

Supplementary Information

MnO₂/Ce6 microbubble-mediated hypoxia modulation for enhancing sono-photodynamic therapy against triple negative breast

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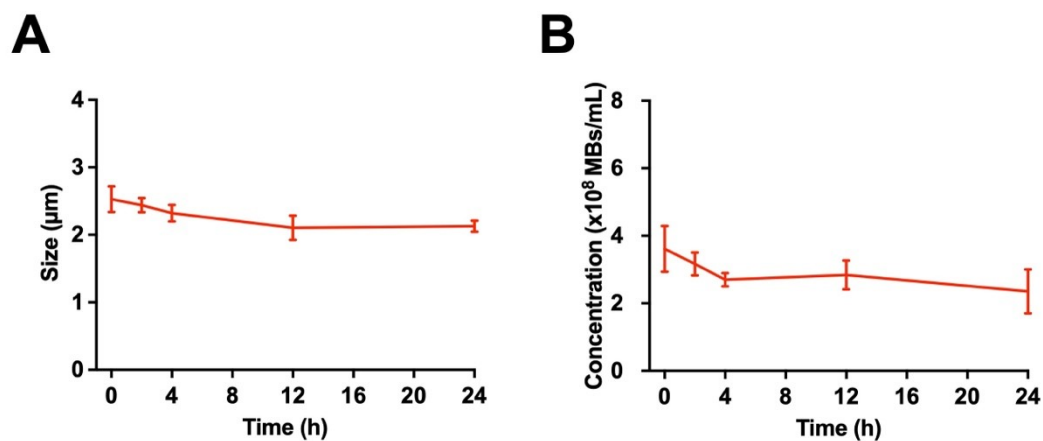


Fig. S1 Stability of MnO₂/Ce6@MBs. (A) Size of MnO₂/Ce6@MBs within 24 hours. (B) Concentration of MnO₂/Ce6@MBs within 24 hours.

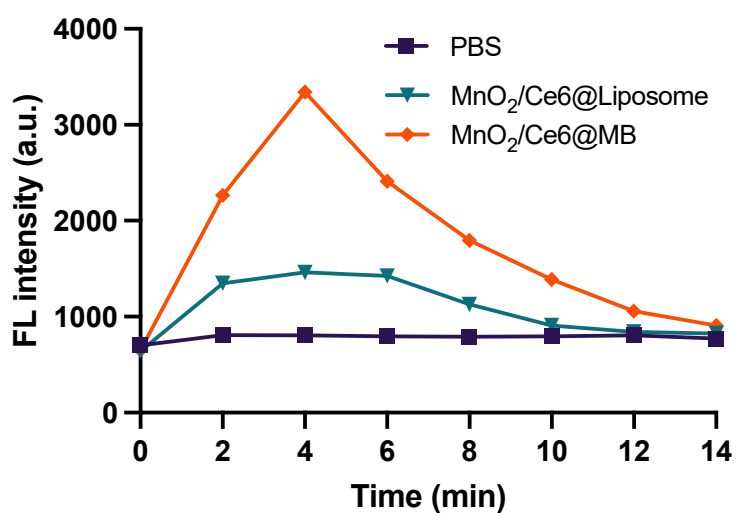


Fig.S2 The SOSG intensity-time curve of different solutions under SPDT treatment.

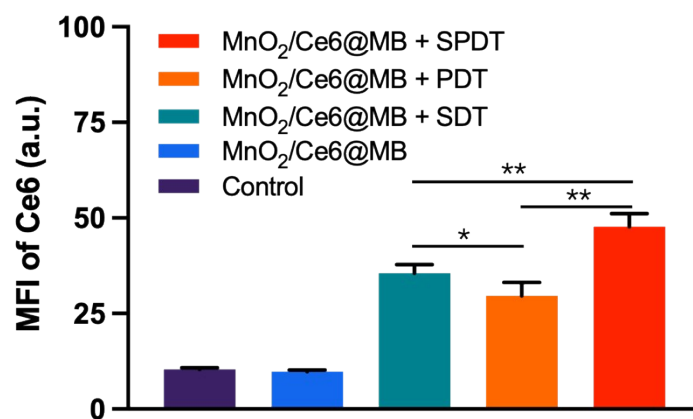


Fig. S3 Mean fluorescence intensity (MFI) of Ce6. * $p < 0.05$, ** $p < 0.01$.

