

## Supporting Information

### Sorafenib and tetrakis (4-carboxyphenyl) porphyrin assembled nanoparticles for synergistic targeted chemotherapy and sonodynamic therapy of hepatocellular carcinoma

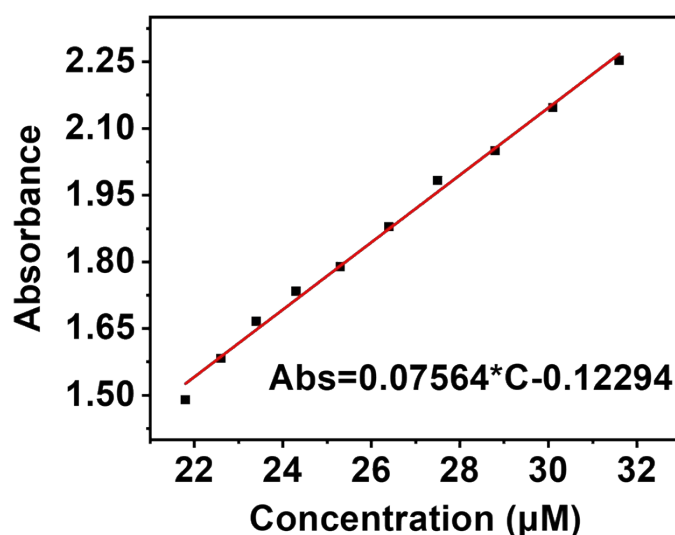
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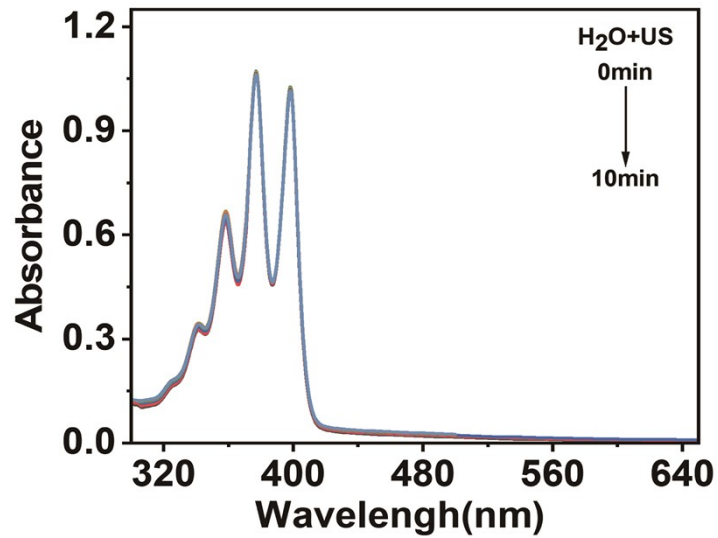
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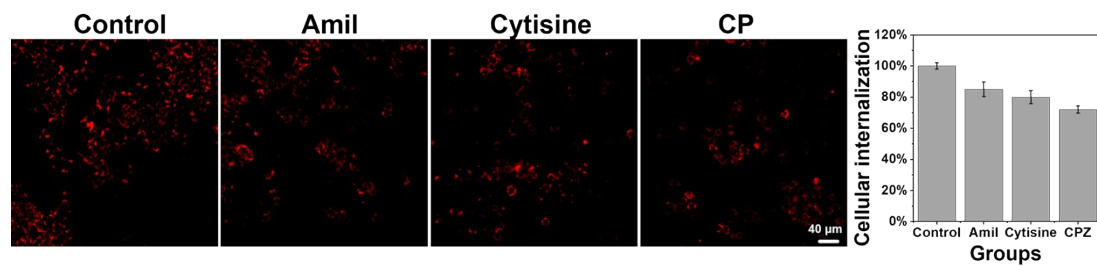


**Fig. S1** The absorbance and concentration relationship of TCPP. (Abs represents absorbance of STP NPs, C represents the concentration of STP NPs)

