

Supplementary Information

Functionalized boron nanosheets as an intelligent nanoplatform for synergistic low-temperature photothermal therapy and chemotherapy

Received 20th March 2020,
Accepted 00th January 20xx

DOI: 10.1039/x0xx00000x

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† Electronic Supplementary Information (ESI) available. See DOI: 10.1039/x0xx00000x

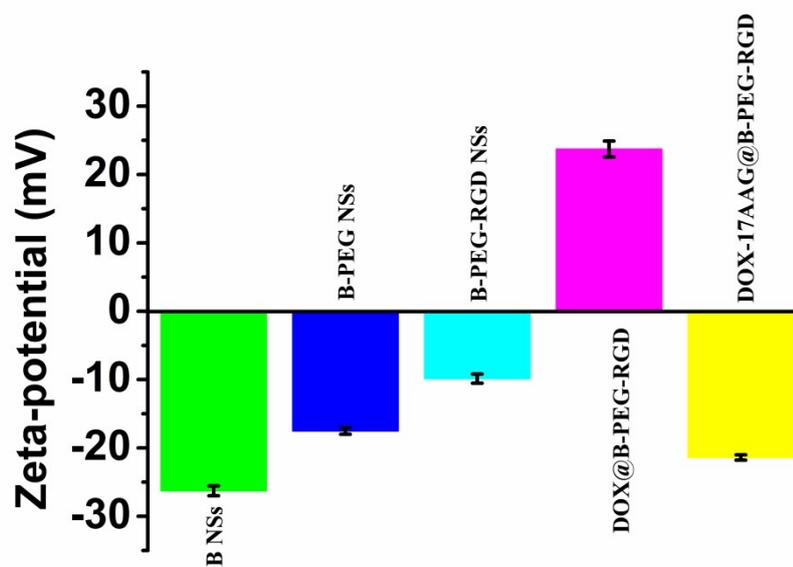


Figure S1. Zeta potential data of different samples.

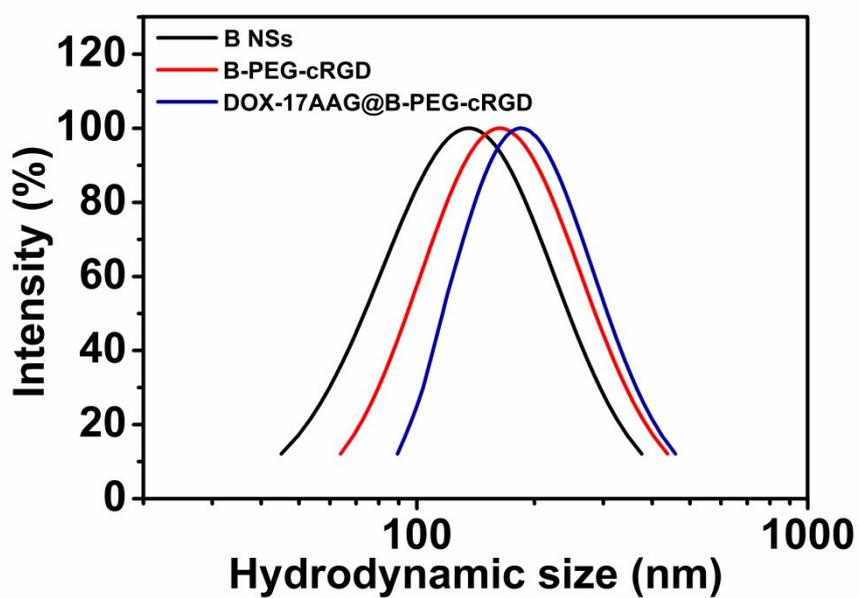


Figure S2. Hydrodynamic diameters of the B NS, B-PEG-cRGD, and DOX-17AAG@B-PEG-cRGD nanoparticles

