

Supporting information

Polydopamine Nanoparticles as a Versatile Molecular Loading Platform to Enable Imaging-guided Cancer Combination Therapy

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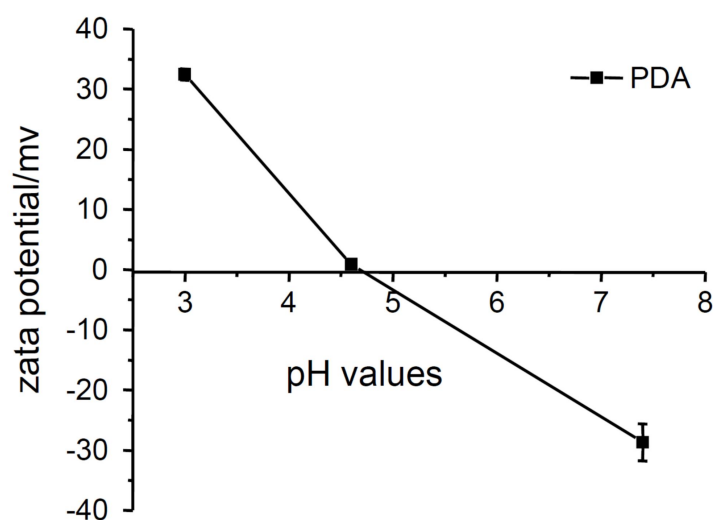


Figure S1. Zeta potentials of PDA nanoparticles in aqueous solutions with different pH values.

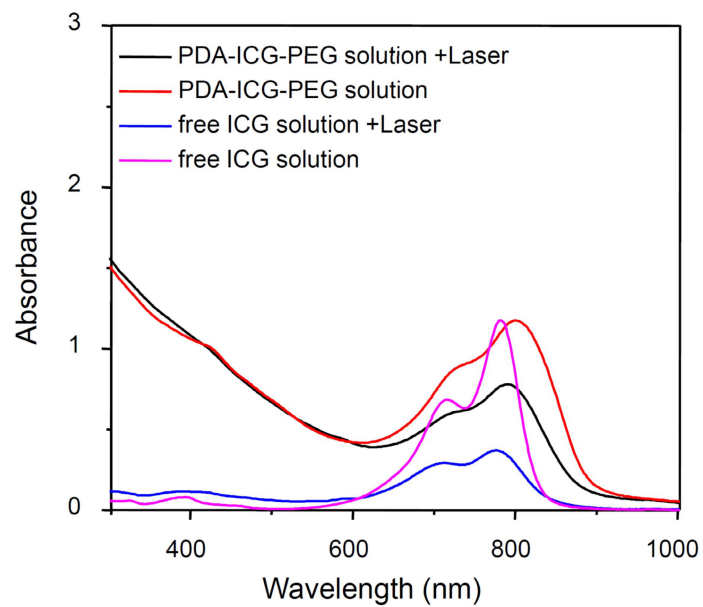


Figure S2. UV-Vis-NIR absorbance spectra of PDA-ICG-PEG and free ICG solutions before and after irradiation by the 808-nm laser at the power density of 0.8 W/cm^2 for 10 min.

