Electronic Supporting Information (ESI)

Enhanced Anti-tumor Efficacy of Hyaluronic Acid Modified Nanocomposites Combined with Sono-chemotherapy against Subcutaneous and Metastatic Breast Tumors

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Supplementary Figures

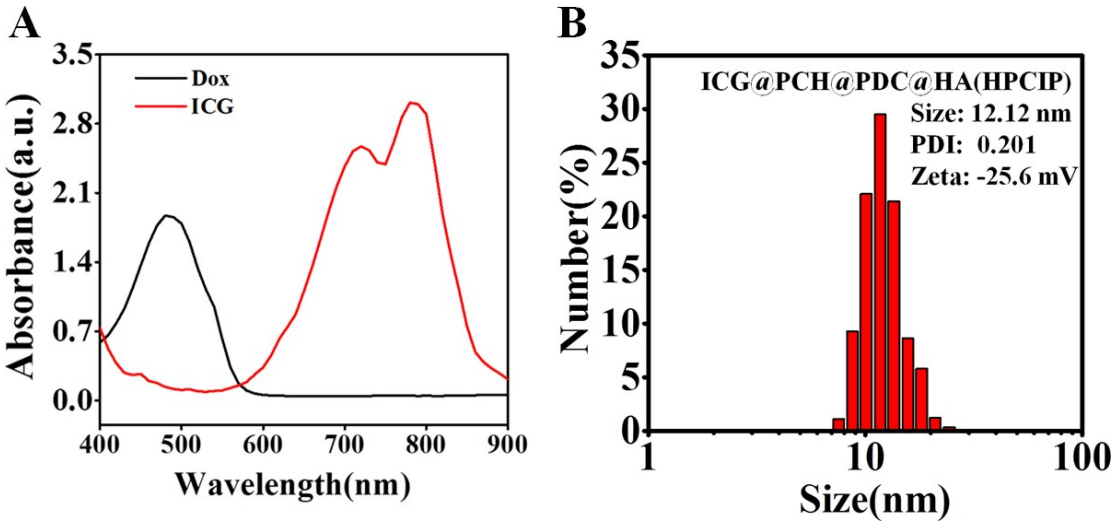

Fig. S1 (A) UV-vis-NIR spectra for DOX and ICG; (B) The average size distribution and zeta potential of HPCIP particles.

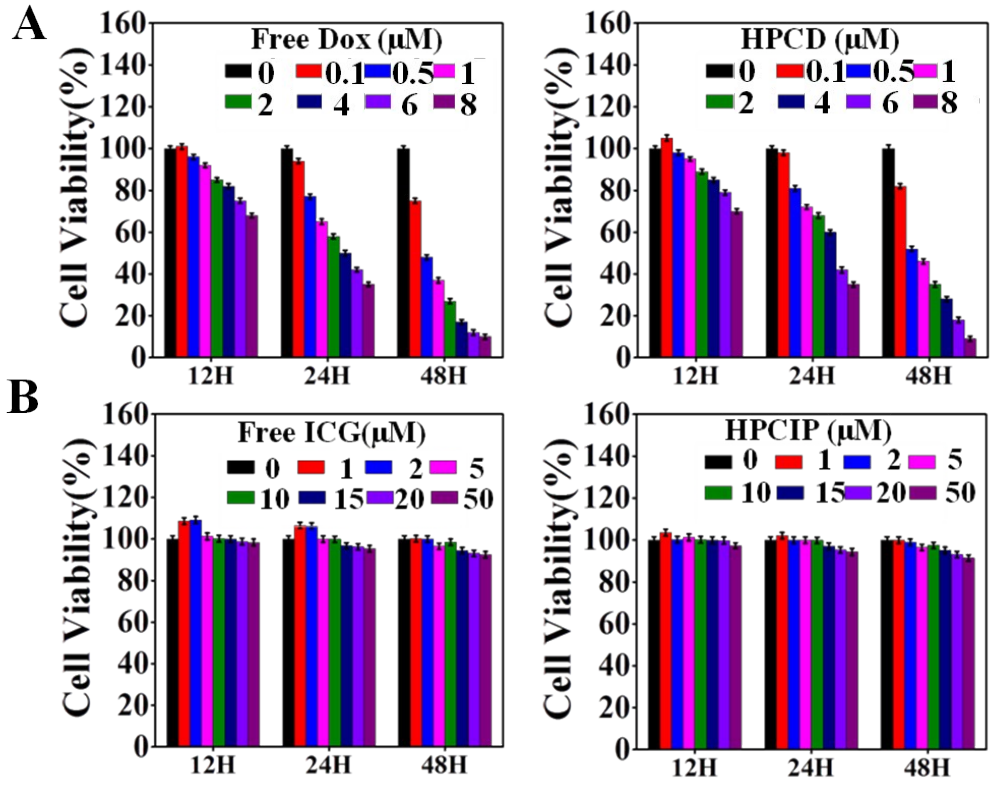

Fig. S2 Dose-and time-dependent cytotoxicity of varying drug formilations to 4T1 cells.

