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Supporting information of

Human serum albumin-based doxorubicin prodrug nanoparticles with tumor pH-responsive aggregation-enhanced retention and reduced cardiotoxicity

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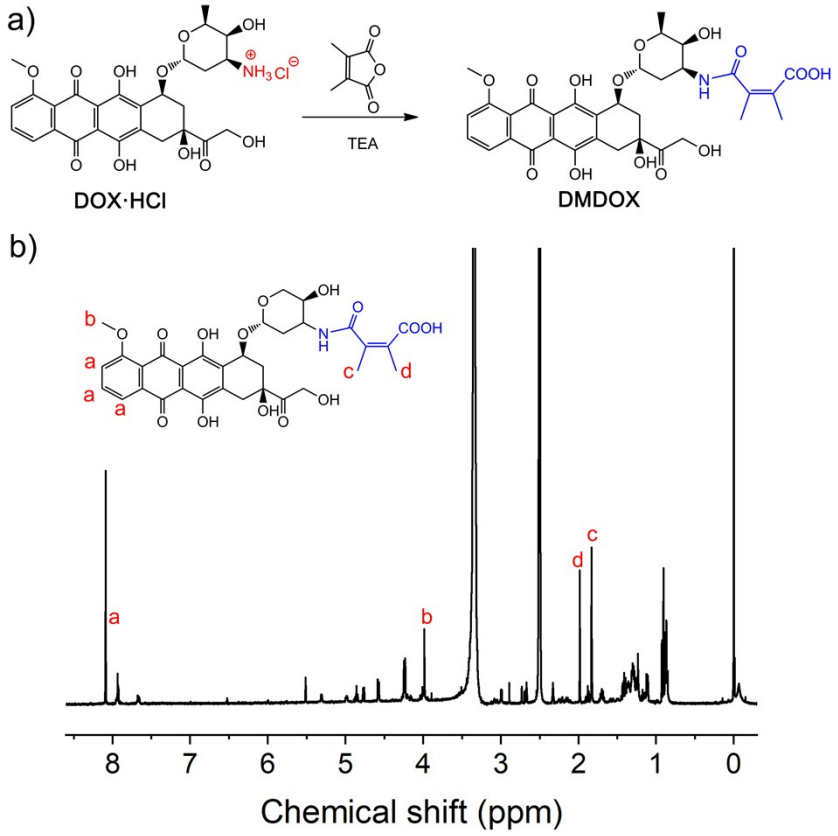

Figure S1. (a) Synthetic scheme of DMDOX. (b) ^{1}H NMR spectrum of DMDOX in DMSO-d_6.

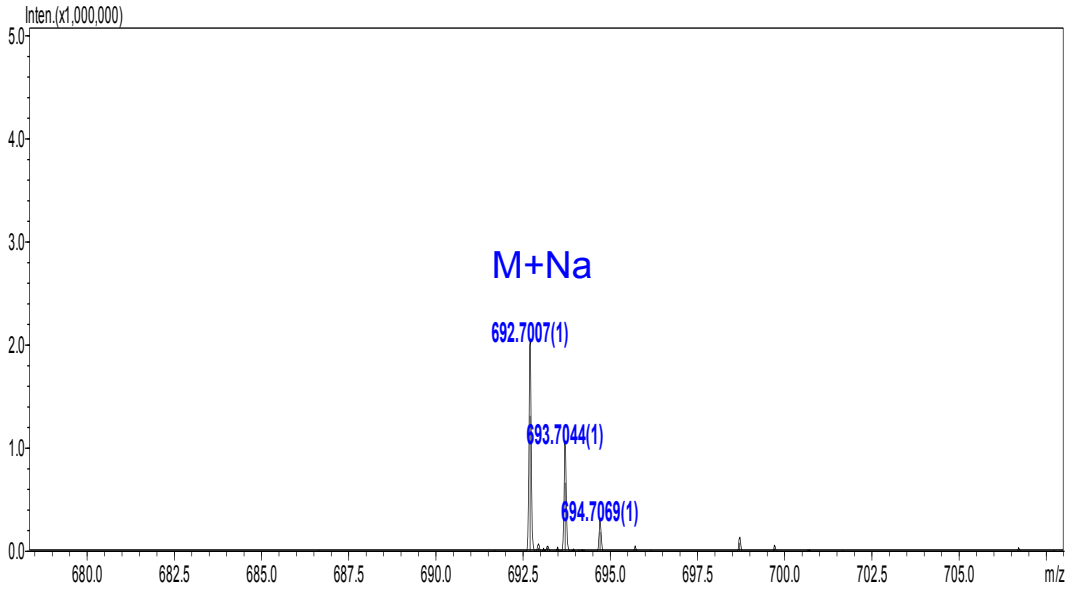

Figure S2. ESI-MS spectrum of DMDOX.