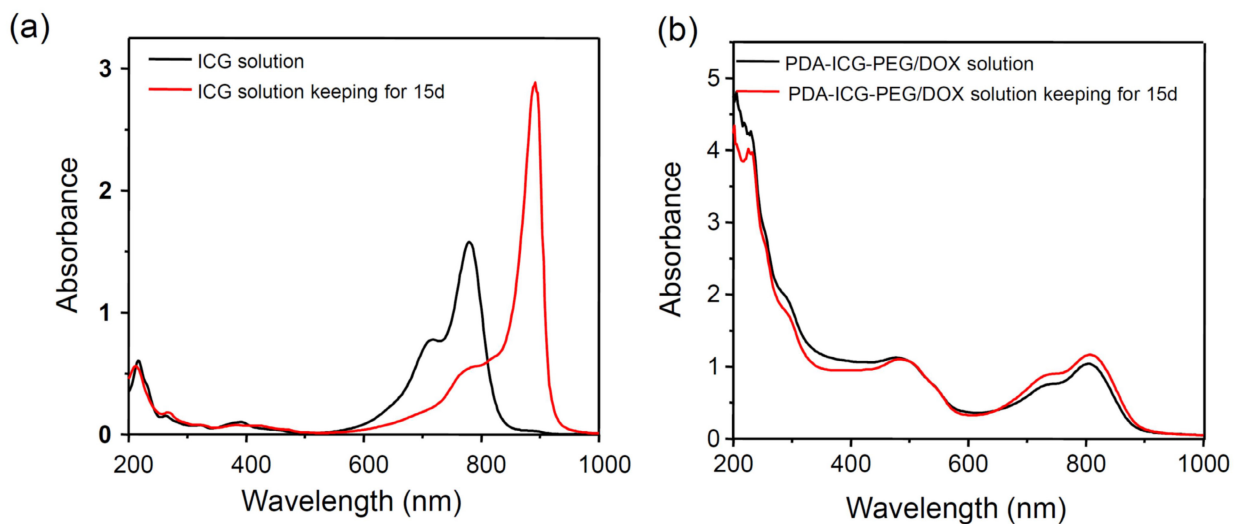


Figure S3. UV-Vis-NIR absorbance spectra of (a) free ICG solution and (b) PDA-ICG-PEG/DOX solution before and after keeping for 15 days.

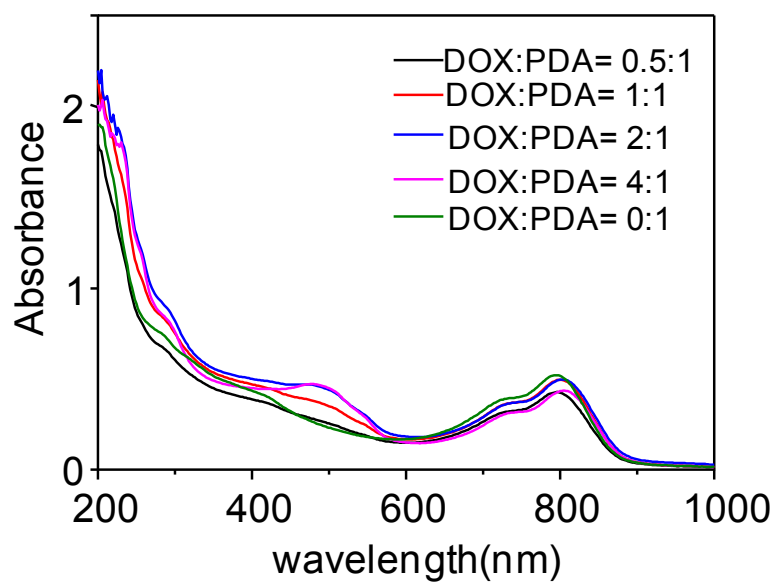


Figure S4. UV-VIS-NIR absorbance spectra of PDA-ICG-PEG/DOX obtained at different feeding DOX : PDA ratios. Excess DOX was removed before measurement.

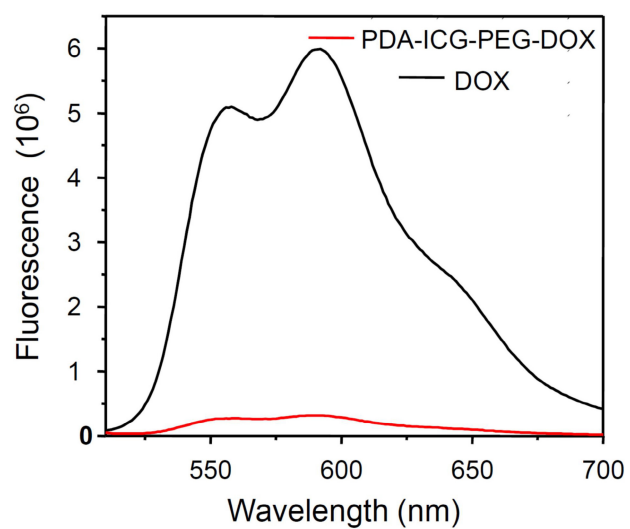


Figure S5. Fluorescence spectra of PDA-ICG-PEG/DOX and free DOX at the same concentration of DOX. A significant DOX fluorescence quenching to about 92% was observed in the PDA-ICG-PEG/DOX solution.