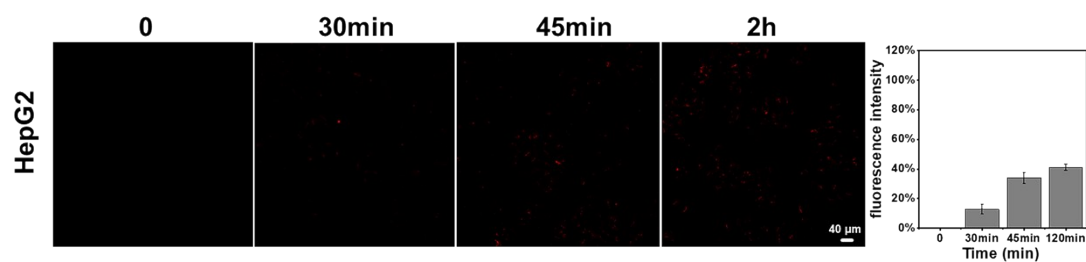




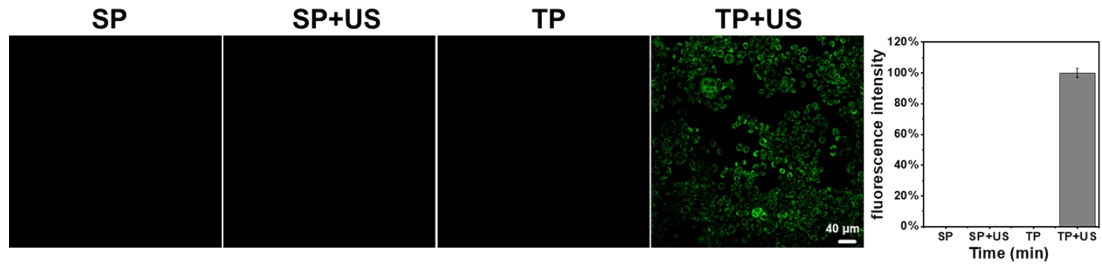
**Fig. S6** UV-vis absorption spectra of ABDA- $\text{Na}_2$  in the absence of STP NPs after US irradiation for different times.



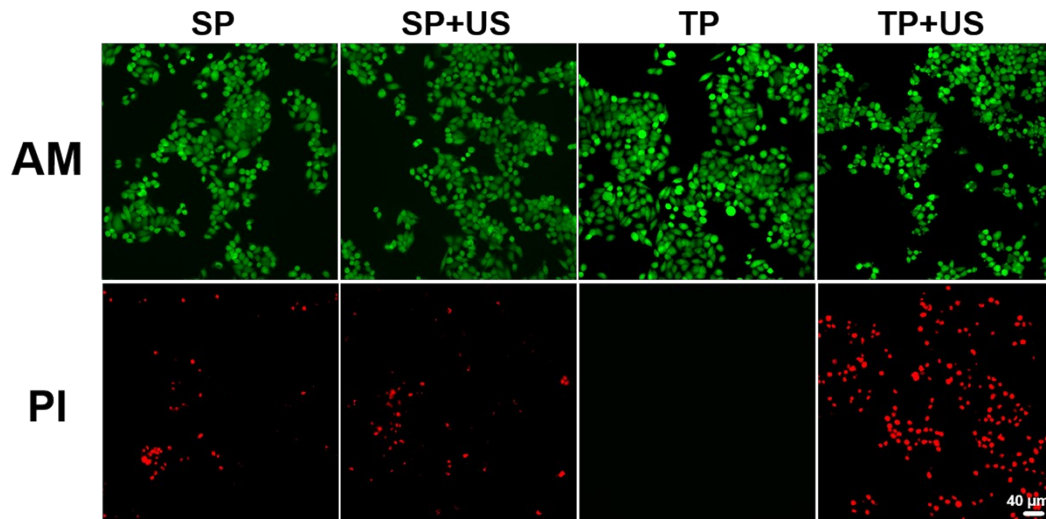
**Fig. S7** Inverted microscope images displaying intracellular uptake of STP NPs (red fluorescence).



