

Figure S1. Schematic illustration of multi-scale optical-resolution photoacoustic microscopy and acoustic-resolution photoacoustic tomography.

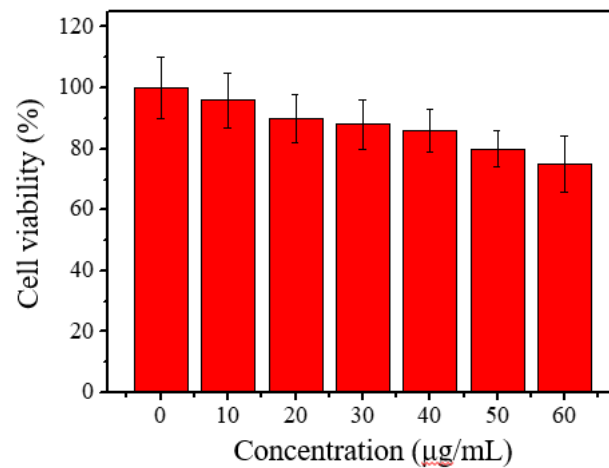


Figure S2. Biototoxicity test.

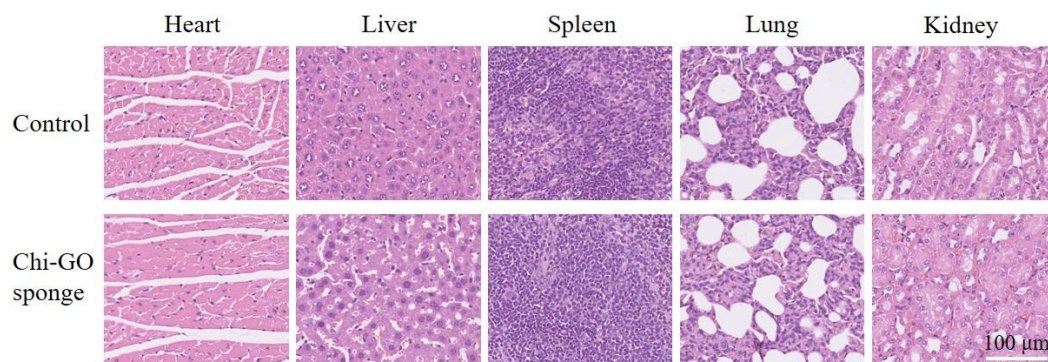


Figure S3. *In vivo* toxicity study of hemostatic sponge. H&E-stained images of major organs including heart, liver, spleen, lung, and kidney collected from mice sacrificed 7 days.

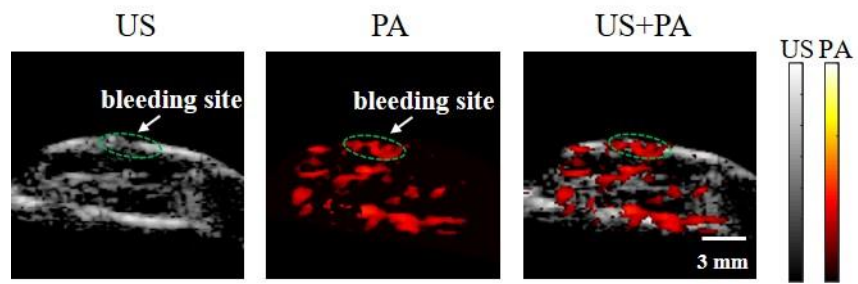


Figure S4. Ultrasound/Photoacoustic dual-modality imaging of the bleeding site after hemostatic treatment.