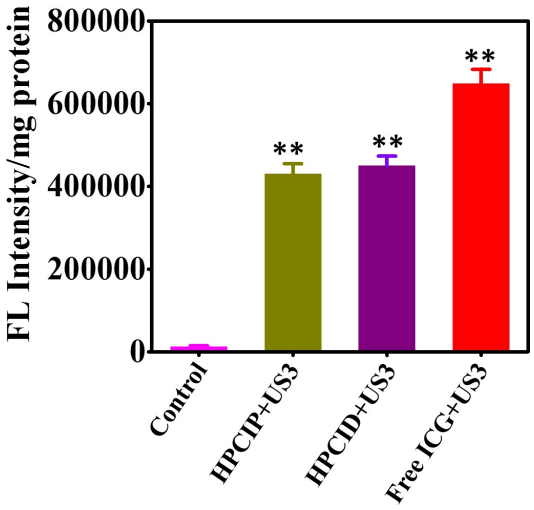

Fig. S3 ROS levels in ultrasonically stimulated 4T1 cells. The fluorescence intensity of DCF was validated spectrophotometrically at 525 nm.

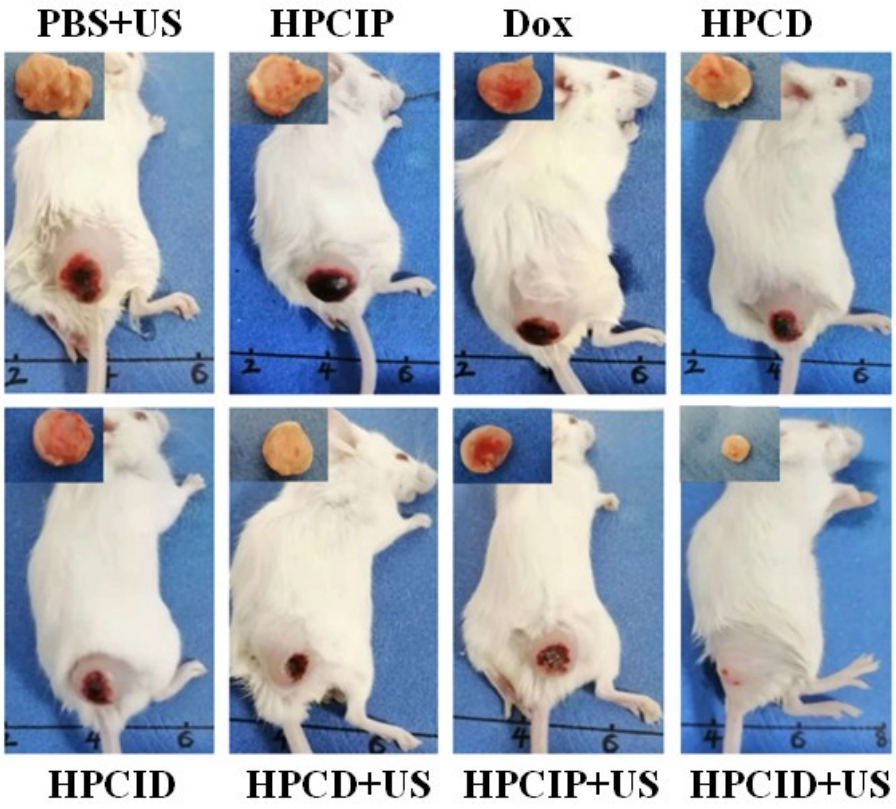

Fig. S4 Images of representative tumors excised and mice from each group at 21 days after treatment.

