

**Electrical Supporting information for**

**A pH-responsive Pickering nanoemulsion for specified spatial delivery of  
immune checkpoint inhibitor and chemotherapy agent to tumors**

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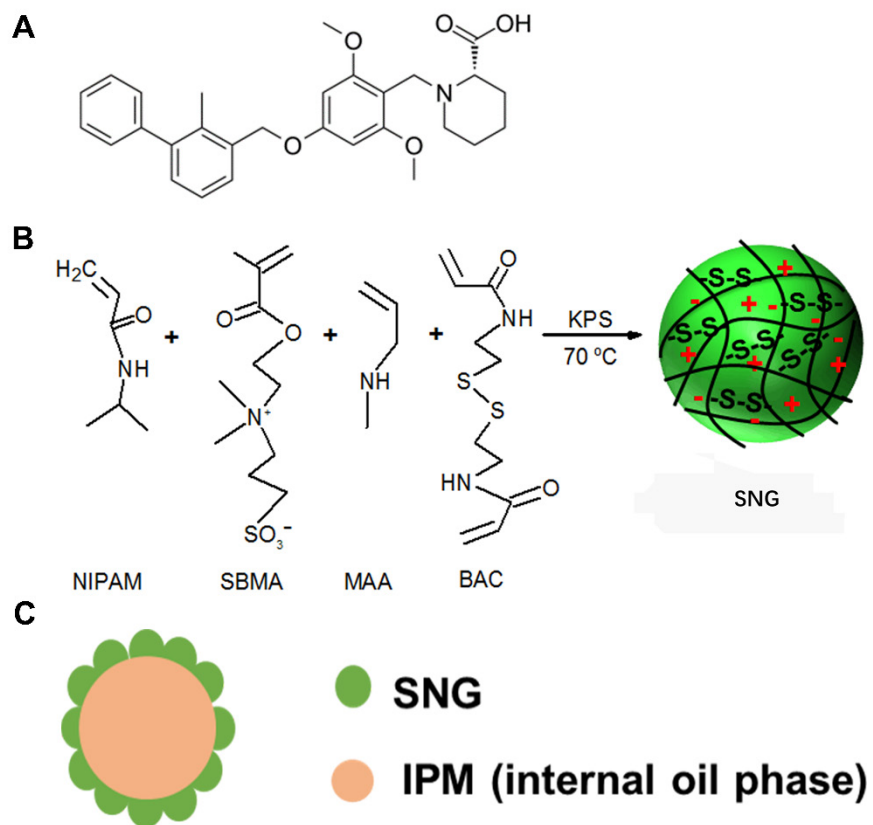


Figure S1. (A) Chemical structure of HY. (B) Synthesis of SNG. (C) Schematic representation of blank PNE.



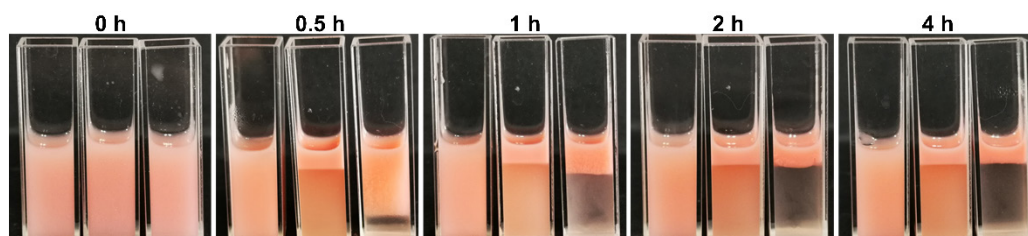
Figure S2. Photo of the blank PNE.



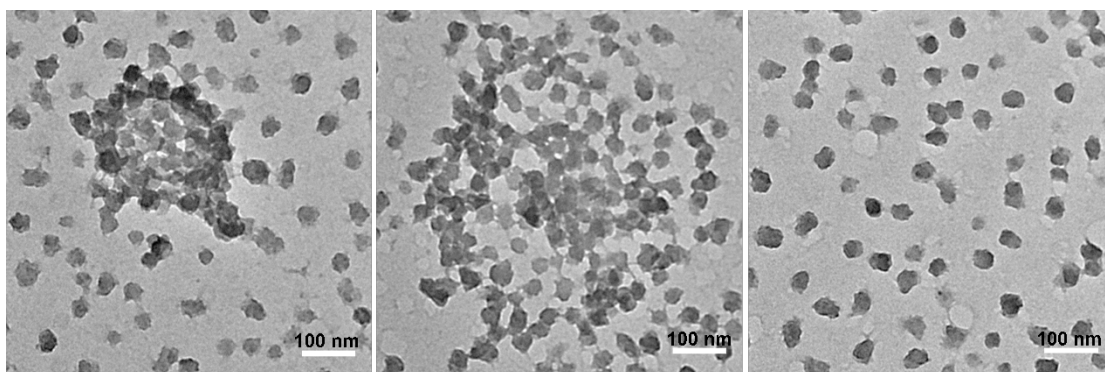
**Figure S3.** Photo of D/HY@PNE after fabrication immediately.



