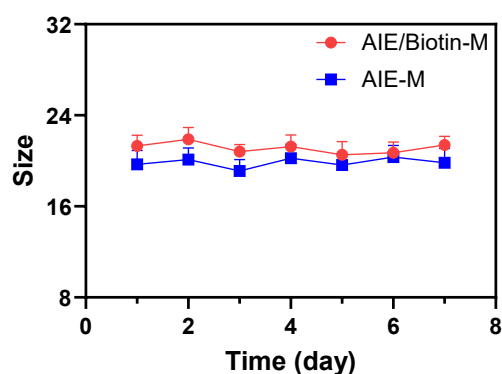


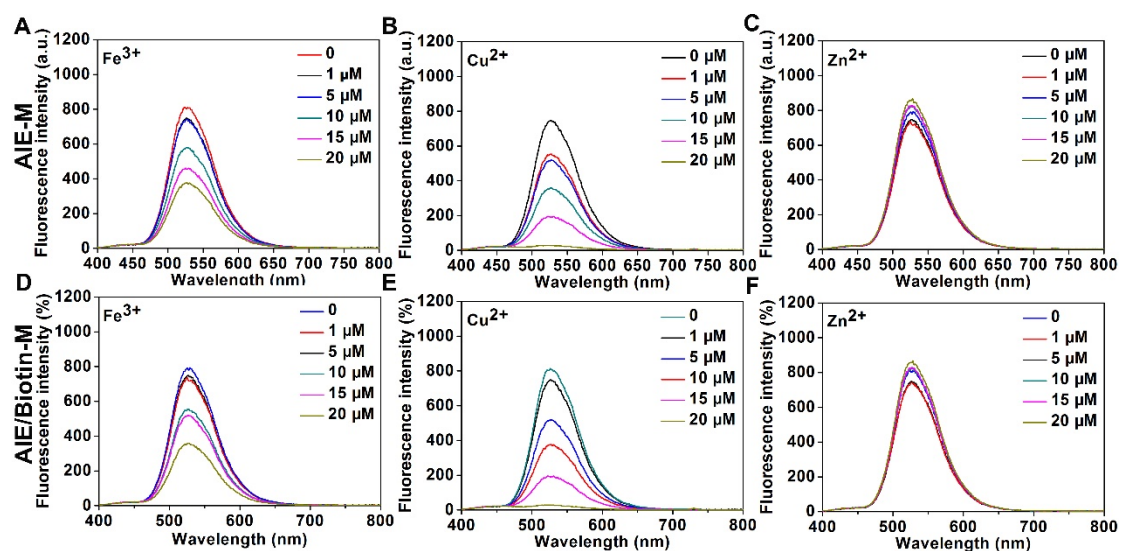
## Supporting information

### Tumor-targeted AIE polymeric micelles mediated immunogenic sonodynamic therapy inhibits cancer growth and metastasis

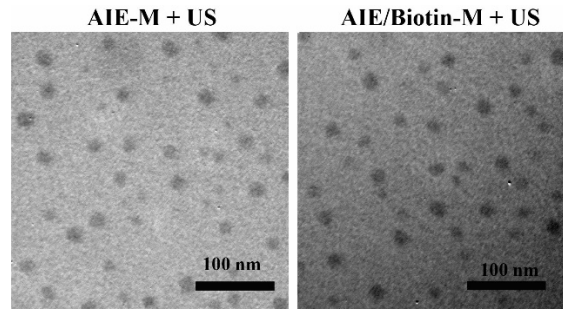
Kai Deng,<sup>‡\*a,d</sup> Yifeng Yu,<sup>‡b</sup> Yong Zhao,<sup>b</sup> Jiami Li,<sup>d</sup> Kunheng Li,<sup>d</sup> Hongyang Zhao,<sup>d</sup> Meng Wu,<sup>\*c</sup>  
Shiwen Huang<sup>\*d,e</sup>



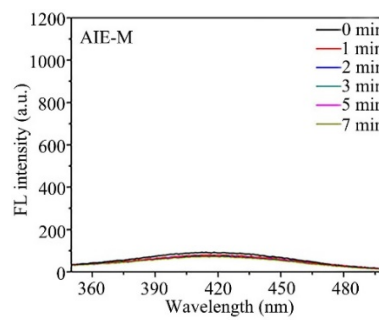
**Figure S1.** The size changes of AIE-M and AIE/Biotin-M after being stored in the nutrient medium at 4 °C for one week.