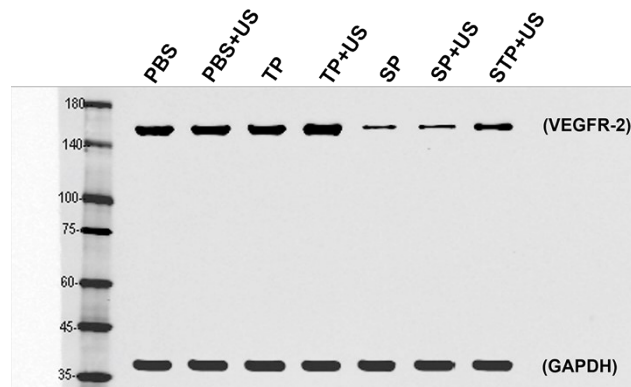
**Fig. S8** Incubation time-dependent fluorescent images of HepG2 cells in the presence of SOR-TCPP@PEG NPs.



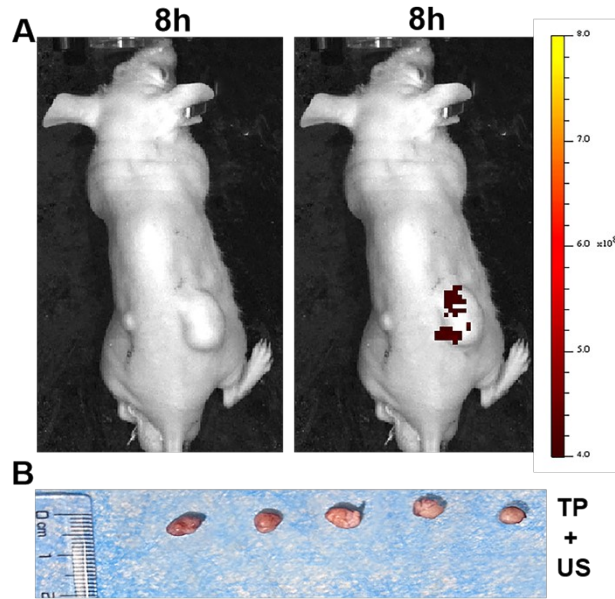
**Fig. S9** Fluorescent images of O22-HepG2 cells under different treatments: SP, SP + US, TP, and TP + US.



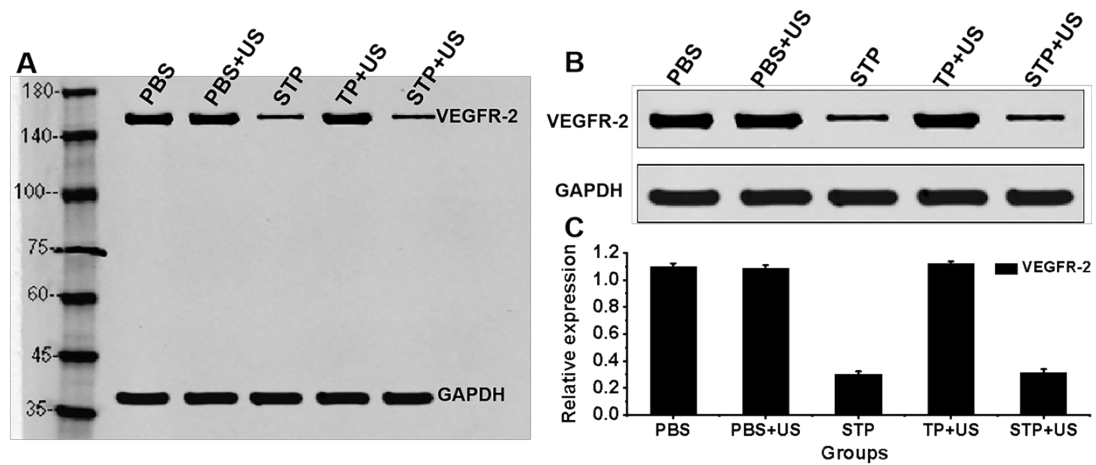
**Fig. S10** Calcein-AM- and PI-stained HepG2 cells after different treatments: SP, SP + US, TP, and TP + US.



**Fig. S11** The full gel and blot image of western blot.



**Fig. S12** (A) Fluorescence imaging of SOR-TCPP@PEG NPs within mouse tumor at 8 h. (B) Tumor photographs of nude mice were taken after TP + US treatments.



**Fig. S13** Western blotting was used to analyze the expression of VEGFR-2 in tumor tissues after different treatments.