Supporting Information for

Copper (Ⅱ)/cis-platinum -loaded nanogels as an adjuvant potentiate disulfiram antitumor efficacy

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Fig. S1 SEC curve of PGMA.

Fig. S2 ^{1}H-NMR spectrums of PGMA (solvent: $CDCl_3$), PGMA-SAR, and PGMA-IDA (solvent: D_2O).

Fig. S3 Confocal microscopy imaging of the intracellular ^{RhB}PGMA and $^{RhB}NG_{Cu2+}$ nanogels in 4T1 cells.

Fig. S4 Size distribution patterns of PGMA-SAR/CDDP at different molar ratios.

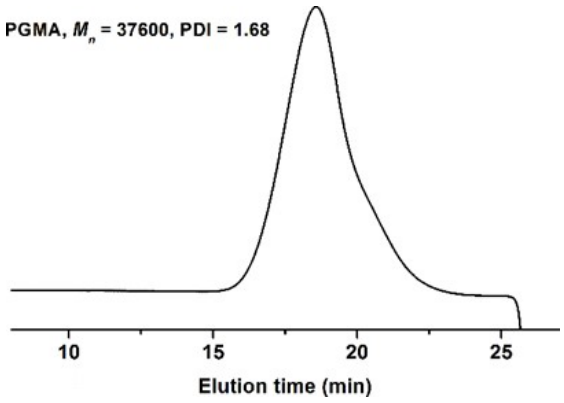
Fig. S5 The ITC titration and fitting curves of adding PGMA-SAR solution to CDDP.

Fig. S6 Size distribution patterns of NG_{CDDP} in water and cell culture medium containing 10% serum.

Fig. S7 The blood Pt concentration as a function of time in the ICR mice after *i.v.* injection of CDDP or NG_{CDDP} at a CDDP dose of 2 mg/kg.

Fig. S8 Histological analysis of major organs in 4T1 cancer model after *i.v.* injection of $CuCl_2$ or NG_{Cu2+} at a copper ions dose of 0.5 mg/kg.

Fig. S9 Histological analysis of kidney in 4T1 cancer model after *i.v.* injection of CDDP or NG_{CDDP} at a CDDP dose of 2 mg/kg.



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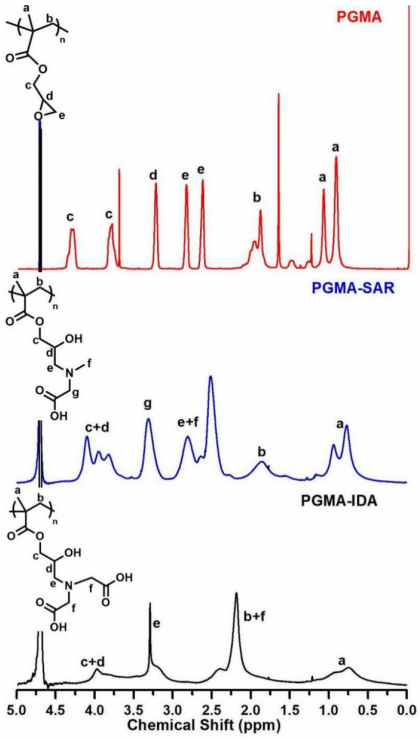

Fig. S2 ^{1}H-NMR spectrums of PGMA (solvent: $CDCl_3$), PGMA-SAR, and PGMA-IDA (solvent: D_2O).

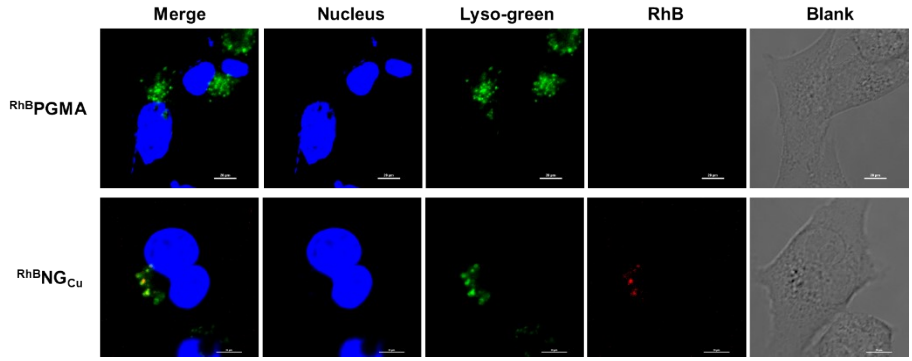

Fig. S3 Confocal microscopy imaging of the intracellular ^{RhB}PGMA and $^{RhB}NG_{Cu2+}$ nanogels in 4T1 cells. Confocal microscopy images taken from the RhB fluorescence channel (red) and merged with the images taken from the Hoechst fluorescence channel (blue) and Lyso-Tracker Green (green) of the cells after 2 h incubation with ^{RhB}PGMA and $^{RhB}NG_{Cu2+}$ nanogels (the RhB -eq. dose used for the experiments was 0.5 µg/ mL). The cells were imaged using a 60× oil-immersion objective; scale bars: 20 µm.