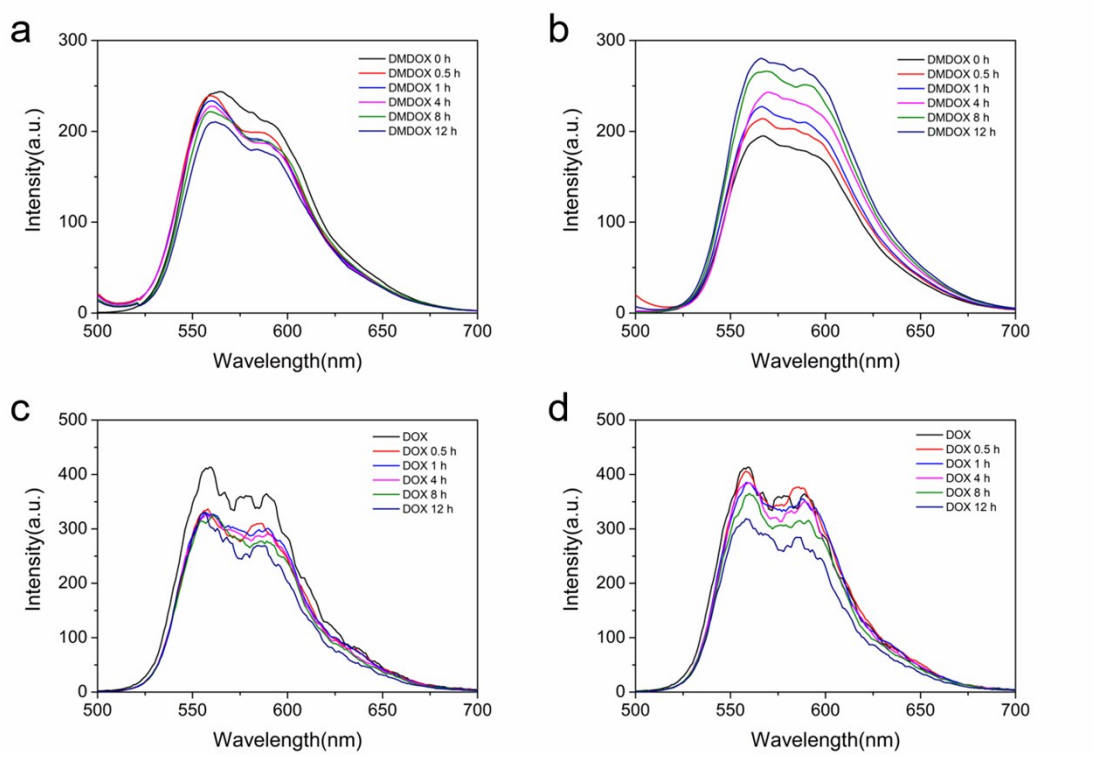

Figure S3. Fluorescence intensity of DMDOX and DOX in different pH conditions. (a-b) Fluorescence emission spectra of DMDOX at pH 7.4 (a) and 6.5 (b) within 12 h. (c-d) Fluorescence emission spectra of DOX at pH 7.4 (a) and 6.5 (b) within 12 h.

Table S1. DLCs and DLEs of HSA-DOX and HSA-DMDOX with different feeding molar ratios of HSA to DOX.

