

## Supporting Information

### **H<sub>2</sub>O<sub>2</sub>-Activated Oxidative Stress Amplifier Capable of GSH Scavenging for Enhancing Tumor Photodynamic Therapy**

*Yadong Liu<sup>a,#</sup>, Zhanwei Zhou<sup>a,#</sup>, Yidi Liu<sup>a</sup>, Yanhui Li<sup>b</sup>, Xinzhi Huang<sup>a</sup>, Chenggen Qian<sup>a,\*</sup>, Minjie Sun<sup>a,\*</sup>*

<sup>a</sup>State Key Laboratory of Natural Medicines, School of Pharmacy, China Pharmaceutical University, 24 Tong Jia Xiang, Nanjing 210009, PR China

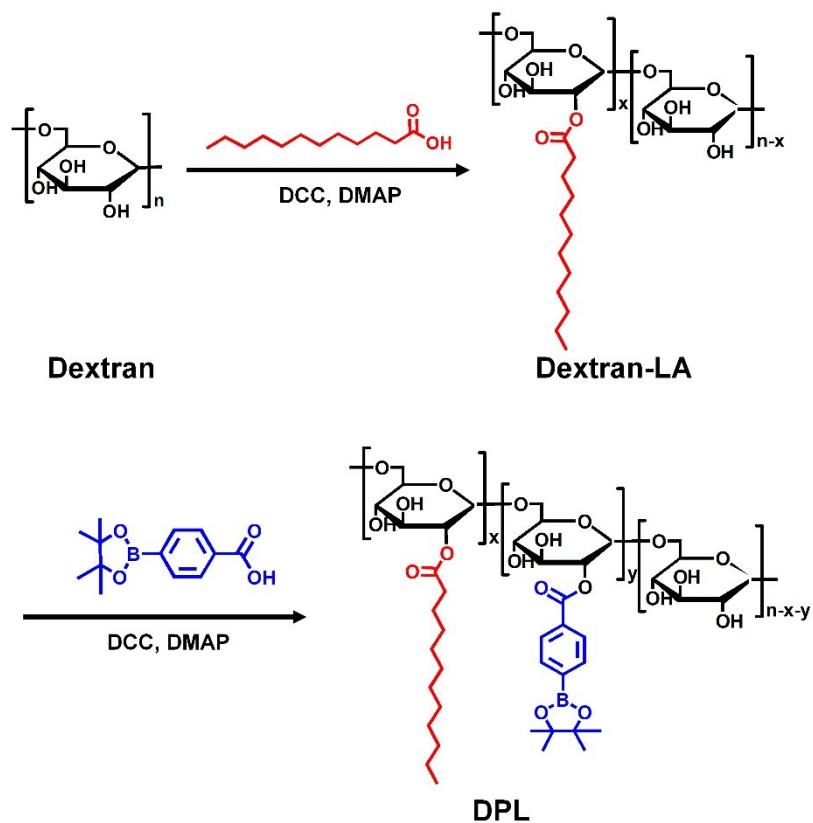
<sup>b</sup>CPSC ZhongQi Pharmaceutical Technology Co., Ltd, 226 Huang He Avenue, Shijiazhuang 050035, PR China

# These authors contributed equally to this work

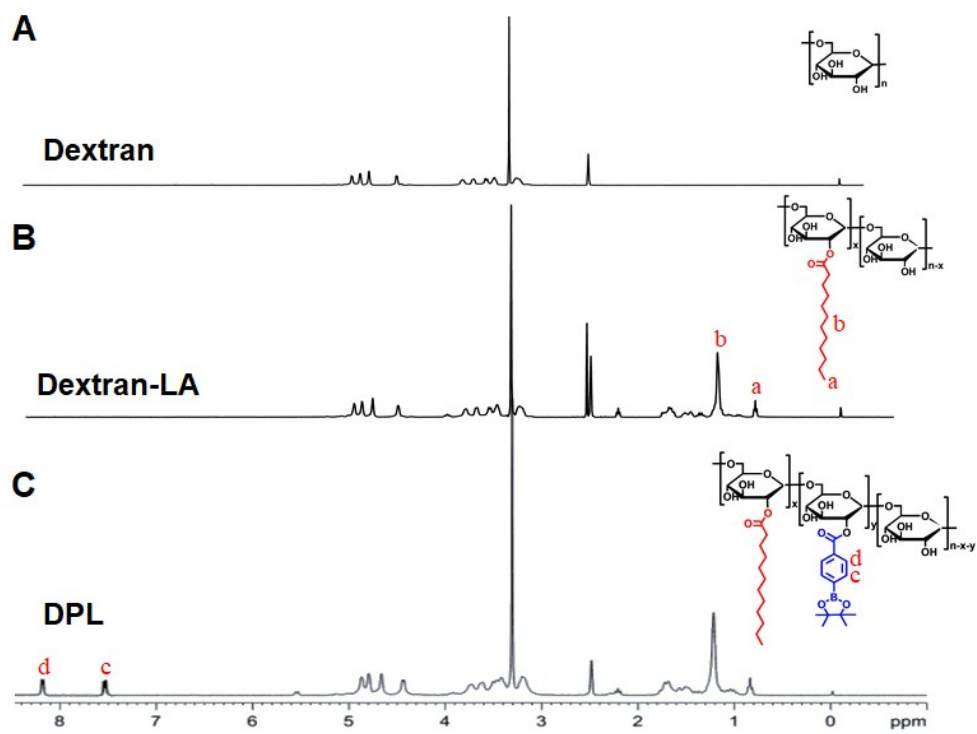
\* Corresponding authors:

Dr. Chenggen Qian, Phone: +86 13400063258, Email: [cgqian@cpu.edu.cn](mailto:cgqian@cpu.edu.cn)

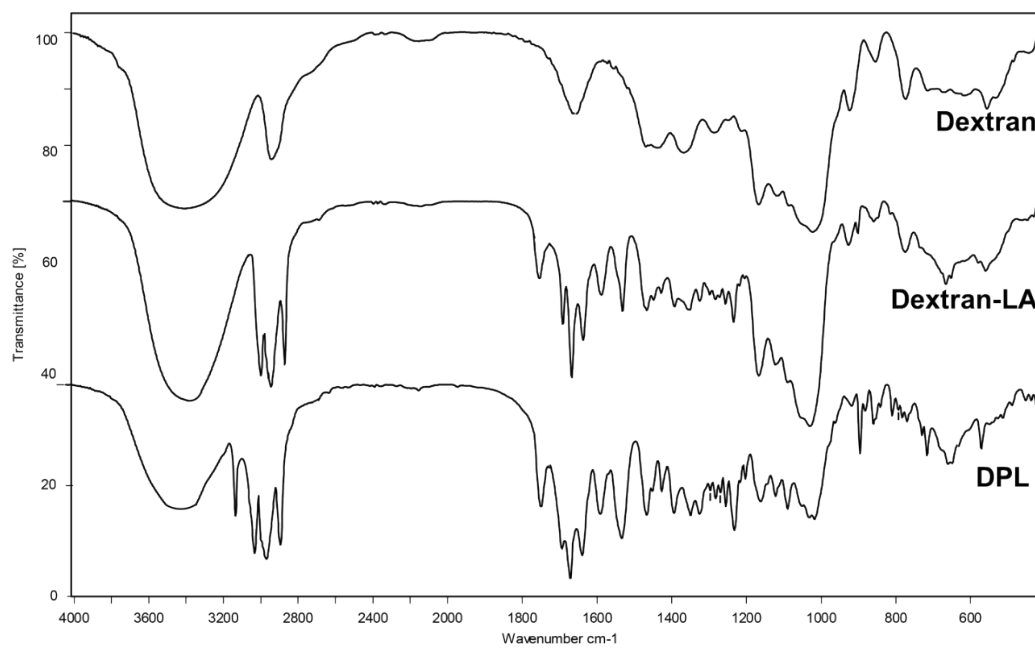
Prof. Minjie Sun, Phone/Fax: +86 25 83271098, Email: [msun@cpu.edu.cn](mailto:msun@cpu.edu.cn)



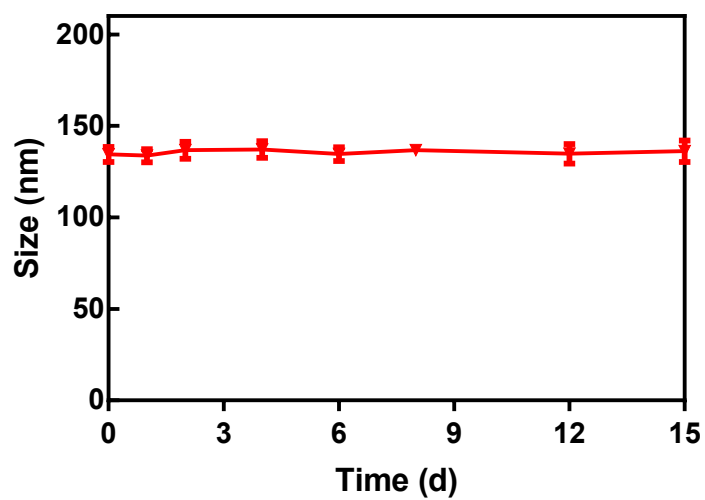
**Fig. S1.** Synthesis procedure of Dextran, Dextran-LA and DPL.



