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Changes have been made to Fig. S9b and Fig. S11 in the corrected Supplementary Information.
Supporting Information

Explosible Nanocapsules Excited by Pulsed Microwave for Efficient Thermoacoustic-Chemo Combination Therapy

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Scheme S1. Synthetic routes employed for (a) POPMA, (b) P(ArgMA-co-DMA) and P(ArgMA-co-DMA)-b-PPOPMA.
Fig. S1 $^1$H NMR spectra of (a) POPMA in CDCl$_3$, (b) P(ArgMA-co-DMA) in D$_2$O, and (c) P(ArgMA-co-DMA)-b-POPMA in CDCl$_3$. 
Fig. S2 (a) Thermoacoustic signals of water, aqueous ammonium bicarbonate solution (NH$_4$HCO$_3$), blank NCPs, DOX-NCPs, and AB/DOX-NCPs upon irradiation with pulsed microwave. (b) Statistics for the peak values in (a), the ratio of values to water.

Fig. S3 Hydrodynamic diameter distribution of AB/DOX-NCPs obtained by dynamic light scattering (DLS) analysis at 43 °C.
Fig. S4 SEM and TEM images of the AB/DOX-NCPs at 43 °C.

Fig. S5 Size distribution of AB-free and DOX-loaded NCPs determined by dynamic light scattering (DLS) at 25 °C, 43 °C and upon irradiation by pulsed microwave.
Fig. S6 CLSM images of 4T1 cells treated with pulsed microwave irradiation (repetition frequency of 80 Hz) for 10 min (left) and without microwave irradiation (right). No detectable abnormality is observed.
**Fig. S7** (a) Flow cytometric analysis of 4T1 cells after incubating with AB/DOX-NCPs and PArg-free AB/DOX-NCPs for 1 h at 4 °C.

**Fig. S8** (a) Hemolytic percent of red blood cells (RBCs) after incubating with AB/DOX-NCPs at various concentrations (0, 37.5, 75, 150, 300, 600 μg mL⁻¹, dispersed in PBS solution) for 4 h, using deionized water (+) as a positive control. (b) Photographs of samples in the hemolysis test.
**Fig. S9** *In vivo* biodistribution analysis for the AB/DOX-NCPs. 4T1 tumor-bearing mice were intravenously injected with free ICG, ICG-loaded AB/DOX-NCPs, respectively. (a) Fluorescence images of tumor bearing mice after post-injection at various durations. (b) Fluorescence imaging of major organs and tumors at 24 h post-injection. (c) Statistical fluorescence intensity of major organs and tumors at 24 h post-injection.
Fig. S10 Relative body weights of 4T1 tumor-bearing mice in various groups during the 21-day evaluation period. Error bars indicate standard deviations, n=5.
**Fig. S11** H&E stained images of tissue sections from the major organs of the mice after various treatments.