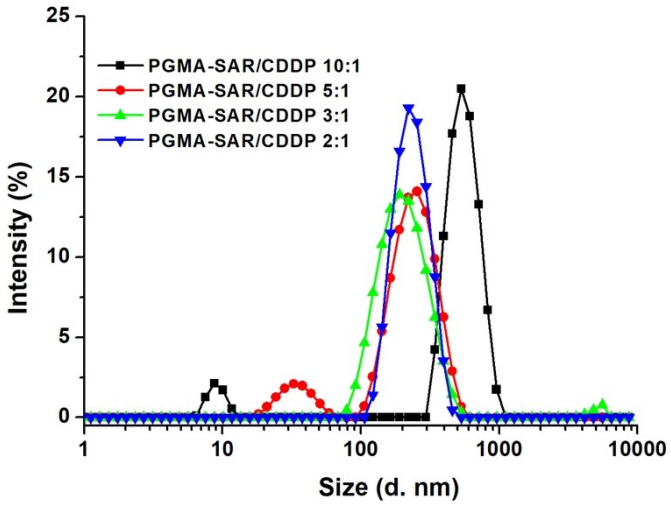

Fig. S4 Size distribution patterns of PGMA-SAR/CDDP at different molar ratios.

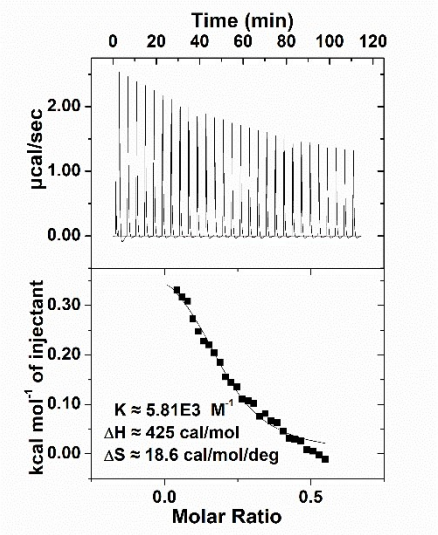

Fig. S5 The ITC titration and fitting curves of adding PGMA-SAR solution (50 mM) to CDDP (10 mM) at 25 °C

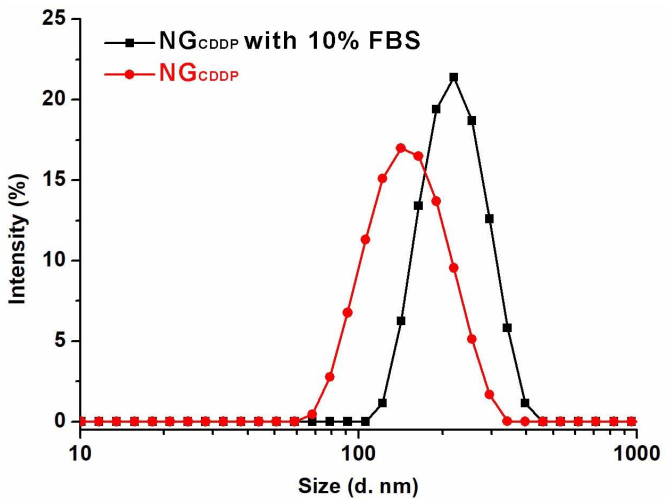

Fig. S6 Size distribution patterns of NG_{CDDP} in water and cell culture medium containing 10% serum.

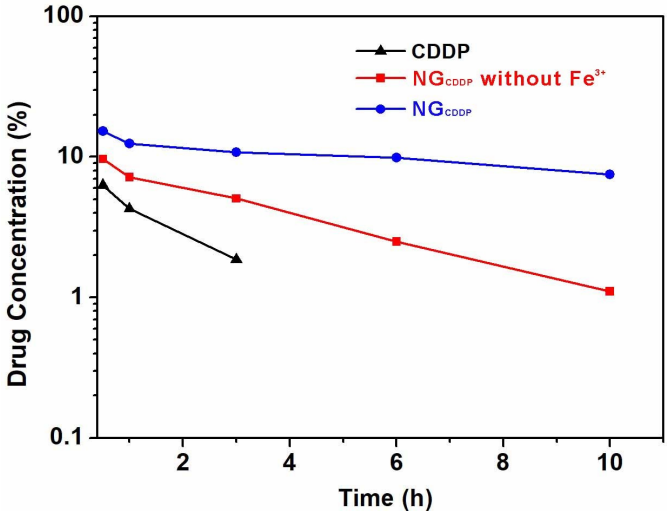

Fig. S7 The blood Pt concentration as a function of time in the ICR mice after *i.v.* injection of CDDP or NG_{CDDP} at a CDDP dose of 2 mg/kg.