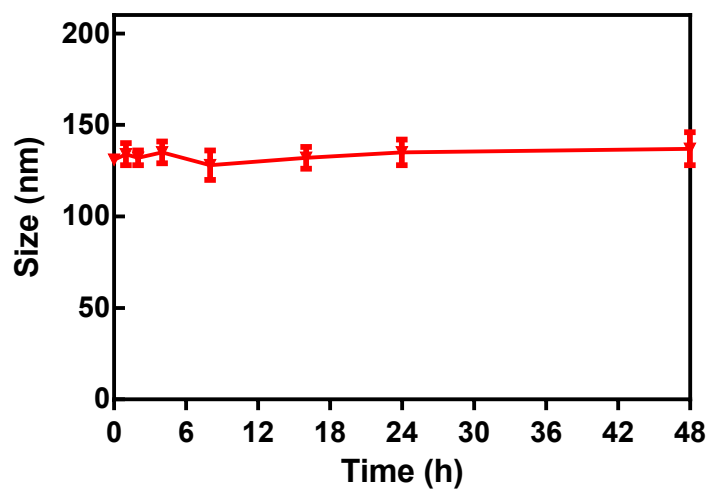
**Fig. S2.**  $^1\text{H}$ -NMR spectrum of Dextran, Dextran-LA and DPL (solvent:  $\text{d}_6$ -DMSO).



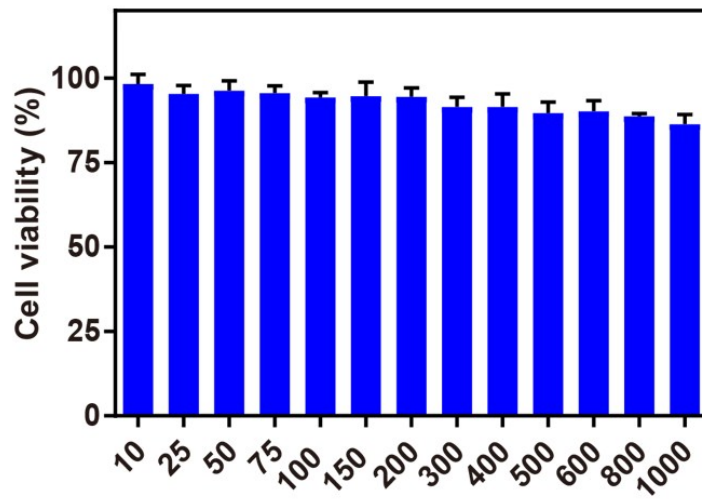
**Fig. S3.** FTIR spectrum of Dextran, Dextran-LA and DPL.



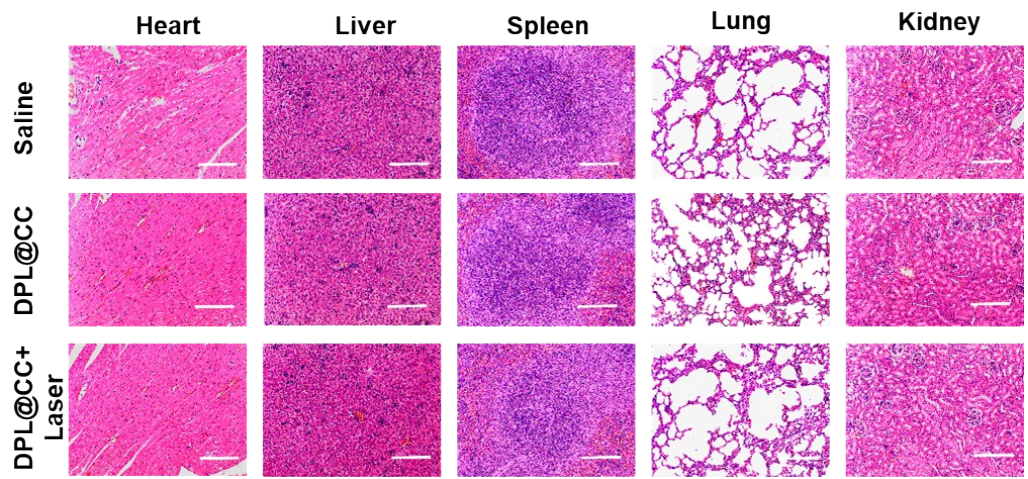
**Fig. S4.** Colloidal stability of DPL@CC by monitoring the particle size (n=3, Mean $\pm$ SD).



**Fig. S5.** Serum stability of DPL@CC by monitoring the particle size (n=3, Mean±SD).



**Fig. S6.** Cell viability of DPL on 4T1 cells after incubation for 24 h (n=3, Mean±SD).



**Fig. S7.** H&E staining images of the main organs (heart, liver, spleen, lung and kidney) after treatments with Saline, DPL@CC or DPL@CC + Laser.