

## Supporting information

### In vivo photoacoustic image-guided tumor photothermal therapy and real-time temperature monitoring using a core-shell polypyrrole@CuS nanohybrid

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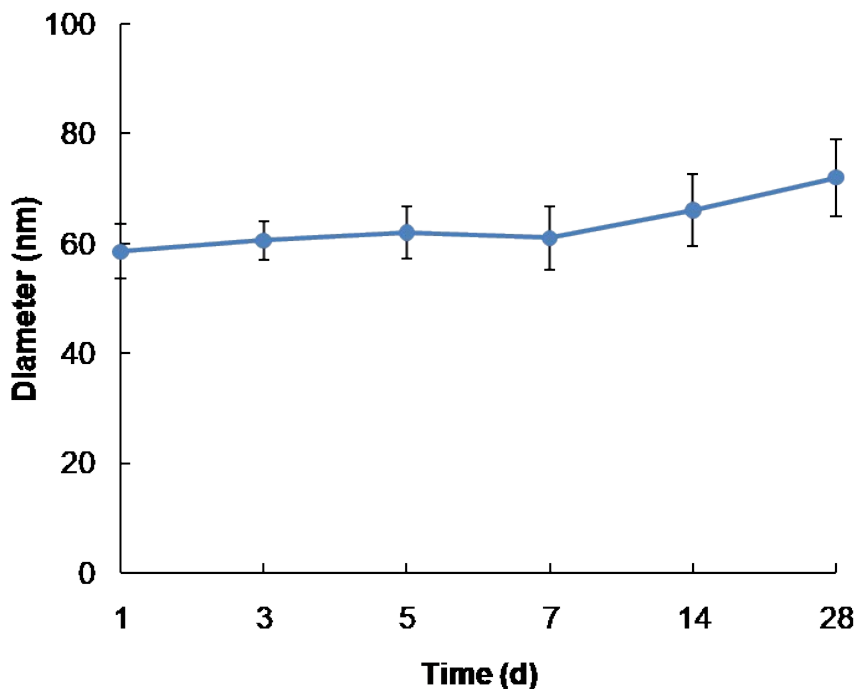


Fig.S1 Diameter of polypyrrole@CuS nanohybrid in 28 days

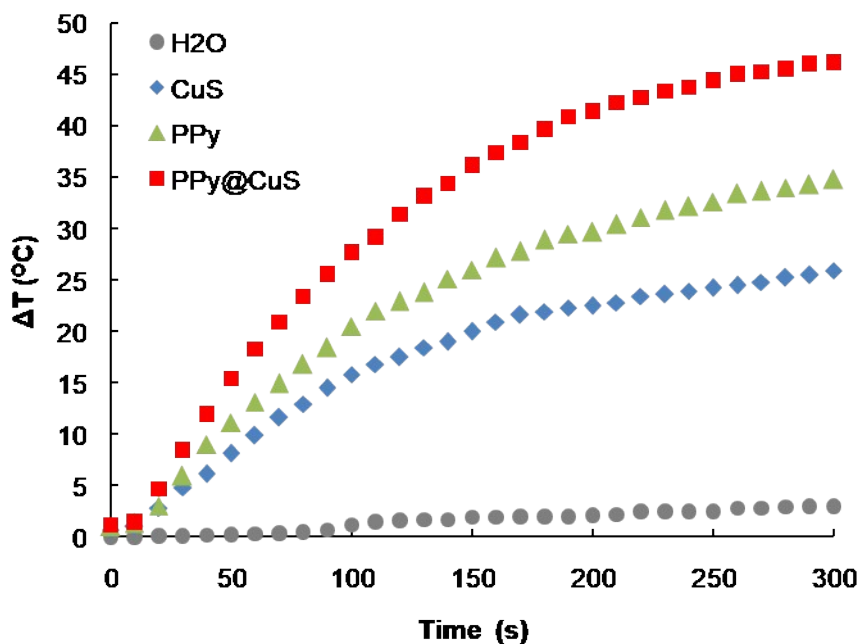


Fig.S2 Temperature elevation of PPy@CuS NPs and CuS, PPy NPs aqueous dispersions under 2 W 808 nm NIR laser irradiation for 300 s.