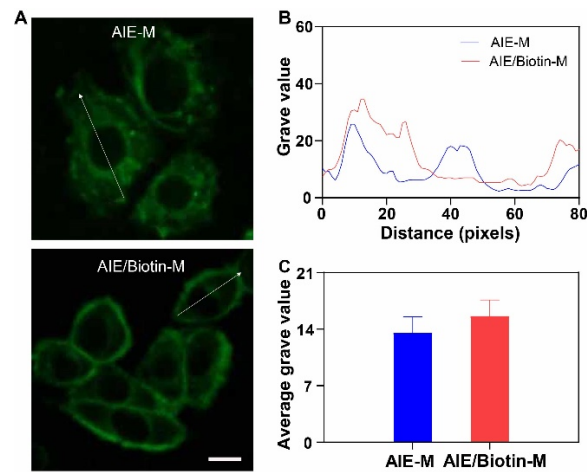
**Figure S2.** Fluorescence spectra of AIE-M (A-C) and AIE/Biotin-M (D-F) in a solution containing different concentration of metal ions.



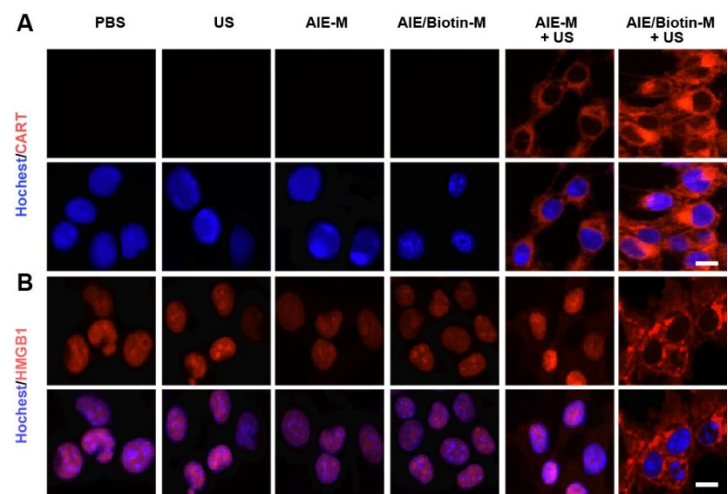
**Figure S3.** TEM images of AIE-M and AIE/Biotin-M after being irradiated with US (1.0 MHz, 2 Wcm<sup>-2</sup>, 50% duty cycle) for 10 min.



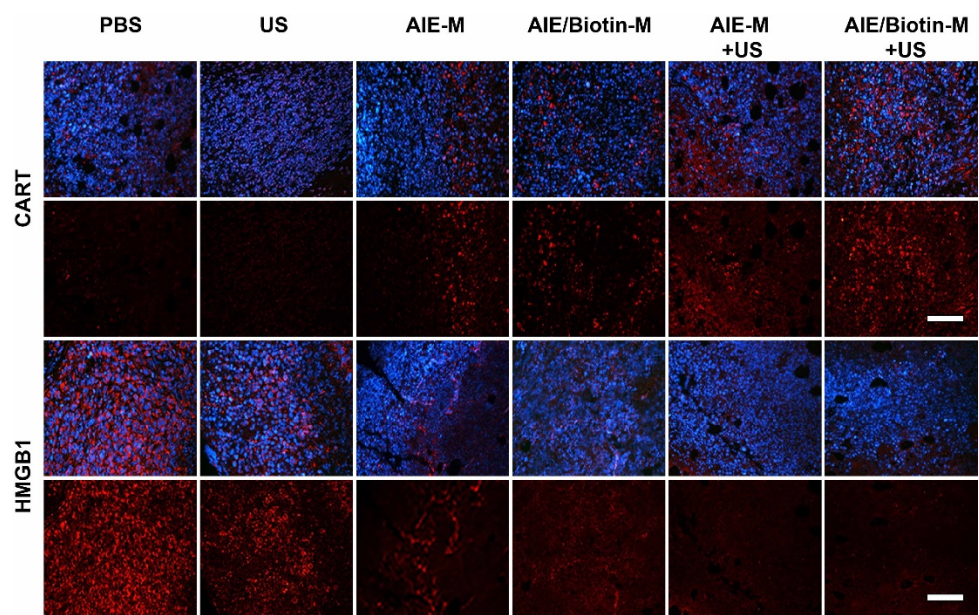
**Figure S4.** The generation of  $\cdot\text{OH}$  by AIE-M with US irradiation for different time quantitatively determined by the fluorescence intensity of TAOH.



