



## Supporting Information

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A Self-Amplifying ROS-Responsive Nanoplatfom for Simultaneous Cuproptosis and Cancer Immunotherapy

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*Supporting Information for*  
**A Self-Amplifying ROS-Responsive Nanoplatfom for Simultaneous Cuproptosis and  
Cancer Immunotherapy**

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Haitong Wen<sup>a</sup>, Youwen Zhang<sup>c,\*</sup>, Huixia Lv<sup>a,\*</sup>, Xin Jin<sup>c,\*</sup>.***

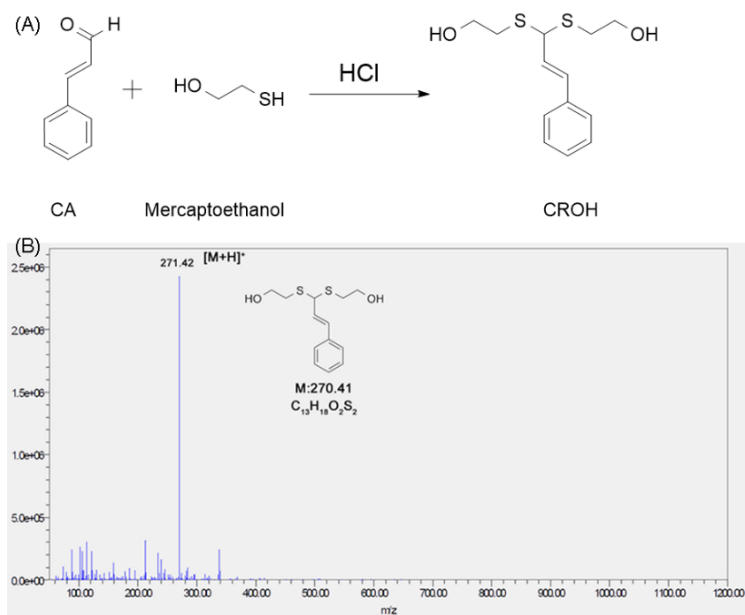
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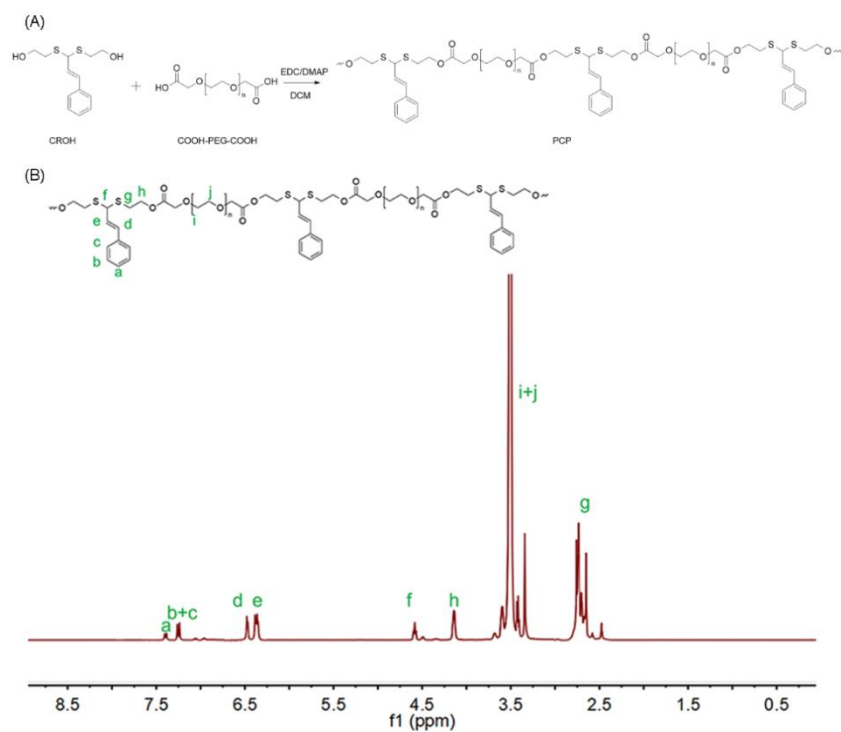
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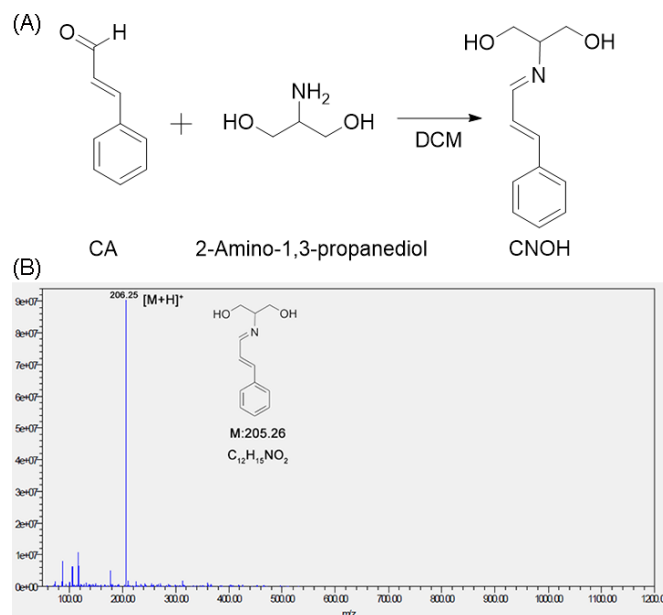
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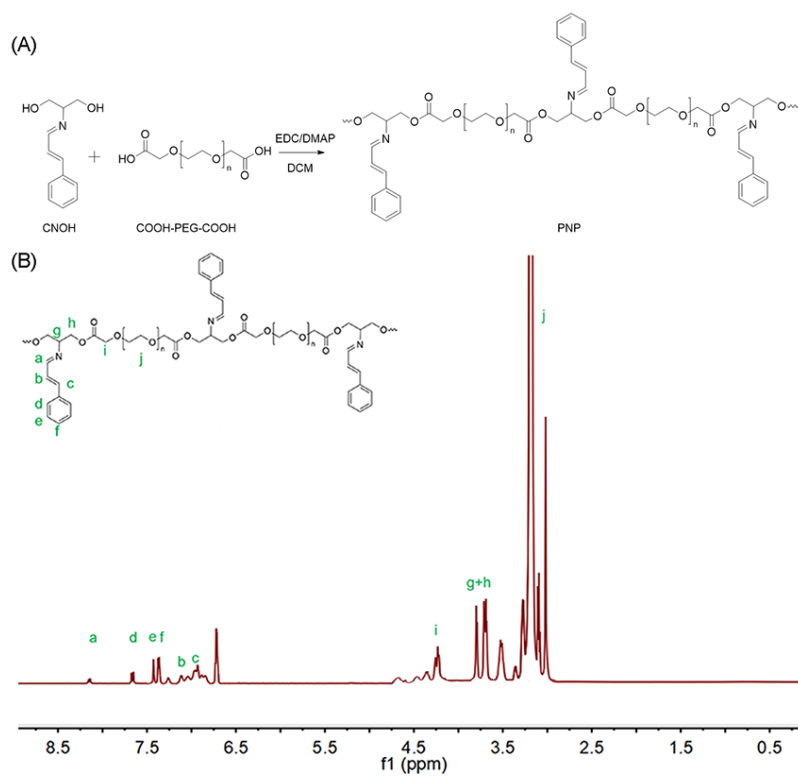
**Figure S1** (A) Synthesis pathway of CROH. (B) ESI-MS spectrum of CROH.  $[M+H]^+ = 271.42$ .



