

Figure S1 (a) UV-Vis-NIR spectra of the hybrid solutions with fixed seeding mass of BPQDs (1.0 mg) and seeding mass of PC from 0.5 to 6.0 mg. (b) The corresponding absorbance at 622 nm in (a).

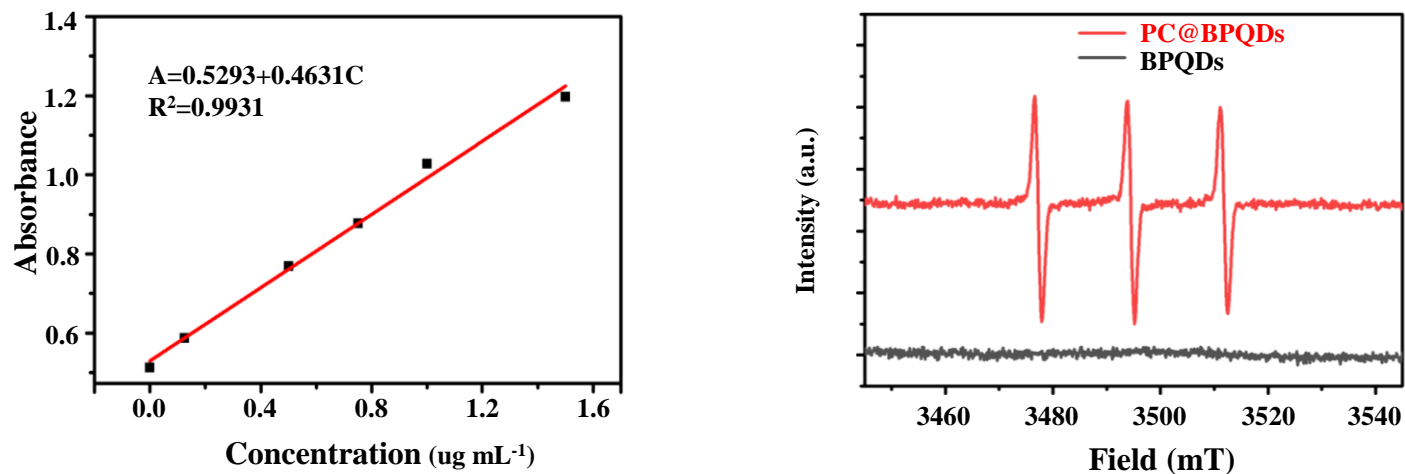


Figure S2 Standard curve of the Bradford protein assay.

Figure S3 ESR spectra of PC@BPQDs with (red line) and without (black line) laser irradiation. The samples were irradiated with a 808 nm (1.0 W cm^{-2})+650 nm (50 mW cm^{-2}) laser for 5 min.

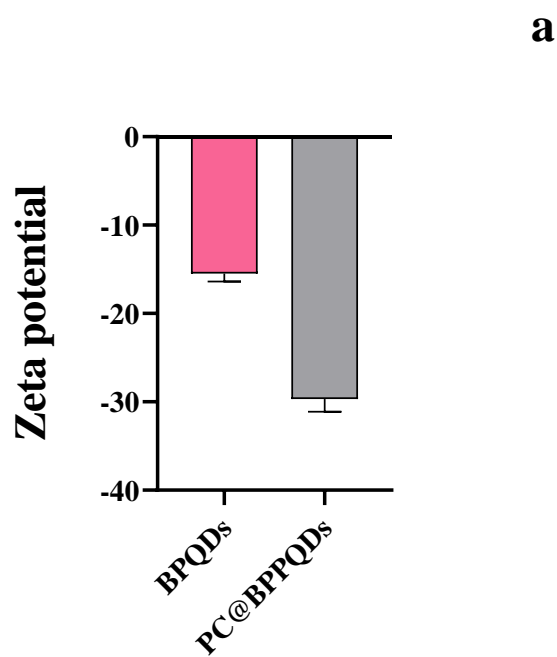


Figure S4 Zeta potentials of BPQDs and PC@BPQDs in water at pH 7.4.