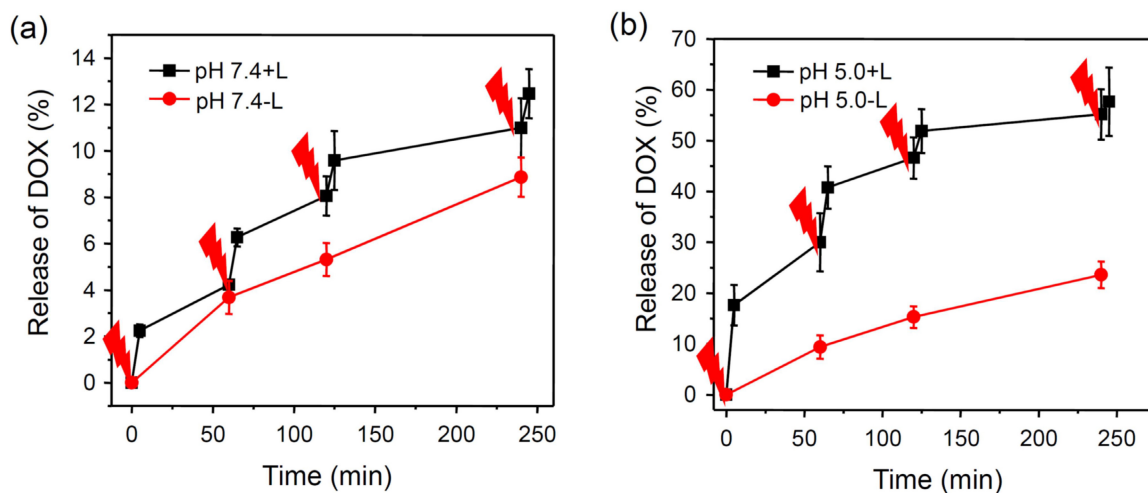


Figure S6 (a, b). NIR-triggered release of DOX from PDA-ICG-PEG/DOX nanoparticles at pH values of 5.0 and 7.4 with or without laser irradiation at different time points.

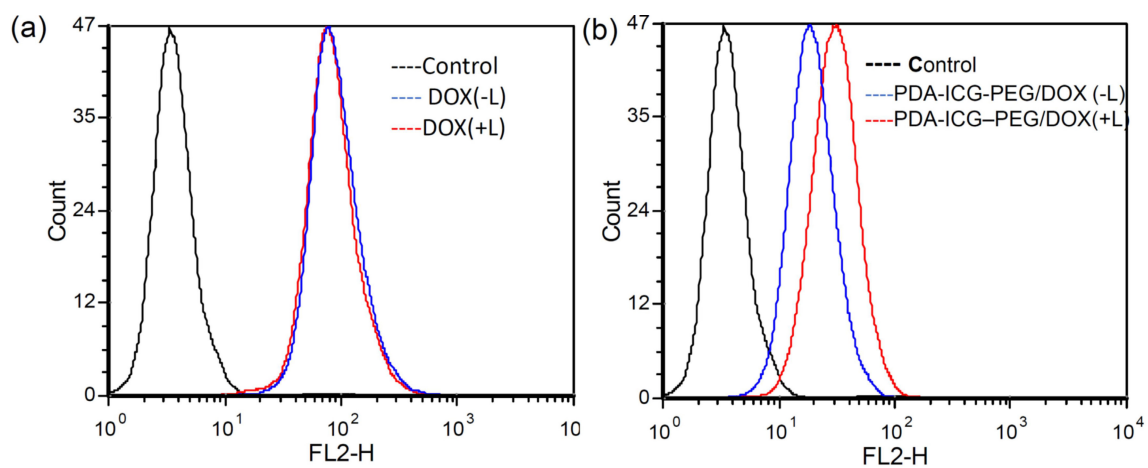


Figure S7 (a, b). Flow cytometry data for cells incubated with free DOX or PDA-ICG-PEG/DOX with/without 808-nm laser irradiation (0.4 W/cm^2 , 20 min).

