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#### Supporting Information

Enhanced photothermal therapy through the in-situ activation of a temperature and redox dual-sensitive nano-reservoir of triptolide

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#### **Supporting Schemes and Figures**

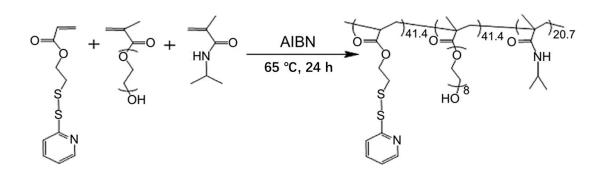


Figure S1. Schematic illustration of the synthesis of PDA-PEG-PNiPMN (3P).

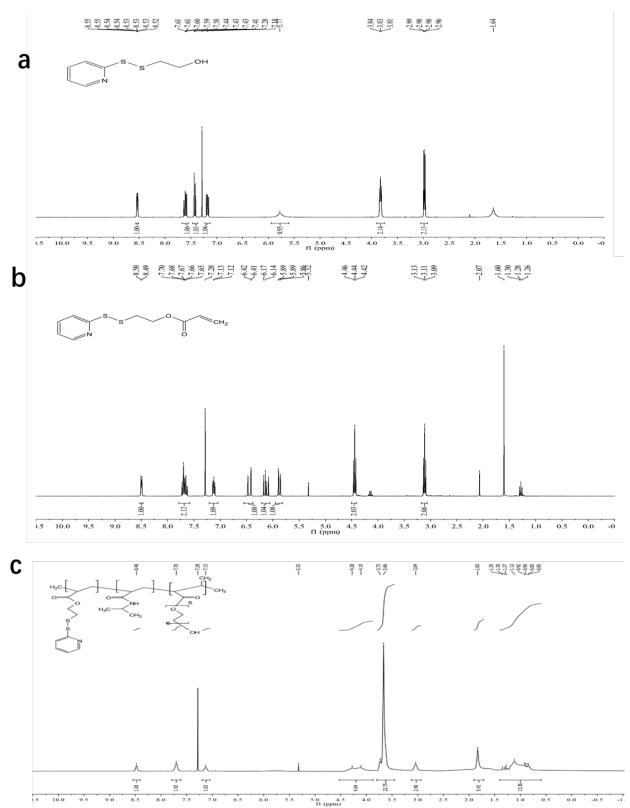


Figure S2. <sup>1</sup>H-NMR spectra of PDS-OH (a), PDA (b), and of PDA-PEG-PNiPMN (c).

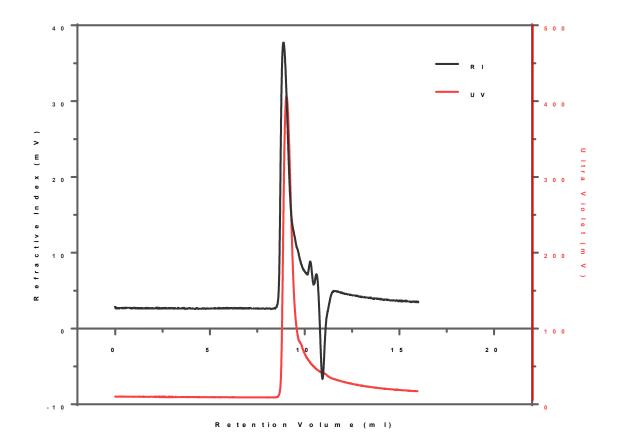
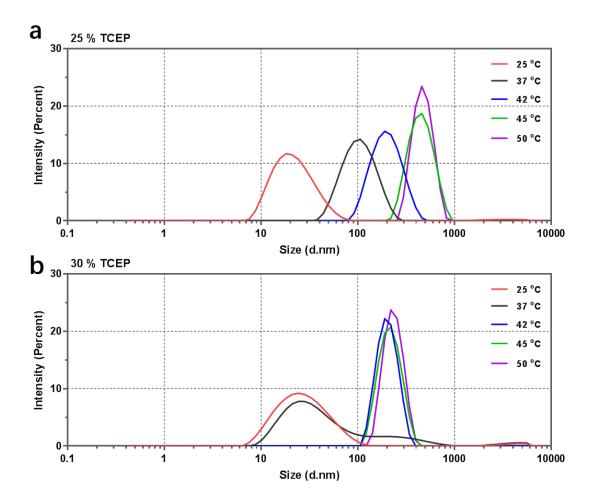
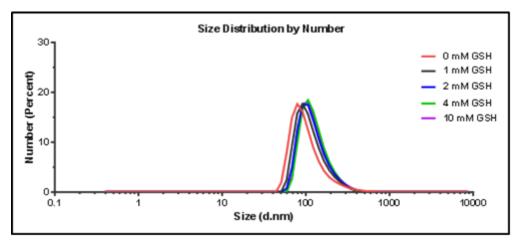