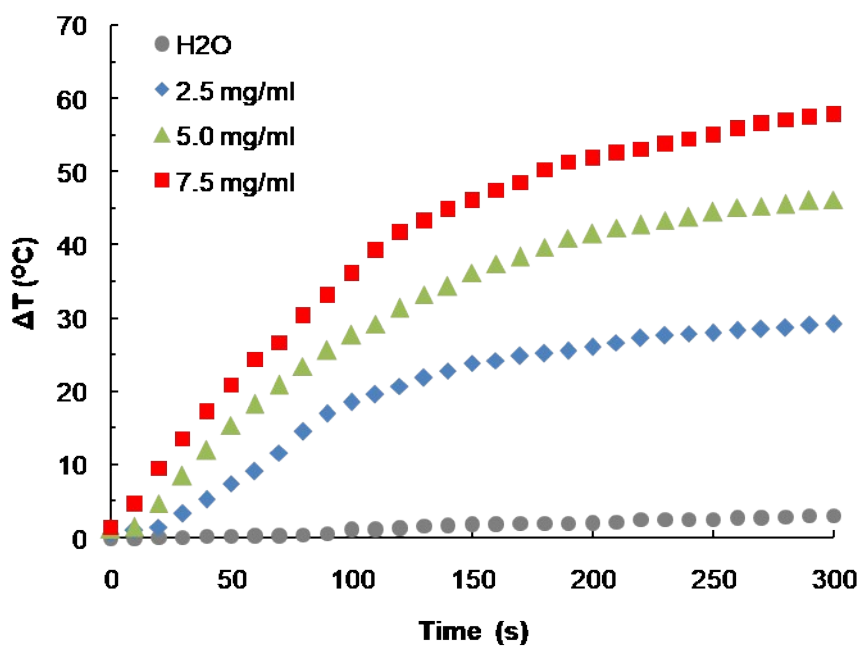


Fig.S3 Temperature elevation of PPy@CuS NPs aqueous dispersions with different concentrations under 2 W 808 nm NIR laser irradiation for 300s.

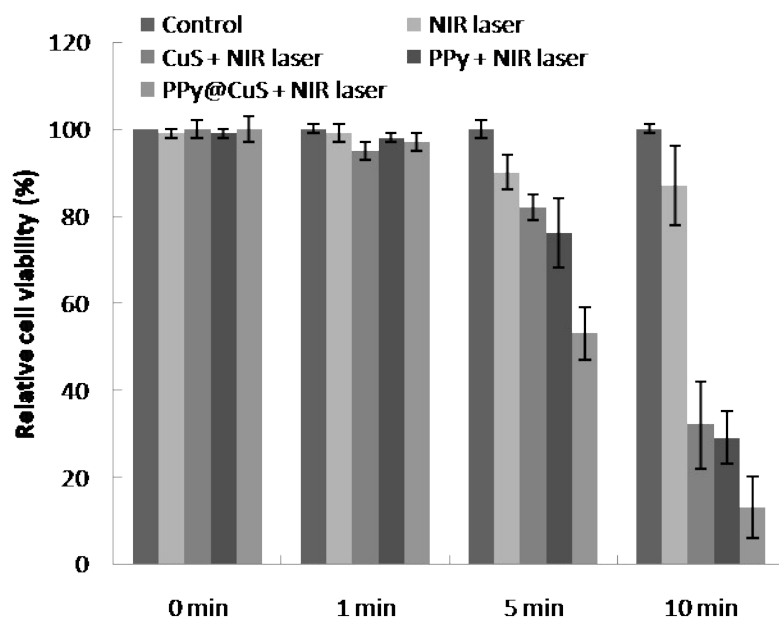


Fig.S4 Relative cell viability of MDA-MB-231 cells co-incubated with different NPs under 808 nm laser (2W) irradiation for 0-10 mins.