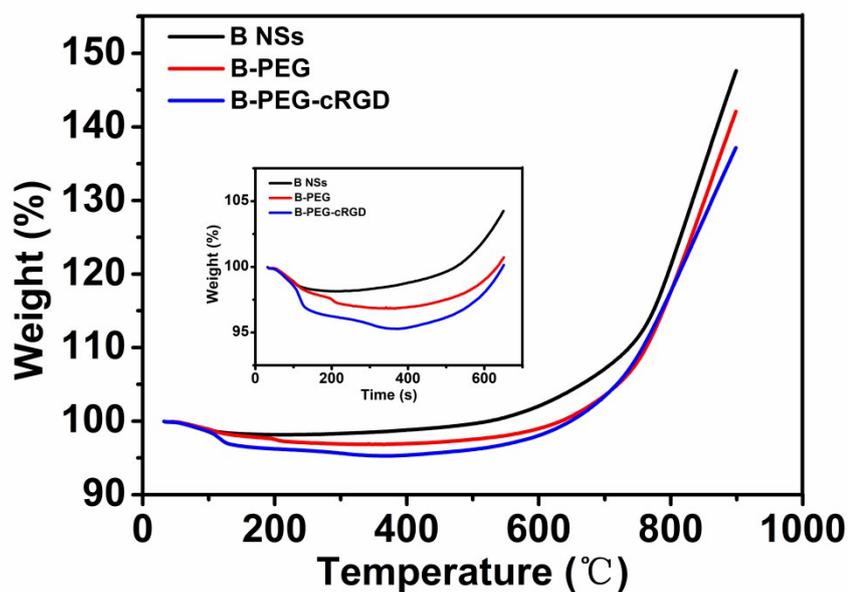


Figure S3. The thermogravimetric curves of B NSs, B-PEG, and B-PEG-cRGD under N₂ flow. The mass increase starting at ca. 400 °C corresponds to oxidation to form B₂O₃.

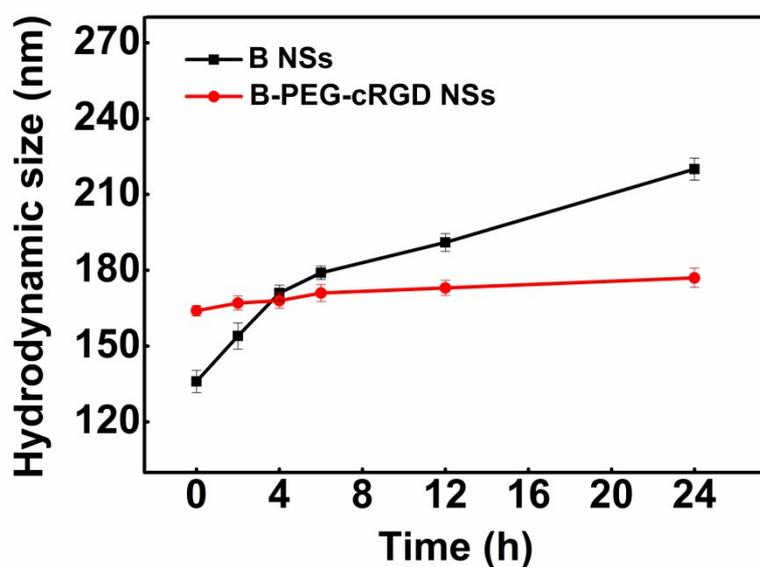


Figure S4. The hydrodynamic size of B NSs and B-PEG-cRGD dispersed in PBS for 24 h.

