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$^+$ T cells, MDSCs (CD11b$^+$Gr-1$^+$) and Tregs (Foxp3$^+$) infiltration in tumor sections at the end of the treatments. The scale bar is 50 µm.