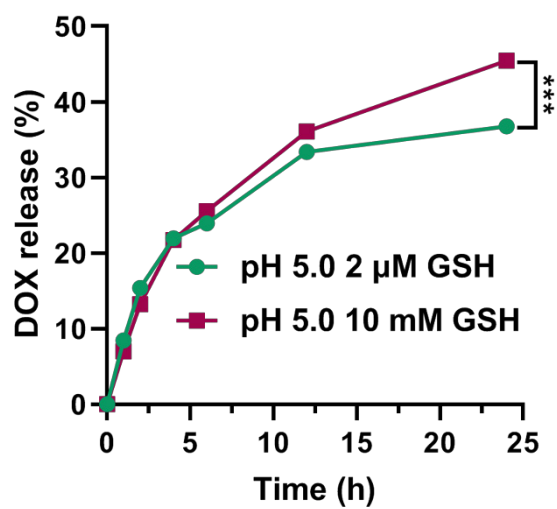
**Figure S4.** Photo of D/HY@PNE stored at 4 °C for 6 months.



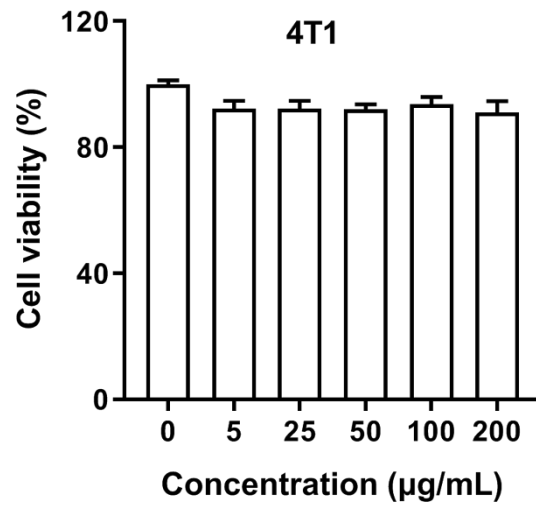
**Figure S5.** Photos of D/HY@PNE with different pH warmed at 37 °C for different time. From left to right, the pH value is 7.4, 6.5 and 5.0, respectively.



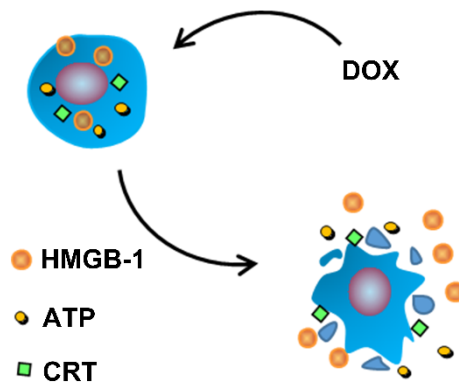
**Figure S6.** TEM images of PNE with pH 6.5 warmed at 37 °C for 4 h taken at different visual field.