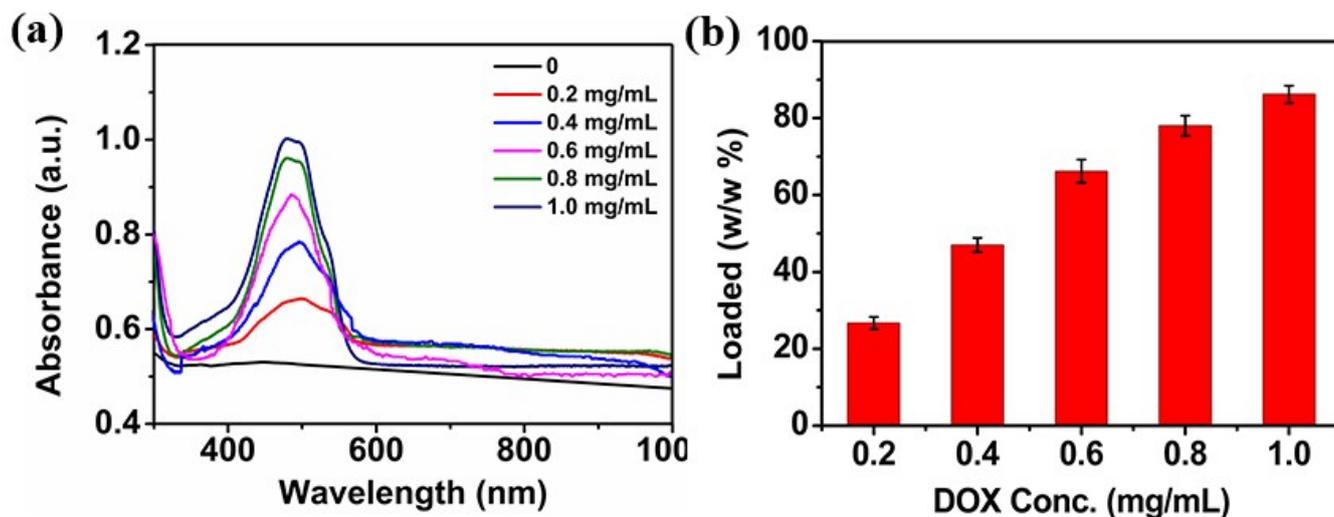


Figure S5. (a) UV-vis absorption spectra of DOX@B-PEG-cRGD with increasing DOX feeding concentrations. (b) DOX loading capacities on B-PEG-cRGD NSs (w/w %) at different DOX feeding concentrations.

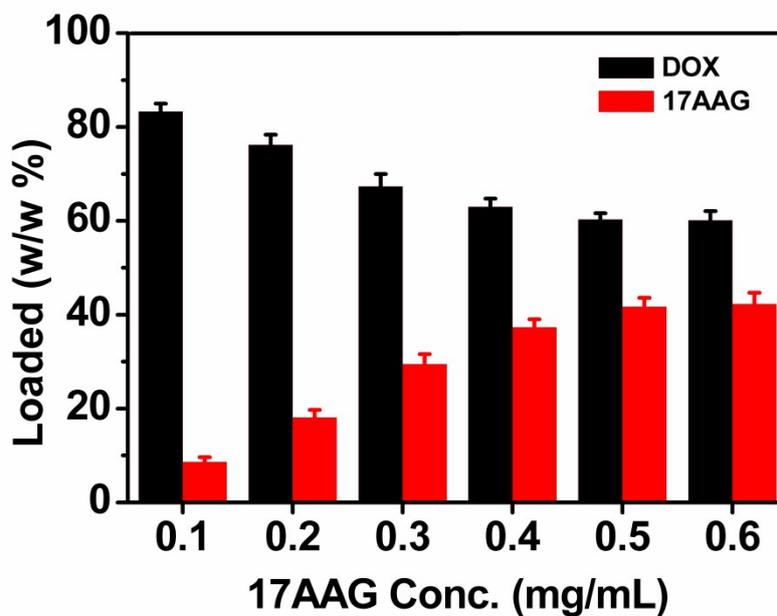


Figure S6. DOX and 17AAG capacities on B-PEG-cRGD NSs (w/w %) at different 17AAG feeding concentrations.

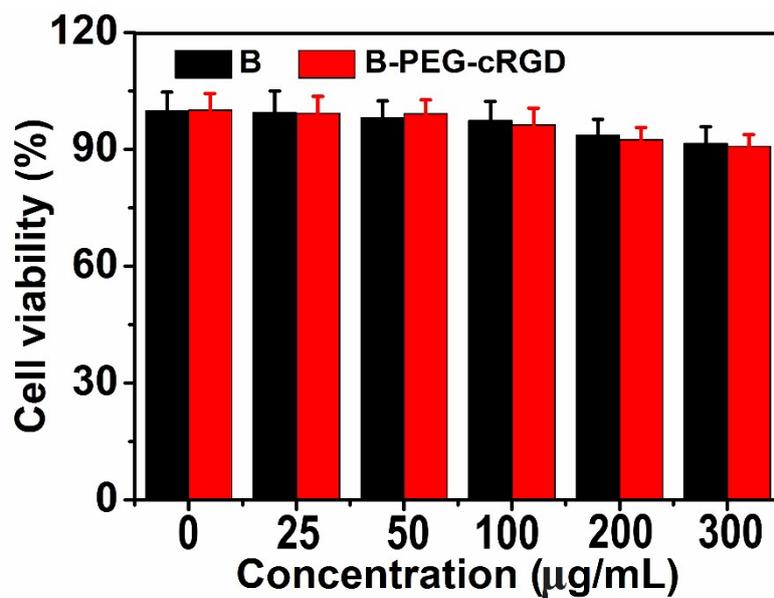


Figure S7. Relative cell viability of MDA-MB-231 cells after treatment with different concentrations of B NSs and B-PEG-cRGD NSs. Results are shown as mean \pm S.D. from three independent experiments with 5 replicates in each.