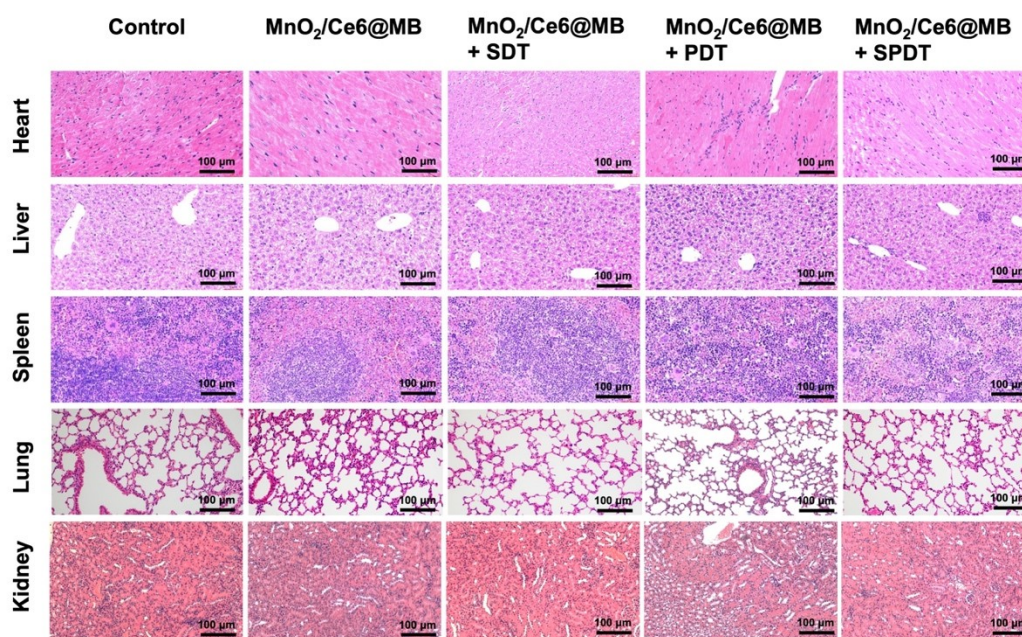


Fig. S4 H&E staining of main organs from 4T1-tumor bearing mice on the 14th day after various treatments. Scale bar = 100 μm .

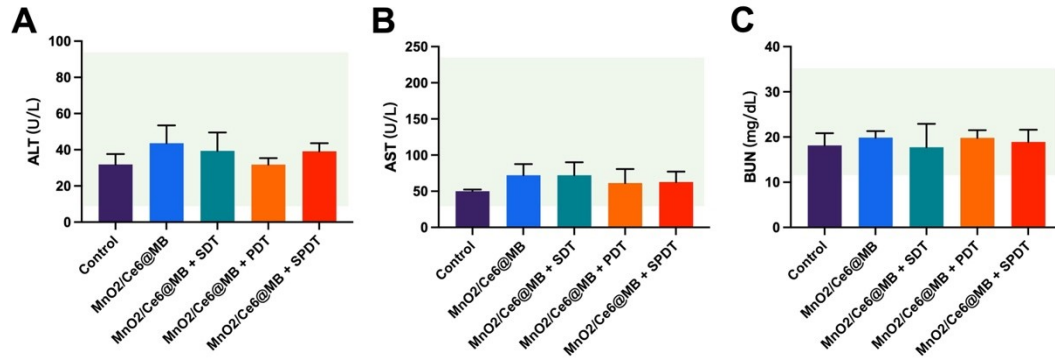


Fig. S5 ALT, AST, and BUN examinations from 4T1-tumor bearing mice on the 14th day after various treatments. The green rectangular shows the reference ranges of normal mice.

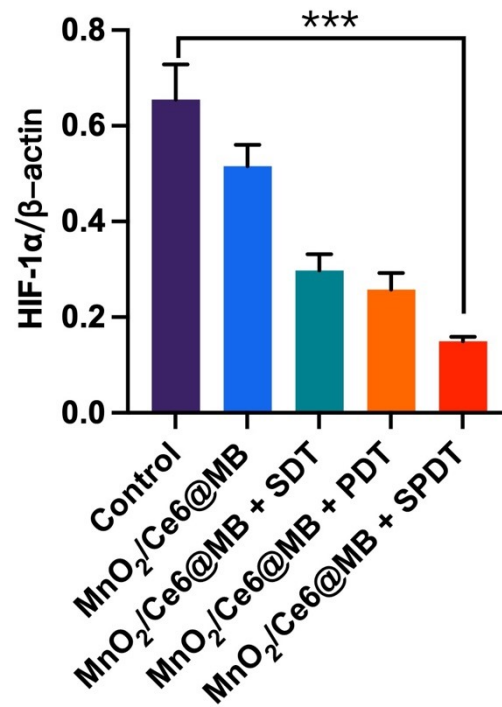


Fig. S6 Semiquantification of western blot assay of HIF-1 α protein by ImageJ software. *** $p < 0.005$.

