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Supporting Information

Nanoparticles based on glycyrrhetinic acid modified porphyrin for photodynamic therapy of cancer

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Fig. S1 Synthesis of TPP-NH₂.

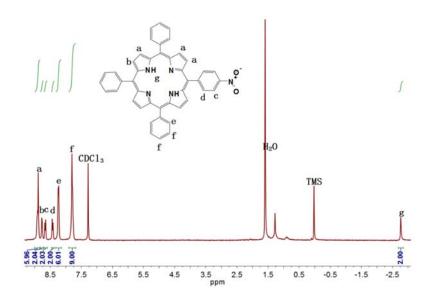


Fig. S2 ¹H NMR spectrum of TPP-NO₂.

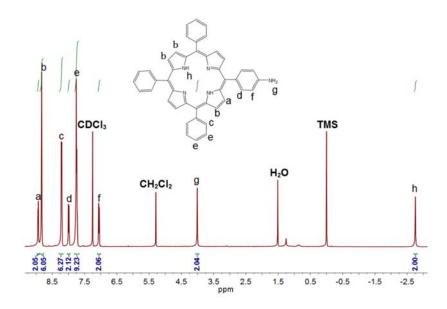


Fig. S3 $^1\mathrm{H}$ NMR spectrum of TPP-NH₂.

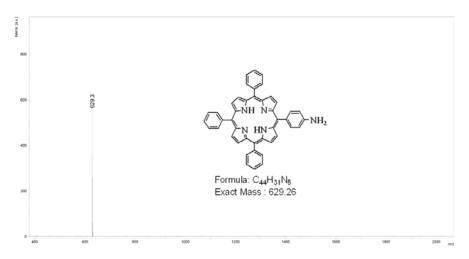


Fig. S4 MALDI-TOF MS of TPP-NH₂.

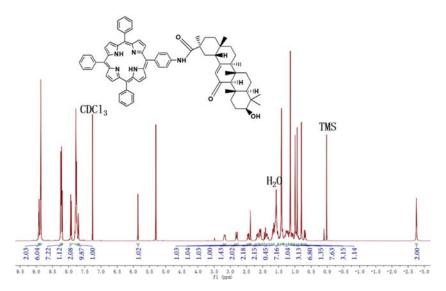


Fig. S5 ¹H NMR spectrum of TPP-GA.

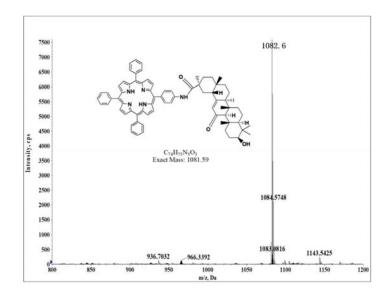


Fig. S6 MALDI-TOF MS of TPP-GA.

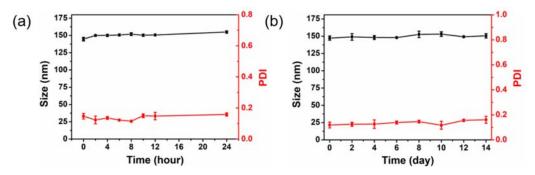


Fig. S7 Time-dependent changes of the diameter and PDI of TPP-GA NPs in (a) PBS with 10% FBS and (b) aqueous solution.

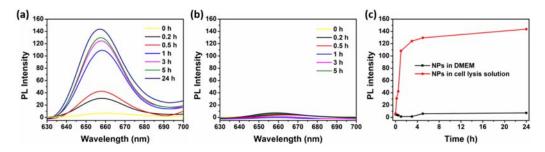


Fig. S8 Time-dependent PL intensity of TPP-GA NPs (5 μ M) in (a) cell lysis solution and (b) DMEM. (c) The PL intensity at 657 nm of TPP-GA NPs (5 μ M) in cell lysis solution and DMEM.

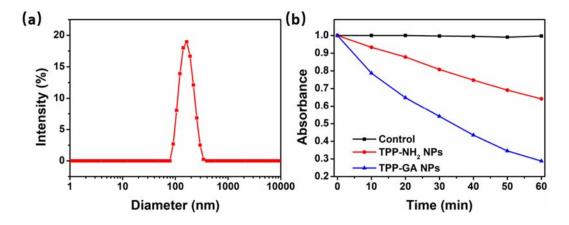


Fig. S9 (a) DLS data of TPP NPs. (b) ROS generation of TPP-GA NPs and TPP NPs detected by ABMDMA. The concentration is both $10 \mu M$.

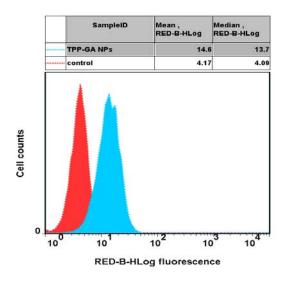


Fig. S10 Flow cytometry of TPP-GA NPs (50 μ M) and control group in HeLa cells.

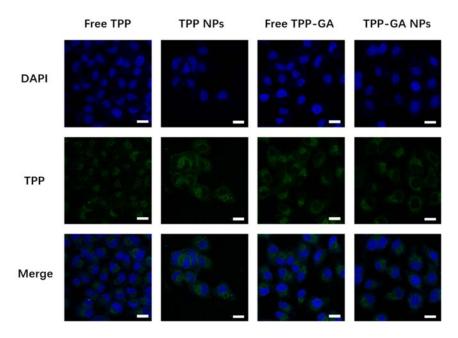


Fig. S11 Cellular uptake images of free TPP, TPP NPs, free TPP-GA and TPP-GA NPs in HeLa cells. Concentration: 10 μ M. Scale bar: 20 μ m.

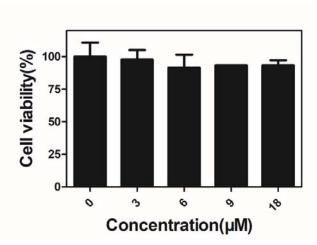


Fig. S12 Cell viabilities of HeLa cells incubated with various concentration of GA for 72 h with irradiation (620 nm, 12 mW/cm²).

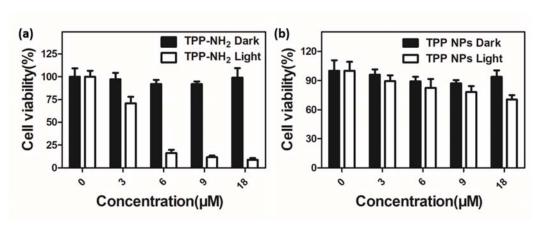


Fig. S13 Cell viabilities of HeLa cells incubated with various concentrations of (a) free TPP and (b) TPP NPs for 72 h with or without irradiation (620 nm, 12 mW/cm²).

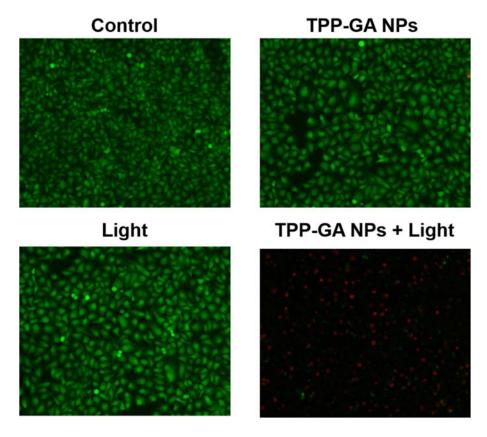


Fig. S14 Live/dead staining of HeLa cells.