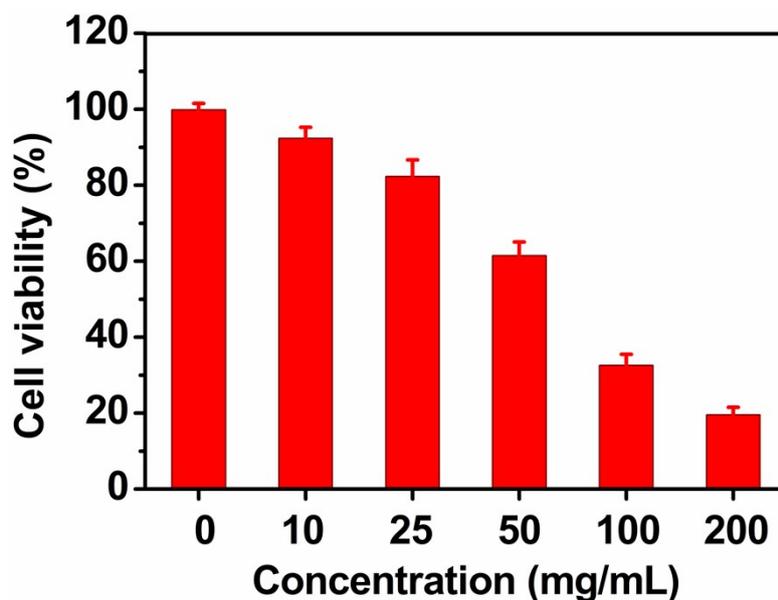


Figure S8. Relative cell viability of MDA-MB-231 cells after treatment for 24 h at different B-PEG NSs concentrations under 808 nm irradiation (1 W cm⁻²) for 10 min.

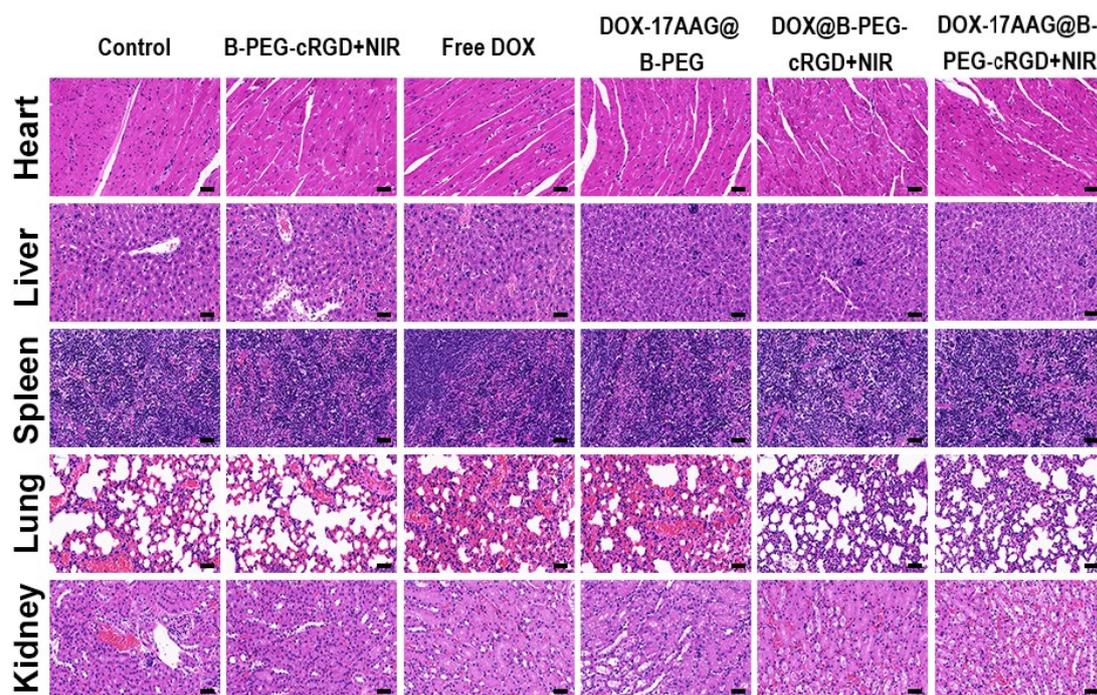


Figure S9. H&E stained images of tissues excised at the end of the treatment period (scale bar: 50 μ m).