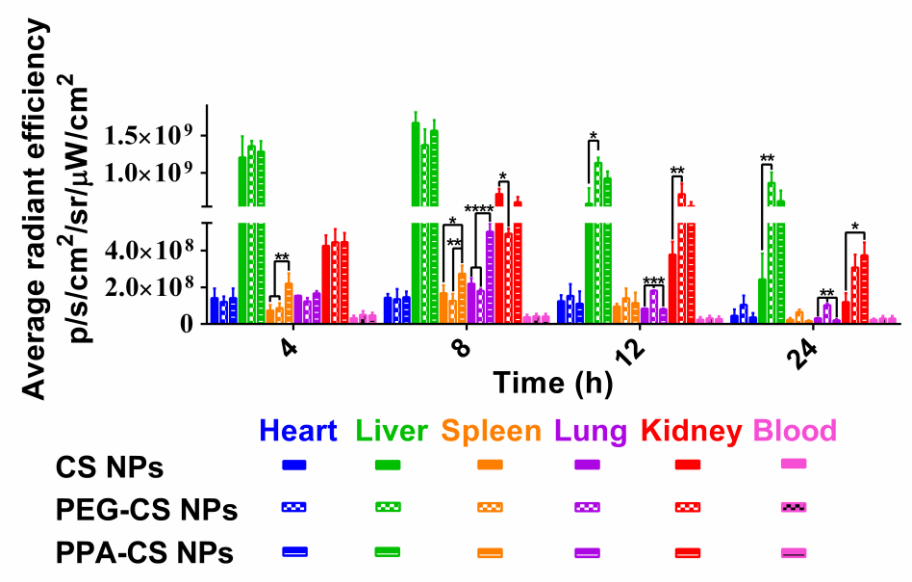

Figure S11. *In vivo* pharmacokinetic performance of Cy7.5@CS NPs, Cy7.5@PEG-CS NPs, and Cy7.5@PPA-CS NPs after *i.v.* injection in mice. The quantified data of fluorescence intensities of various organs and whole blood. (*P < 0.05; **P < 0.01; ****P < 0.0001).