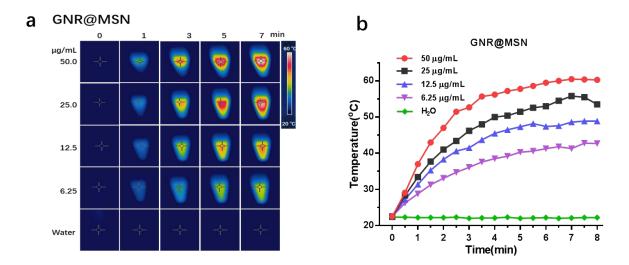
Figure S3. GPC curve of PDA-PEG-PNiPMN (3P) polymer.



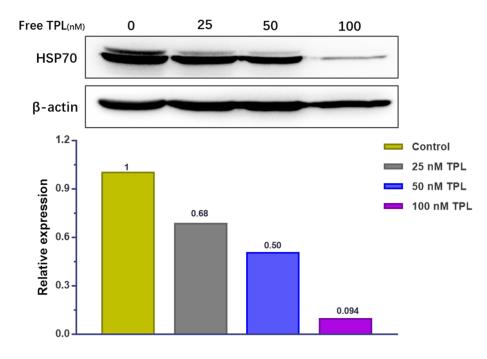
**Figure S4.** Dynamic light scattering size of PDA-PEG-PNiPMA nanogel with 25 % (a) and 30 % (b) crosslinking at different temperatures.



**Figure S5.** Dynamic light scattering size of GNR@MSN-3P in the buffers supplemented with 0-10 mM GSH.



**Figure S6.** Infrared thermal images (a) and temperature change (b) of GNR@MSN upon 808 nm laser irradiation (2 W/cm<sup>2</sup>).



**Figure S7.** HSP70 expression in 4T1 cells after being treated with free TPL for 48 h by western blotting analysis,  $\beta$ -actin was used as an internal control.

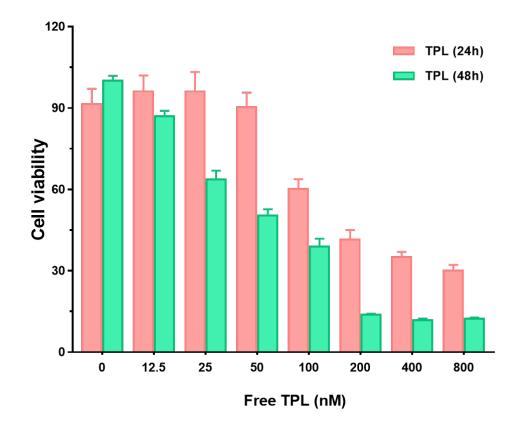
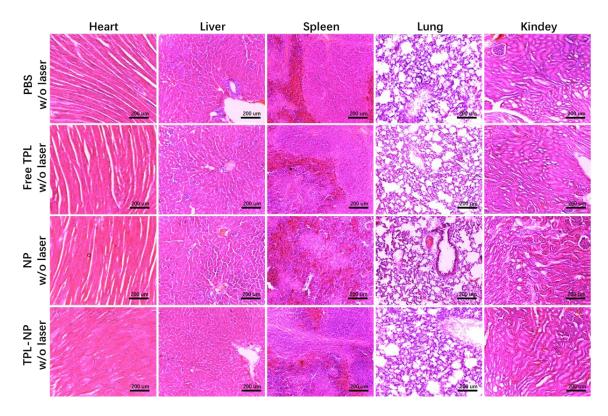


Figure S8. Normalized cell viability of 4T1 cells treated with free TPL for 24 h and 48 h.



**Figure S9.** H&E staining images of heart, liver, spleen, and kidney at the end of the antitumor inhibition test.