Samples	Feeding molar ratio of HSA to DOX	DLCs	DLEs
HSA-DOX 1:5	1:5	3.3%	78.9%
HSA-DMDOX 1:5	1:5	1.8%	37.6%
HSA-DOX 1:10	1:10	6.9%	85.8%
HSA-DMDOX 1:10	1:10	3.3%	36.1%
HSA-DOX 1:20	1:20	7.2%	48.9%
HSA-DMDOX 1:20	1:20	3.6%	21.6%

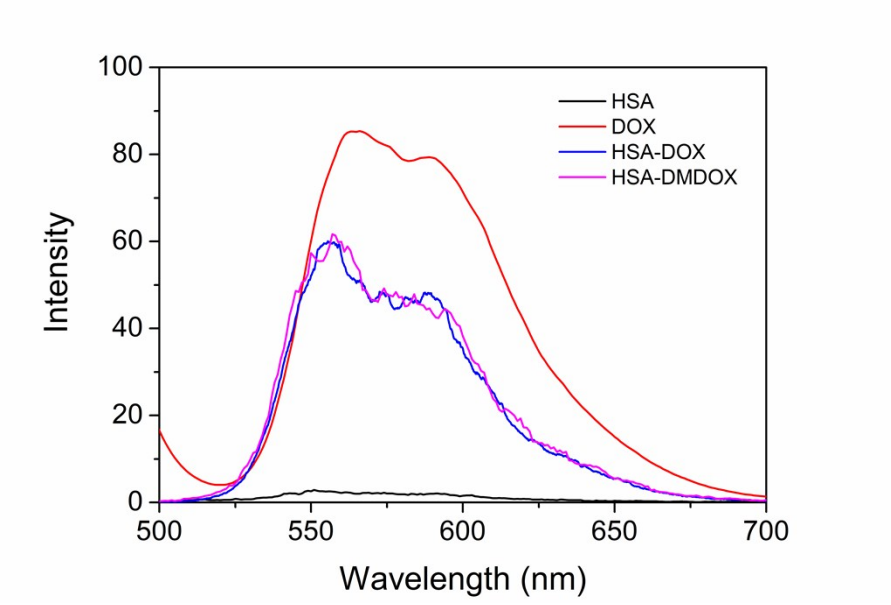

Figure S4. Fluorescence emission spectra (excited at 480 nm) of HSA, DOX, HSA-DOX and HSA-DMDOX.

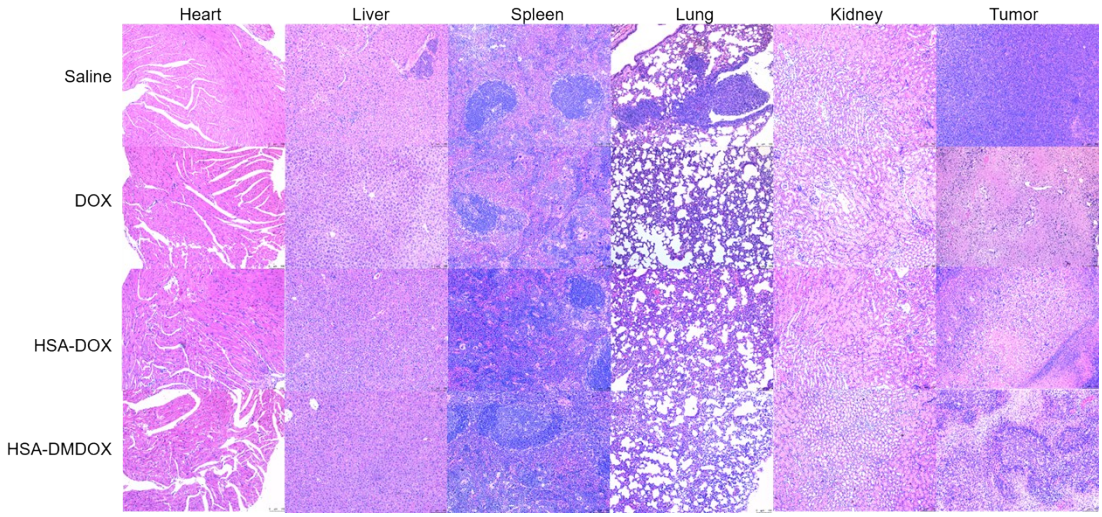

Figure S5. The H&E histological analysis (100×) of heart, liver, spleen, lung, kidney, and tumor in different groups (saline, DOX, HSA-DOX and HSA-DMDOX).