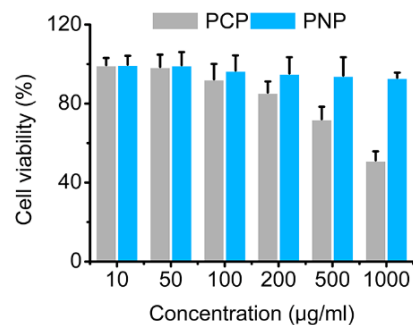
**Figure S2** (A) Synthesis pathway of PCP. (B)  $^1\text{H}$  NMR spectrum of PCP.



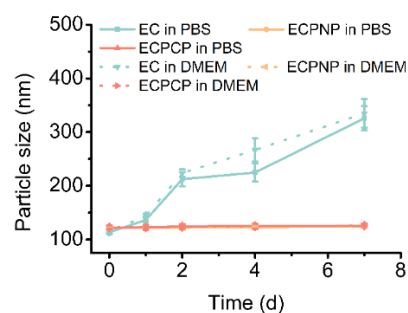
**Figure S3** (A) Synthesis pathway of CNOH. (B) ESI-MS spectrum of CNOH.  $[M+H]^+ = 206.25$ .



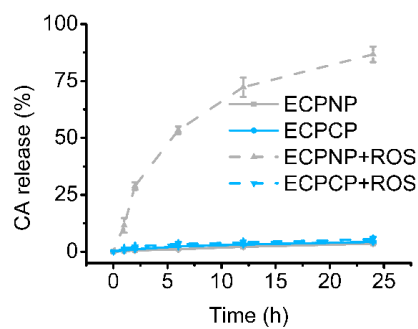
**Figure S4** (A) Synthesis pathway of PNP. (B)  $^1H$  NMR spectrum of PNP.



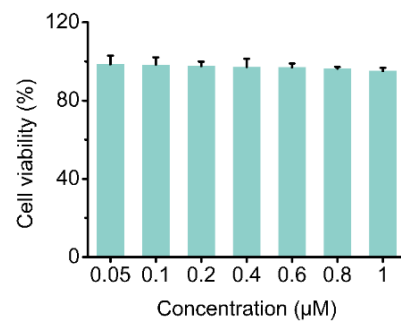
**Figure S5** *In vitro* cell cytotoxicity of PCP and PNP against 4T1 tumor cell line. Data are presented as mean  $\pm$  SD,  $n = 6$ .



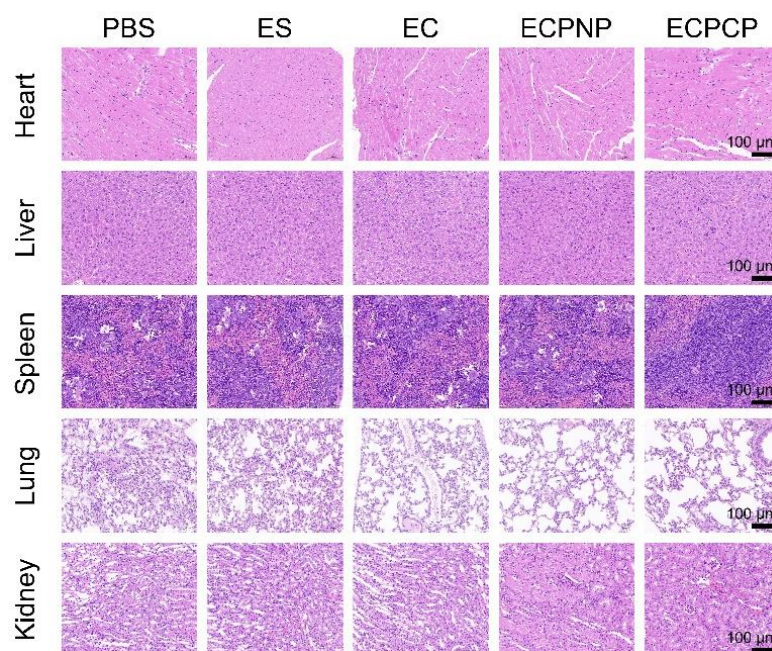
**Figure S6** *In vitro* stability of EC, ECPNP and ECPCP in PBS and DMEM at 37 °C. Data are presented as mean  $\pm$  SD,  $n = 3$ .