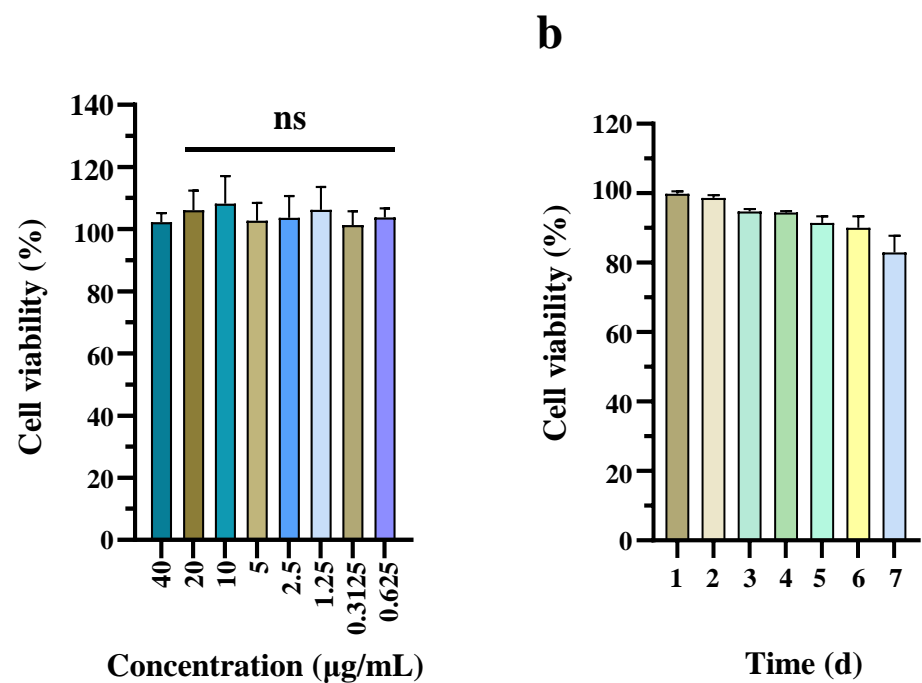


Figure S5 The cell viability of LO₂ cells after incubation with PC@BPQDs for (a) 24 h and (b) 7 d. During 7 d's culture, the fresh medium was replaced every 3 days.

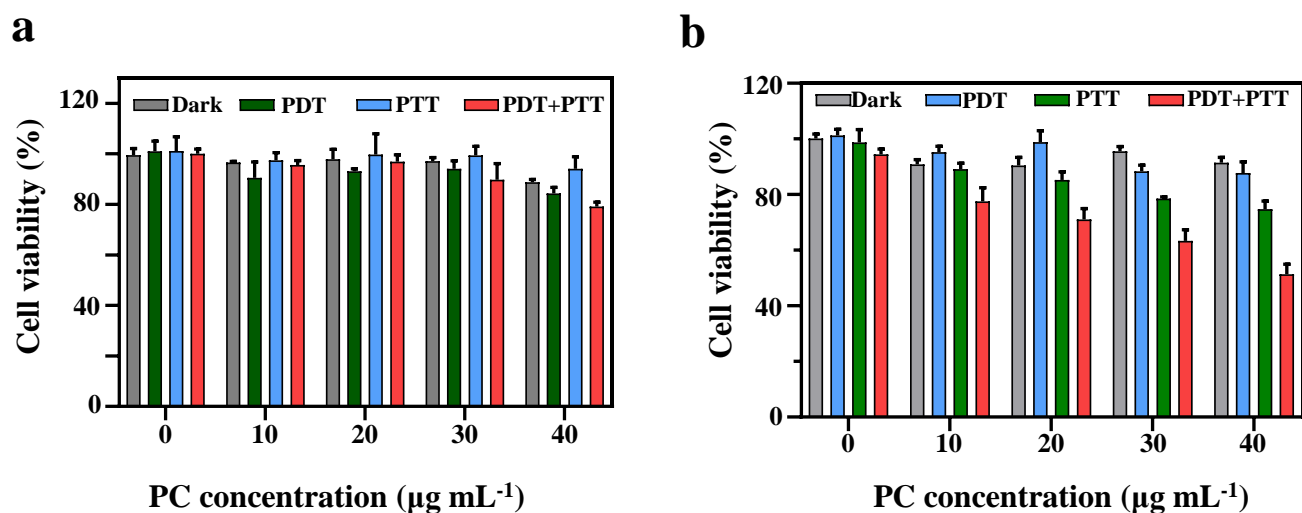


Figure S6 Dark cytotoxicity and in vitro phototherapeutic effects of free PC and PC@BPQDs at various concentrations ([PC] = 0–40 µg mL⁻¹) of MDA-MB-231 cells. Control group: no laser, PDT group: 650 nm Laser (50 mW/cm²), PTT group: 880 nm Laser (1 W/cm²), PDT+PTT group: 650 +880 nm Laser).