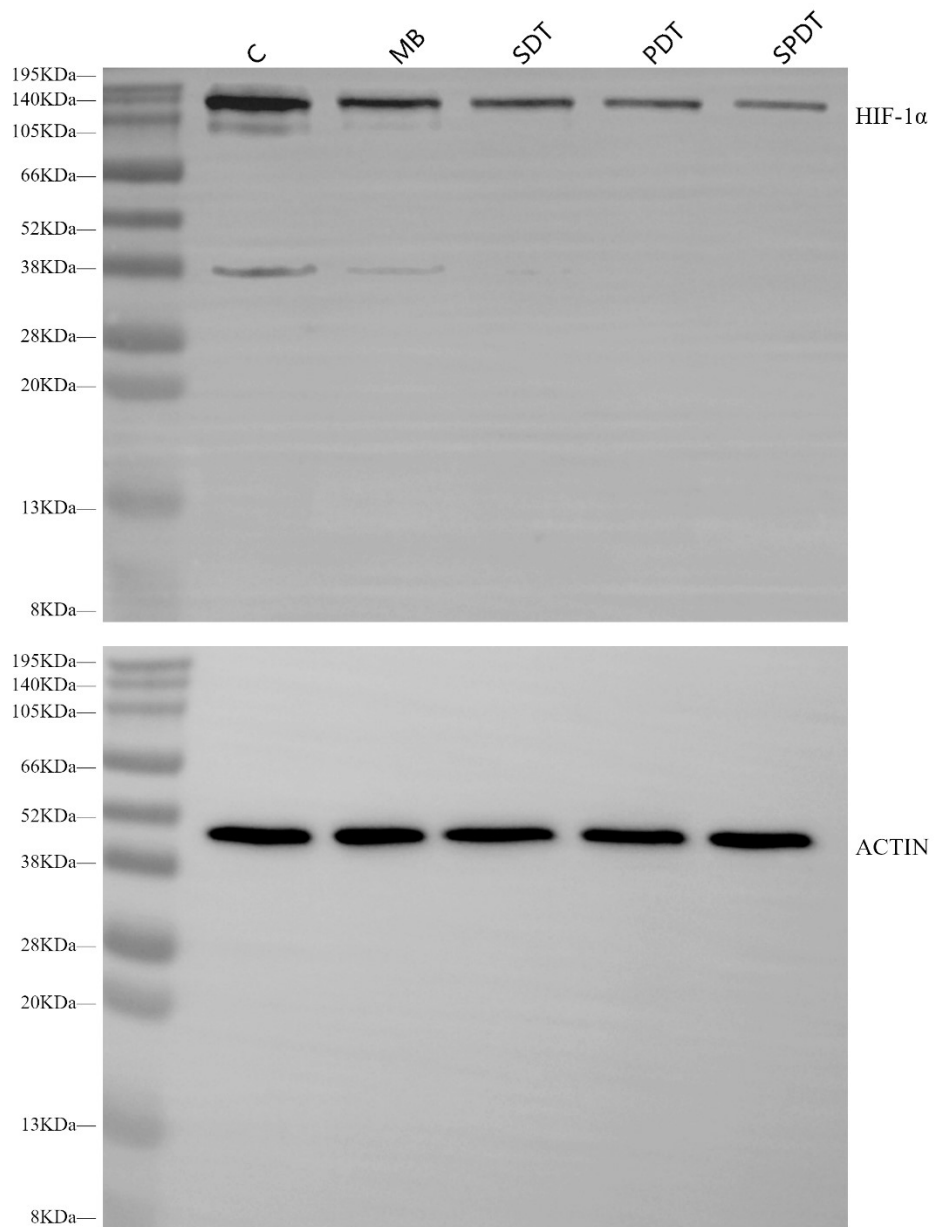


Fig. S7 Western blot assay of HIF-1 α protein. (G) ELISA assay of HIF-1 α protein.