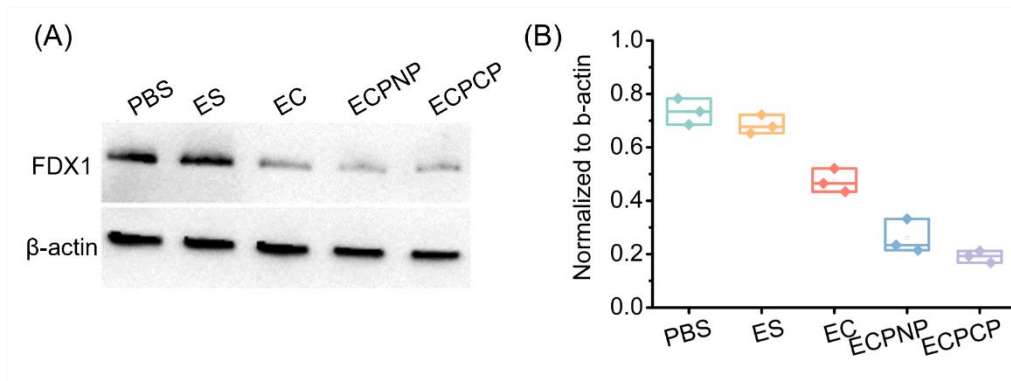
**Figure S7** *In vitro* CA release behavior from ECPNP and ECPCP under ROS condition at 37 °C. Data are presented as mean  $\pm$  SD,  $n = 3$ .



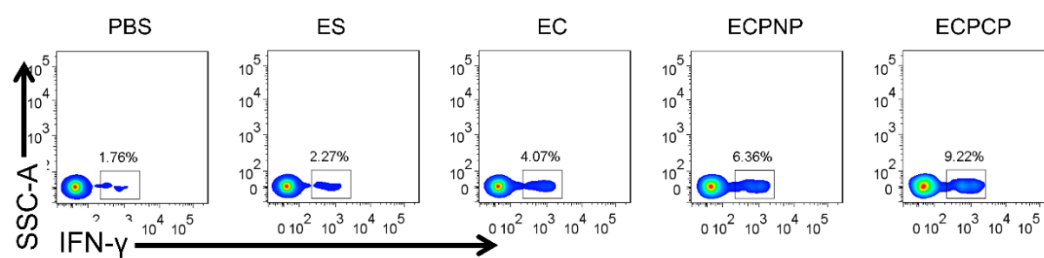
**Figure S8** *In vitro* cell cytotoxicity of  $\text{CuCl}_2$  against 4T1 tumor cell line. Data are presented as mean  $\pm$  SD,  $n = 6$ .



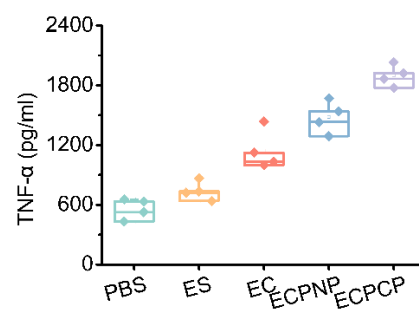
**Figure S9** H&E staining of major organs harvested from Balb/c mice after treatment. Scale bar: 100  $\mu\text{m}$ .



**Figure S10** The expression of FDX1 *in vivo* after treatments measured by western blot.



**Figure S11** Flow cytometry analysis of IFN- $\gamma$  secretion by CD3<sup>+</sup>CD4<sup>+</sup>CD8<sup>+</sup> T lymphocytes.



**Figure S12** *In vivo* TNF- $\alpha$  level in tumor tissues, respectively,  $n = 4$ .