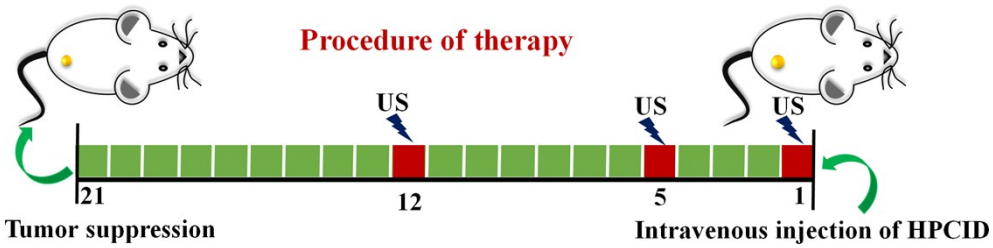

Fig. S5 In vivo therapeutic scheme of SDT on mice tumor xenograft. Each group received three repeated SDT treatments at day = 1, 5 and 12 after injected.

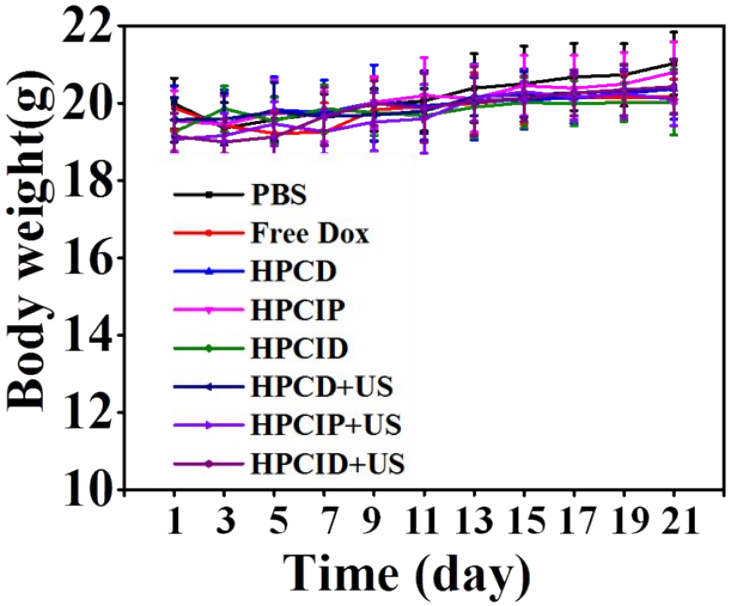

Fig. S6 Evaluation of side effects after therapeutic treatment. Plot of mouse body weight versus the number of days post the different treatments.