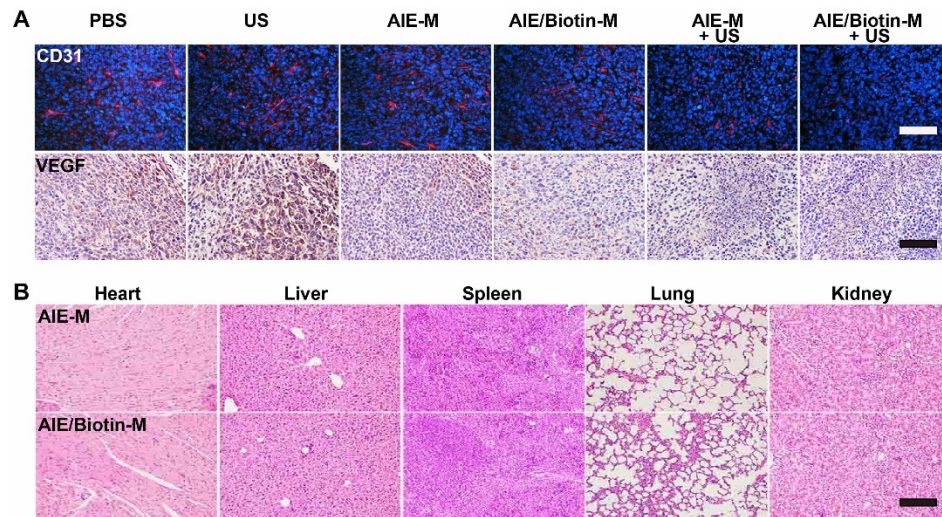
**Figure S5.** (A) CLSM images of intracellular AIEgens fluorescence after sequential incubation with biotin and AIE micelles (scale bar = 25 μm) for 24 h. (B, C) Fluorescence intensity profiles and average fluorescence intensity analysis for AIEgens in 4T1 cells from Fig. S3A.



**Figure S6.** CLSM images of CART (A) and HMGB1 (B) released from 4T1 cells *in vitro* after uptake of AIE-M and AIE/Biotin-M plus treated without US or with US (1.0 MHz, 2 Wcm<sup>-2</sup>, 50% duty cycle) for 3 min (scale bar = 25μm).



**Figure S7.** *In vivo* AIE/Biotin-M mediated SDT to induce DMAPs release. 4T1 tumor-bearing mice were i.v. separate injection of AIE-M and AIE/Biotin-M once every 3 days for three times, and then treated without or with US (1.0 MHz, 2 Wcm<sup>-2</sup>, 50% duty cycle) irradiation at 2 h post-injection for 5 min. The exposure of CART and release of HMGB1 in 4T1 tumors of BALB/c mice at 6 h after last US irradiation (scale bar = 200 μm).



**Figure S8.** (A) The tumor tissue immunofluorescence staining for CD31 and immunohistochemical staining for VEGF after various treatments for 16 days. (B) H&E staining of heart, liver, spleen, lung, and kidney after tumor-free mice were i.v. separate injection of AIE-M and AIE/Biotin-M for 16 days. (scale bar = 200  $\mu$ m).