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Supplementary Information (SI):

Porphyrin-ferrocene conjugates for photodynamic and chemodynamic Therapy

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Synthetic procedures of TPP- NH_2

Synthetic procedures of TNCF

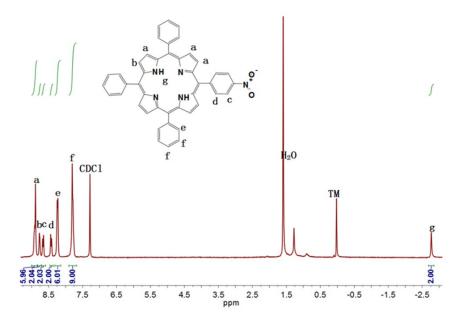


Figure S1. ¹H NMR spectrum of TPP-NO₂.

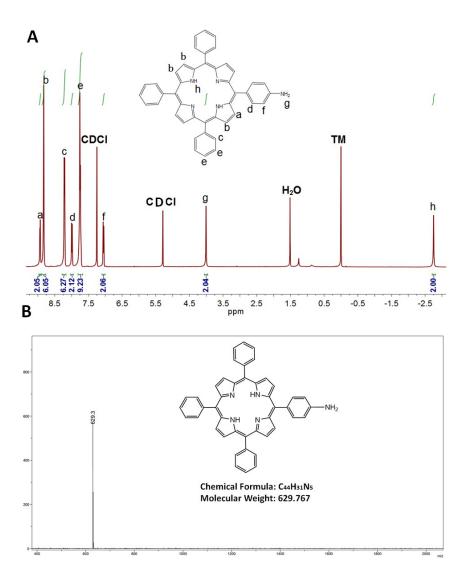


Figure S2. (A) 1H NMR spectrum of TPP-NH₂. (B) MALDI-TOF mass spectrum of TPP-NH₂.

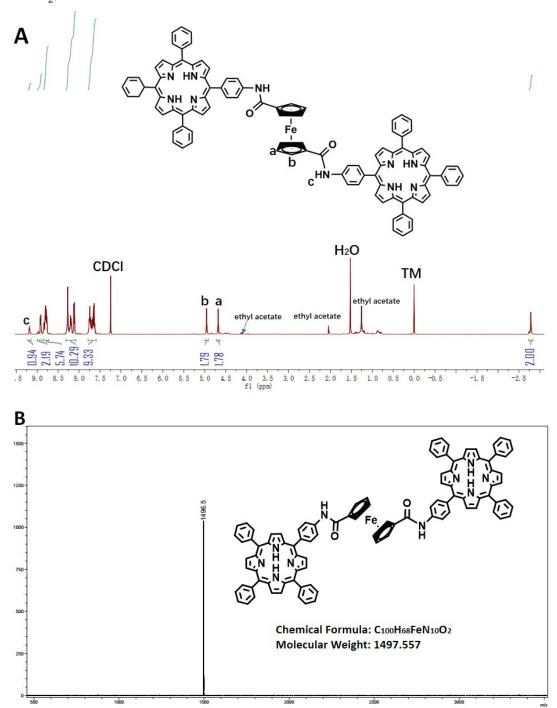


Figure S3. (A) ¹H NMR spectrum of TNCF. (B) MALDI-TOF mass spectrum of TNCF.

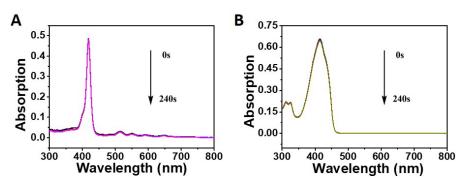


Figure S4. Time-dependent UV-vis absorption spectra of TNCF (A) and DPBF (B) upon irradiation with a 620 nm lamp irradiation (12 mW/cm2) from 0 to 240 s.

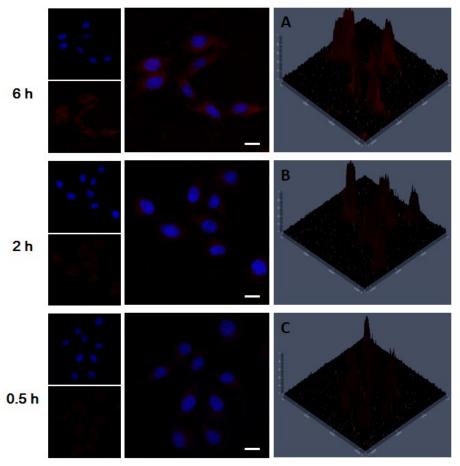


Figure S5. CLSM images of MCF-7 cells incubated with TNCF under the condition of 37° C. For each panel, the images show cell nuclei stained by DAPI (blue), fluorescence of TNCF (red) and overlays of three images. Scale bars, $20 \mu m$. Fluorescence of TNCF and Lyso-tracker Red in cells at $2.5D \mod (A-C)$.

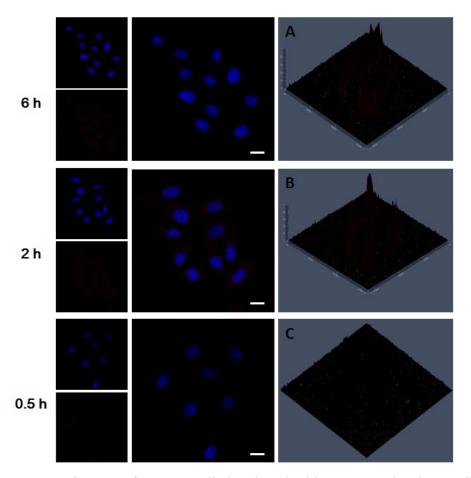


Figure S6. CLSM images of MCF-7 cells incubated with TNCF under the condition of 4°C. For each panel, the images show cell nuclei stained by DAPI (blue), fluorescence of TNCF (red) and overlays of three images. Scale bars, 20 μm. Fluorescence of TNCF and Lyso-tracker Red in cells at 2.5D mode (A-C).

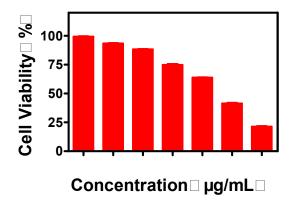


Figure S7. Cell viabilities of MCF-7 cells treated with H₂O₂ at various concentrations.

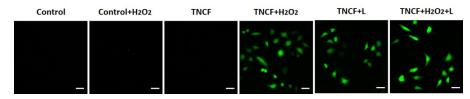


Figure S8. Generation of ROS in vitro (HeLa) under different treatments denoted by the fluorescence of DCF. Scale bars, $20~\mu m$.