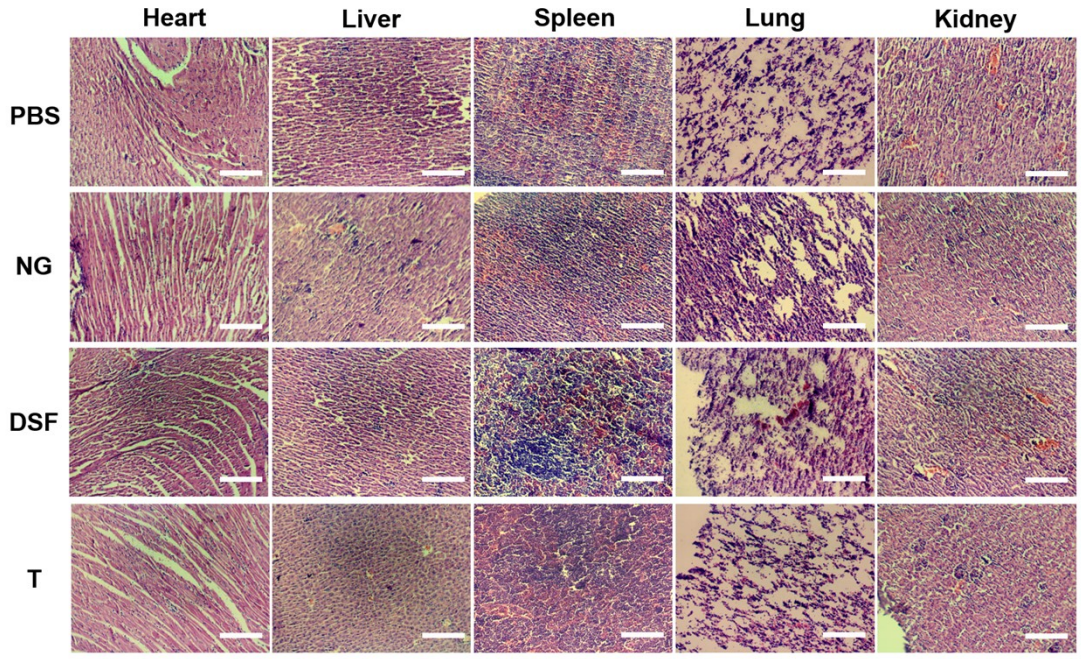

Fig. S8 Histological analysis of major organs in 4T1 cancer model after *i.v.* injection of $CuCl_2$ or NG_{Cu2+} at a copper ions dose of 0.5 mg/kg (scale bar: 1 mm).

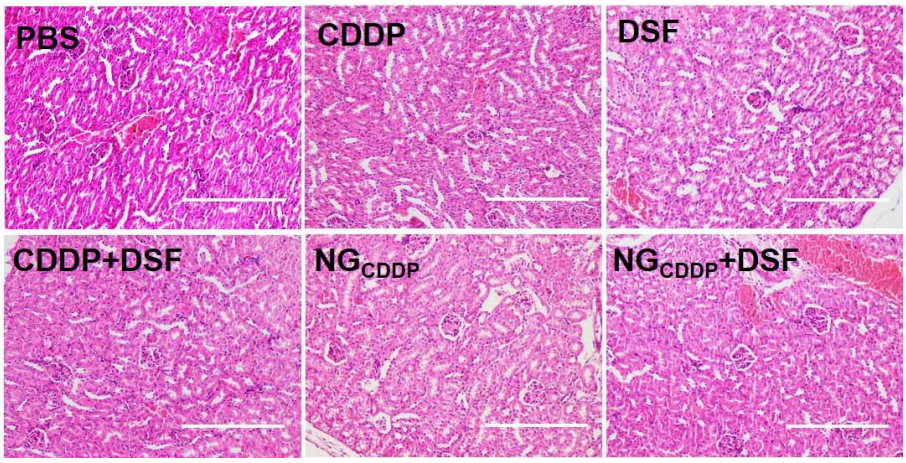

Fig. S9 Histological analysis of kidney in 4T1 cancer model after *i.v.* injection of CDDP or NG_{CDDP} at a CDDP dose of 2 mg/kg (scale bar: 1 mm).