

Electronic Supplementary Information

Facile Fabrication of a Magnetically Smart PTX-Loaded Cys- $\text{Fe}_3\text{O}_4/\text{CuS}@ \text{BSA}$ Nano-drug for Imaging-guided Chemo-photothermal Therapy

Lanfang Ren,^{†a} Xijian Liu,^{*†a} Qian Wang,^b Lijuan Zhang,^a Guoying Deng,^b Feng Zhou^{b,c} and Jie Lu^{*a}

^aSchool of Chemistry and Chemical Engineering, Shanghai University of Engineering Science, Shanghai 201620, P. R. China. E-mail: liuxijian@sues.edu.cn; E-mail: dr.lujie@foxmail.com

^bOrthopedic Traumatology, Trauma Center, Shanghai First People's Hospital, Shanghai Jiao Tong University School of Medicine, 100 Haining Road, Shanghai 200080, P. R. China

^cFirst School of Clinical Medicine, Nanjing Medical University, Nanjing, 211166, P. R. China

1. Supplementary Figures

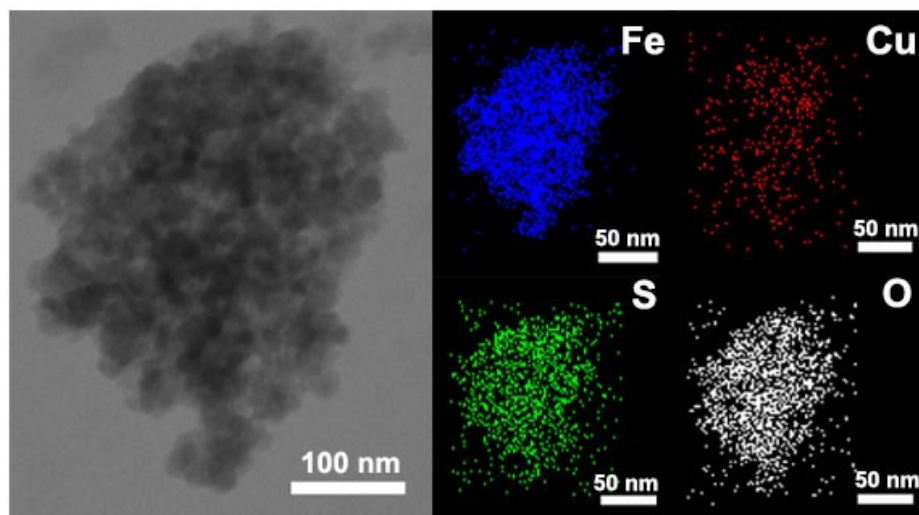


Fig. S1 STEM images of an individual Cys- $\text{Fe}_3\text{O}_4/\text{CuS}@ \text{BSA}$ nanocomposite. The elemental maps showed the distribution of Fe (blue), Cu (red), S (green) and O (white).

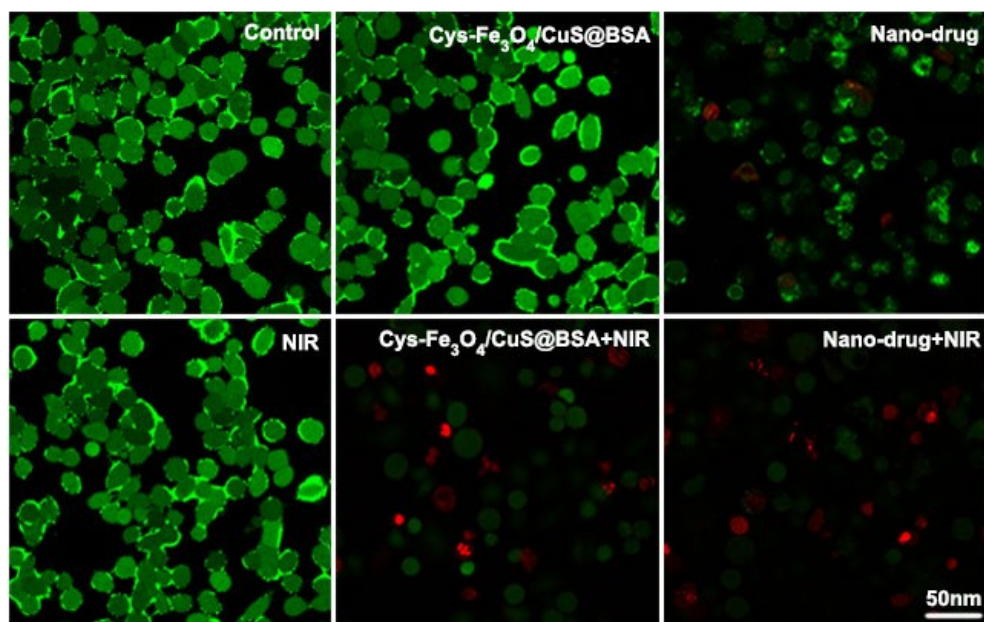


Fig. S2 Confocal fluorescence images of HeLa cells treated with Control, Cys-Fe₃O₄/CuS@BSA, and Nano-drug. Live and dead cells were stained by Calcein AM and PI, which presented in green and red colors in those images, respectively. The scale bar in all images is 50 nm.

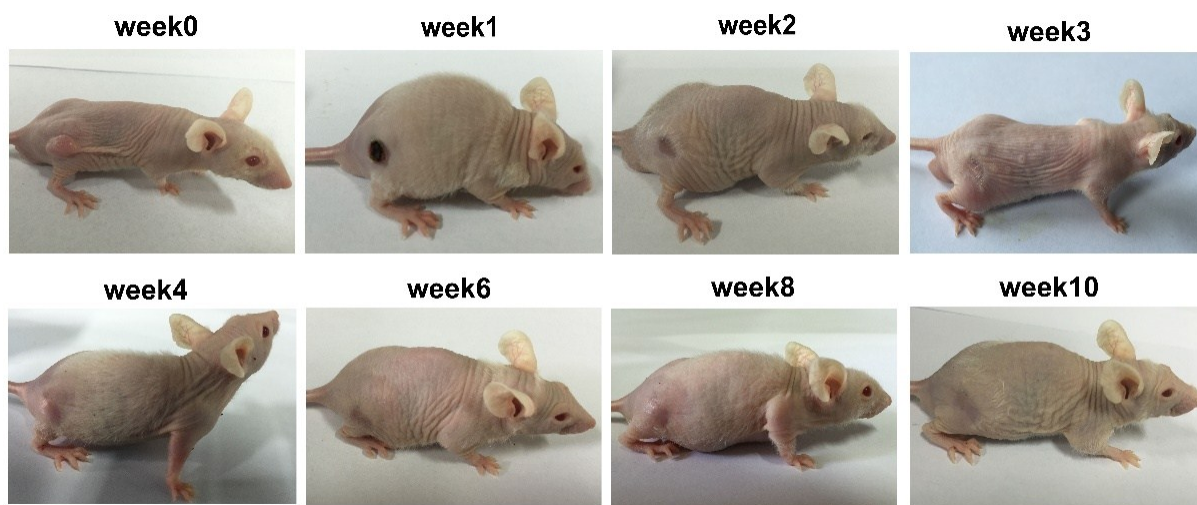


Fig. S3 Representative photographs at various time after treatment with Nano-drug plus NIR laser irradiation.