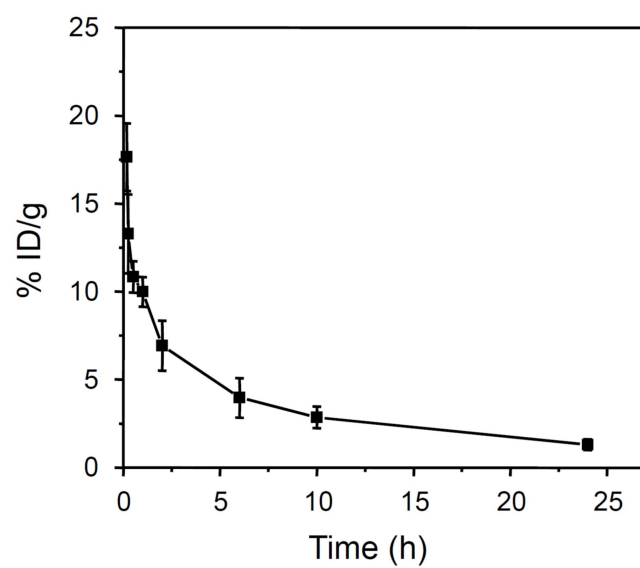


Figure S8. Blood circulation of PDA-ICG-PEG/DOX after i.v. injection. The data were obtained from DOX fluorescence in the blood. Error bars were based on triplicated samples.

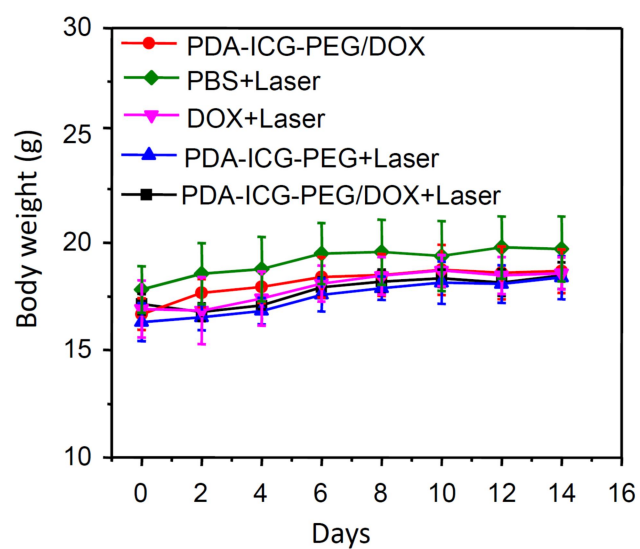


Figure S9. Average body weights of mice after various treatments indicated.

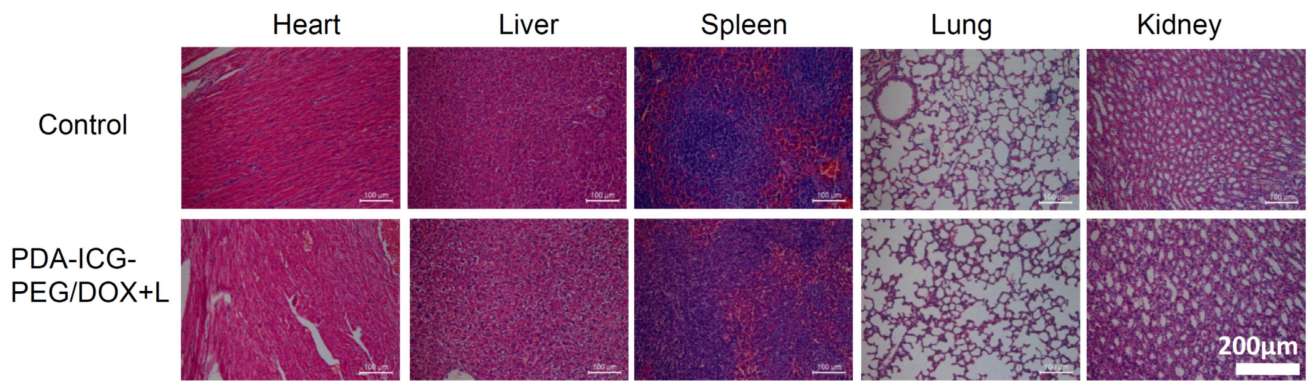


Figure S10. H&E stained images of major organ slices collected from mice of control group and the combination therapy group at day 14 post treatment. No appreciable sign of organ damage appeared in all major organs of mice. Scale bar = 200 µm.