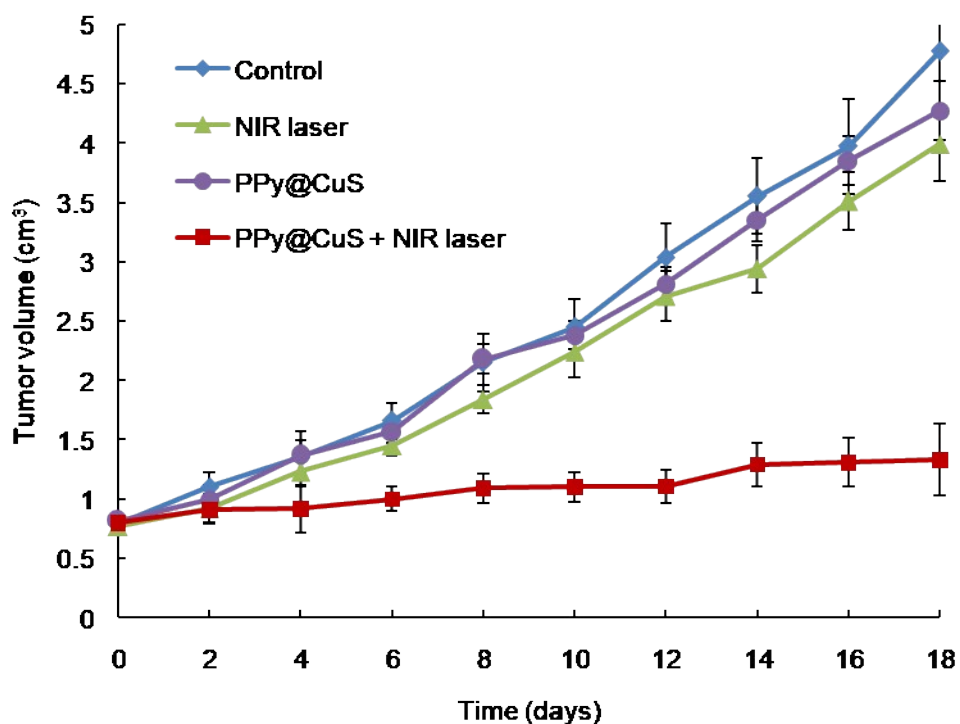


Fig.S5 Tumor-volume curves after the injection of PPy@CuS NPs followed by NIR laser irradiation in vivo

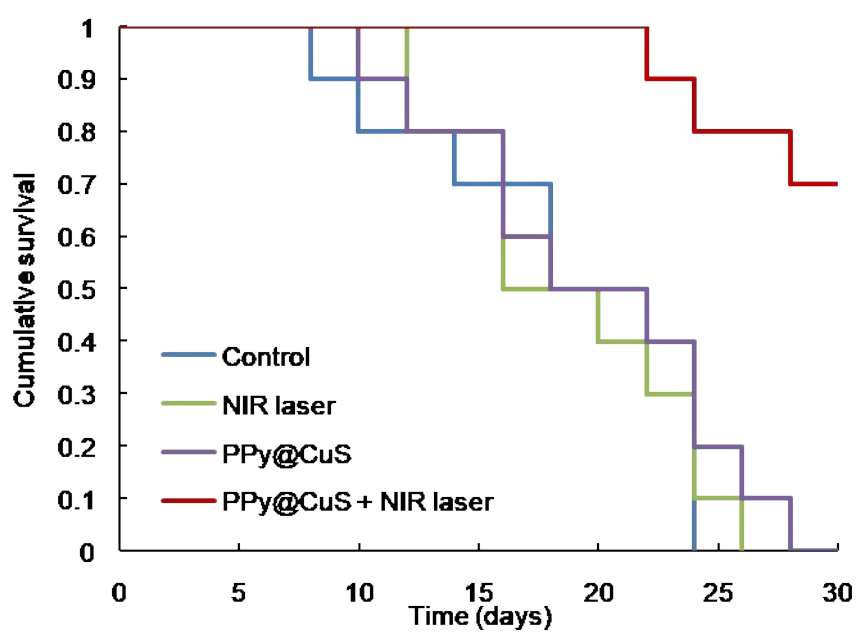


Fig.S6 Cumulative survival of animals after intravenous administration of PPy@CuS NPs and NIR laser irradiation