**Figure S7.** Cumulative released DOX from D/HY@PNE in different concentration of GSH at different time points.

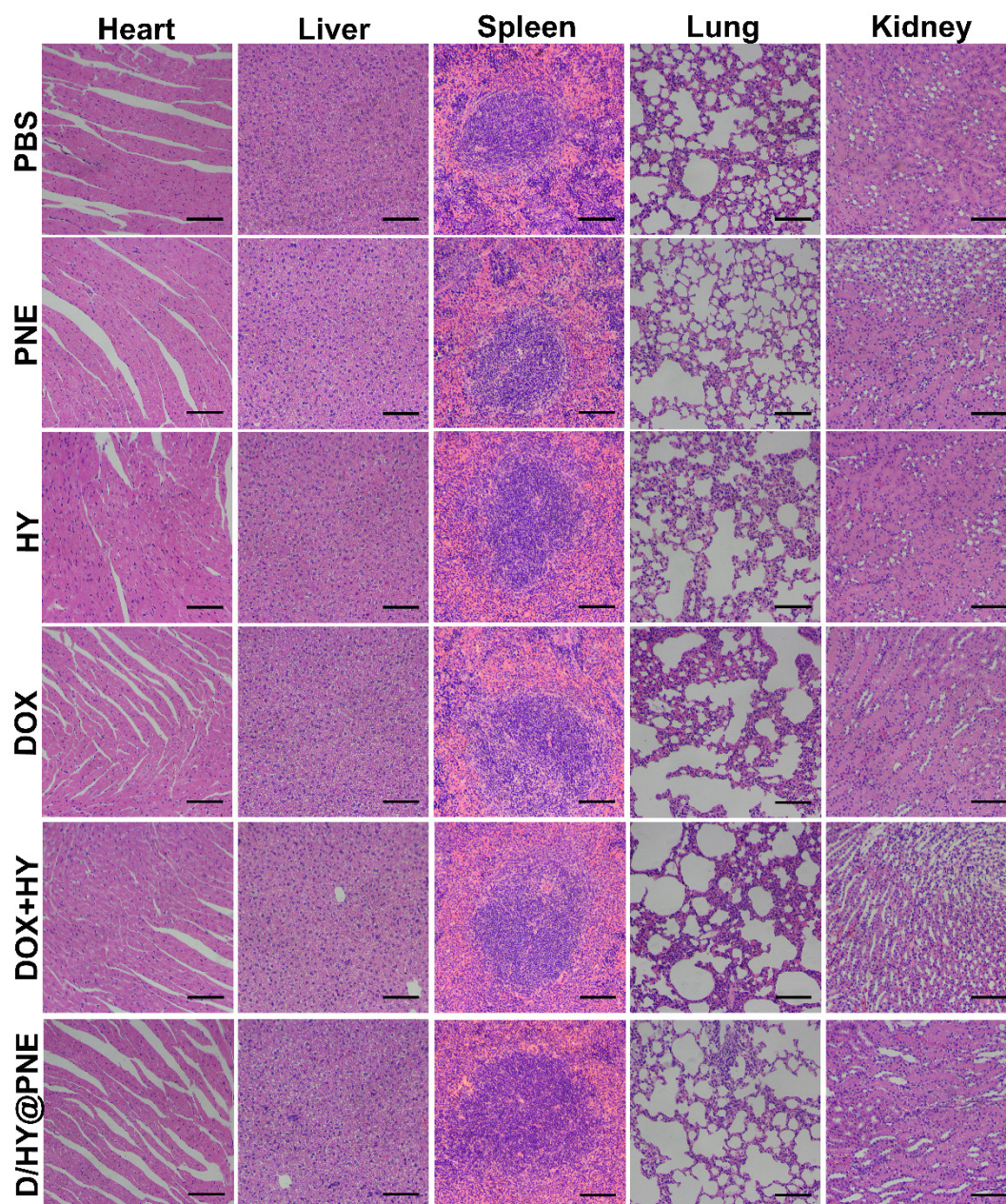


**Figure S8.** The cell viability of 4T1 cells incubated with PNE for 24 h.

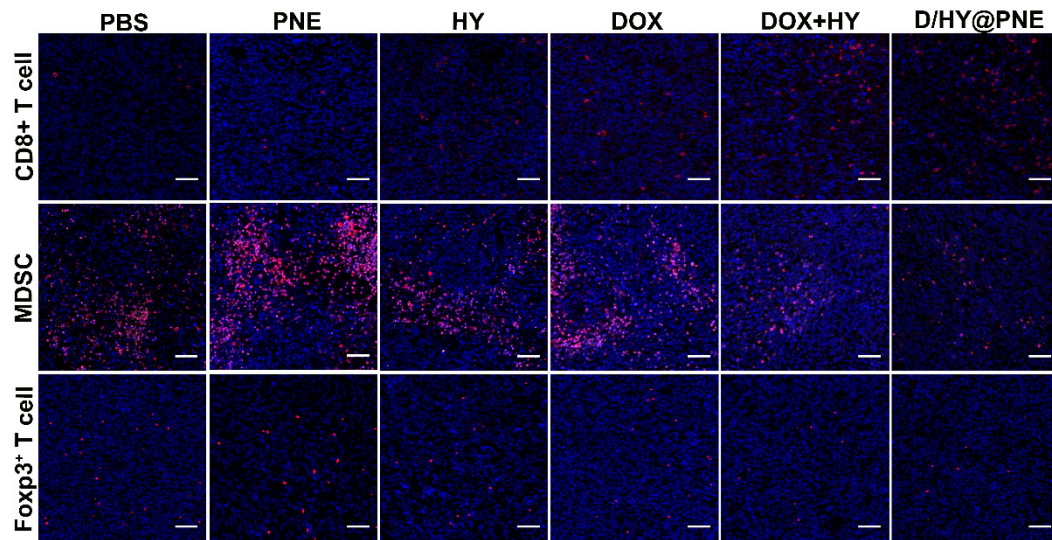


**Figure S9.** Schematic illustration of DOX-induced ICD of tumor cells as characterized by CRT exposure, ATP secretion, and HMGB-1 release.





**Figure S10.** H&E staining of the major organs of 4T1-bearing mice at the end of antitumor studies. The scale bar is 50 µm.



**Figure S11.** Immunofluorescence staining was used to test CD8<sup>+</sup> T cells, MDSCs (CD11b<sup>+</sup>Gr-1<sup>+</sup>) and Tregs (Foxp3<sup>+</sup>) infiltration in tumor sections at the end of the treatments. The scale bar is 50  $\mu$ m.