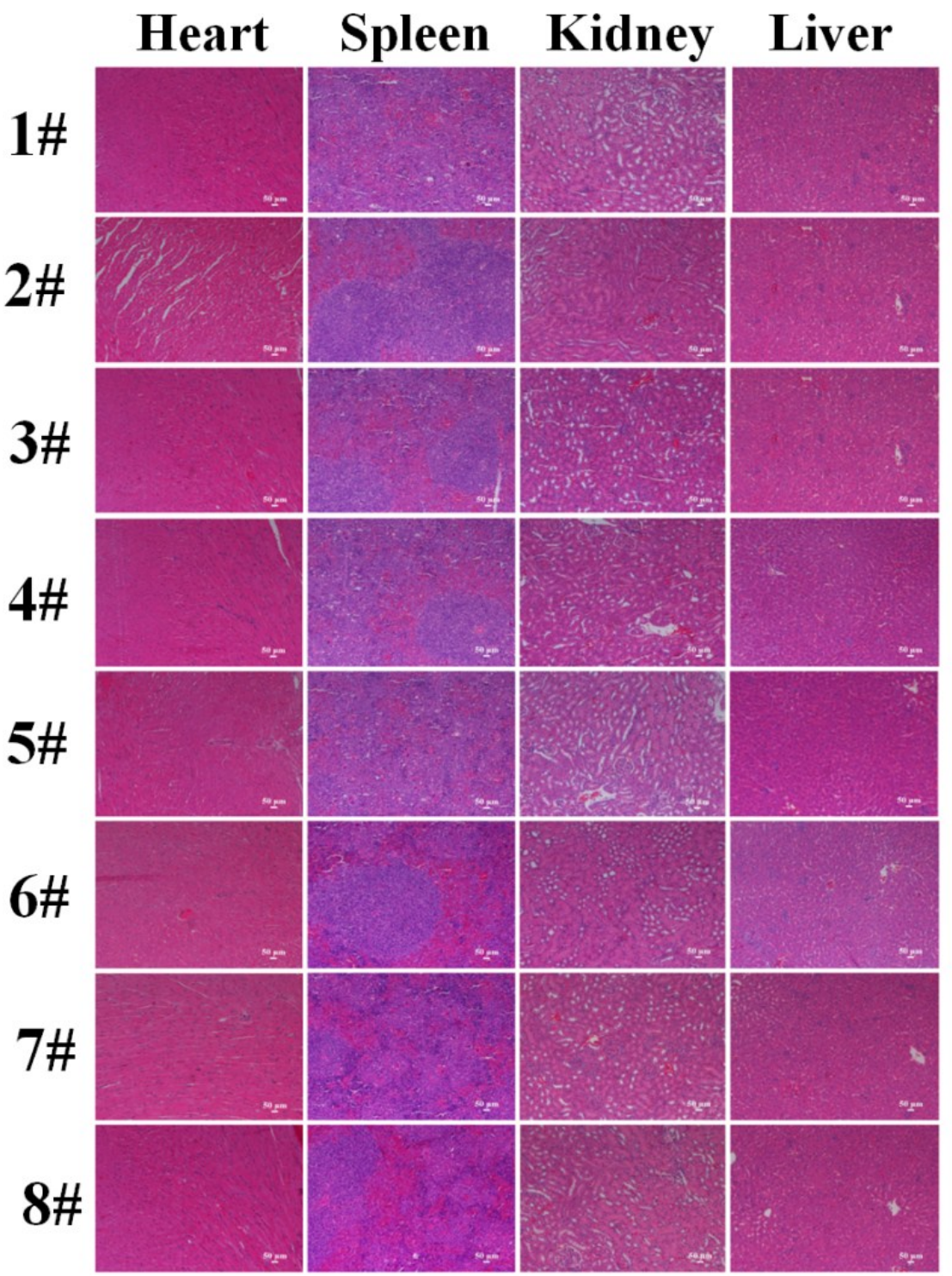

Fig. S7 Evaluation of side effects after therapeutic treatment. Effect of the different treatments on the structural changes of the major organs (heart, liver, spleen, and kidney) in 4T1-bearing mice, visualized by H&E staining and observed under an optical microscope. (1#: PBS+US , 2#: Free Dox; 3#: HPCD; 4#: HPCIP; 5#: HPCID; 6#:HPCD + US; 7#: HPCIP+ US; 8#: HPCID+US)

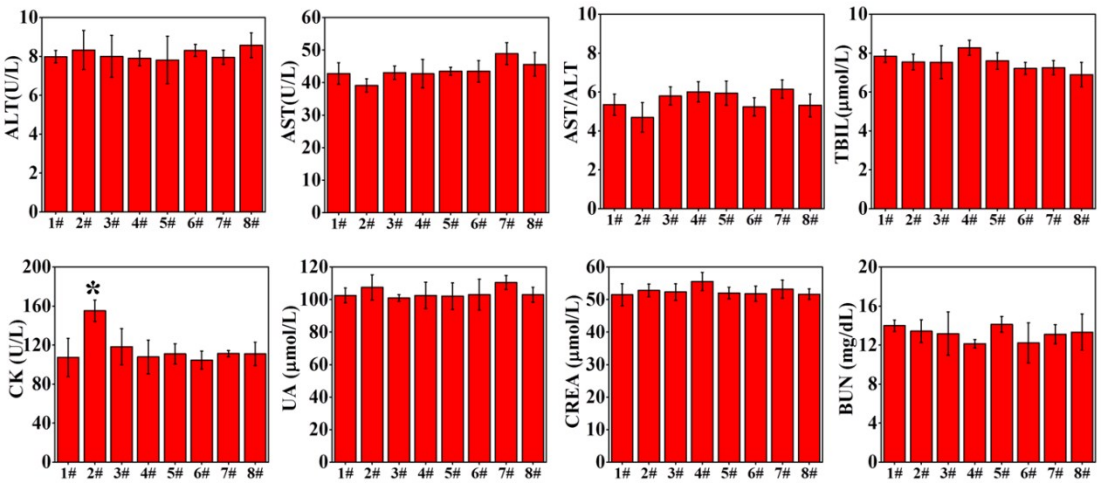

Fig. S8 The influence of heart, liver and kidney function after different treatment using serum biochemical analysis. *P<0.05, significant difference of the Dox group compared with the other groups. (1#: PBS+US , 2#: Free Dox; 3#: HPCD; 4#: HPCIP; 5#: HPCID; 6#:HPCD + US; 7#: HPCIP+ US; 8#: HPCID+US).