Supplementary information to:

Actively targeting D-α-tocopheryl polyethylene glycol 1000 succinatepoly(lactic acid) nanoparticles as vesicles for chemo-photodynamic combination therapy of doxorubicin-resistant breast cancer

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Figure S1. 1H NMR spectra of TPGS-PLA in $CDCl_3$ and TPGS, Ce6, Ce6-TPGS, TPGS-MAL, tLyp-1, tLyp-1-TPGS in D₆-DMSO. The number in red and that in blue respectively represented assignments of protons and related integral ratios for calculating.



Figure S2. Cell viability of MCF-7 (drug-sensitive cancer) and MCF-7/ADR cells (drug-resistant cancer) treated with free DOX (n=3, IC₅₀ of MCF-7: 0.78 µg/mL; IC₅₀ of MCF-7/ADR: 96.14 µg/mL)



Figure S3. (A) Fluorescent signals of DOX (Excitation: 485 nm, Emission: 590 nm) in NP and tLyp-1-NP were detected in the organs and tumors at 24 h post-administration. (B) Semi-quantitative analysis of the fluorescent intensity of the formulations in different organs and tumors. Data represented mean \pm SD (n = 6). ***p < 0.001 significantly different with that of NP group.