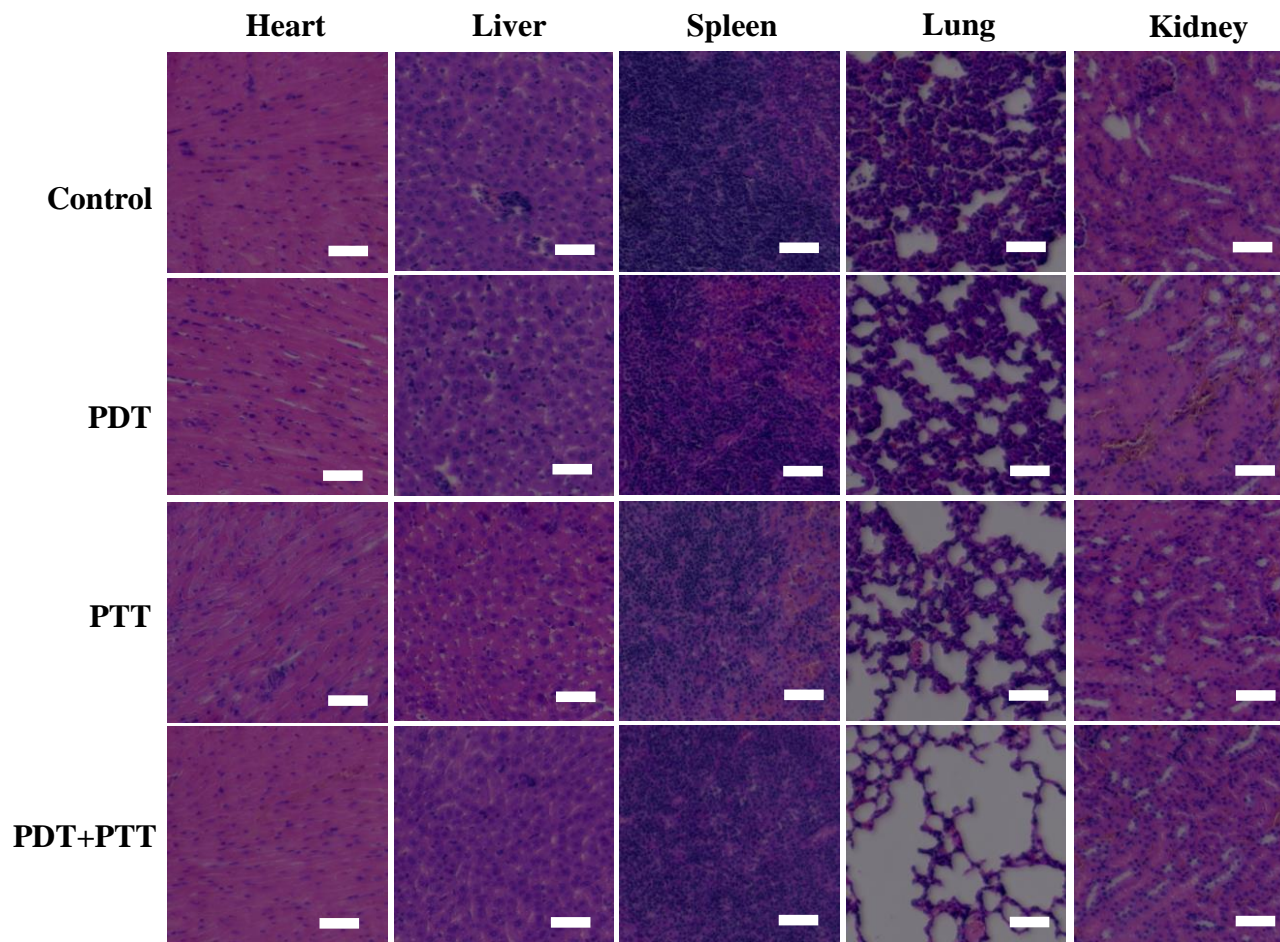


Figure S7 H&E staining images of main organs after 14 d of treatment with different treatments (Control: no laser, PDT: 650 nm Laser (50 mW/cm²), PTT: 880 nm Laser (1 W/cm²), PDT+PTT: 650 +880 nm Laser). Scale bars: 100 μ m.

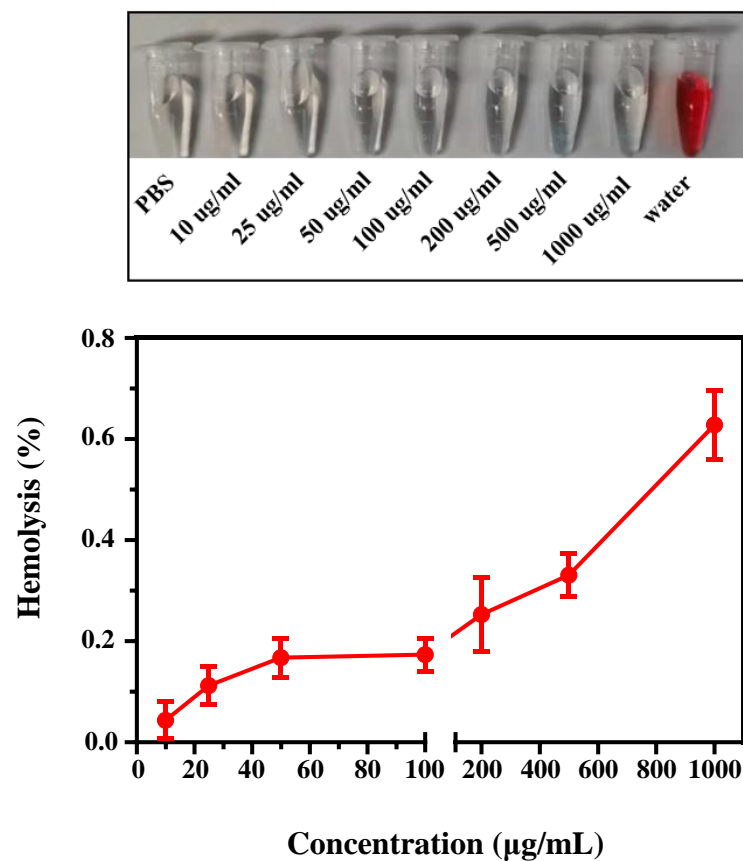


Figure S8 Hemolysis results of RBC (2%, v/v) for PC@BPQD at a series of concentrations.