## Electronic Supplementary Information (ESI)

for

## Polymeric prodrugs conjugated with reduction-sensitive dextrancamptothecin and pH-responsive dextran-doxorubicin: An effective combinatorial drug delivery platform for cancer therapy

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Fig. S1 UV spectra of CPT, CPT-ss-N<sub>3</sub>, Dex-C≡C<sub>20</sub>, and Dex-ss-CPT<sub>10.6</sub>.



10 Fig. S2 HPLC curves of (A) CPT, (B) CPT-ss-N<sub>3</sub>, (C) DMSO, and (D) Dex-ss-CPT<sub>10.6</sub>. HPLC analyses were performed with acetonitrile/water (75/25, v/v) as the mobile phase at 30 °C at a flow rate of 1.0 mL min<sup>-1</sup>.



Fig. S3 UV spectra of DOX, DOX-*hyd*-N<sub>3</sub>, Dex-C= $C_{20}$ , Dex-*hyd*-DOX<sub>5.9</sub> and Dex-*hyd*-DOX<sub>5.9</sub> (acid breaking).



10 Fig. S4 HPLC curves of (A) DOX, (B) DOX-*hyd*-N<sub>3</sub>, (C) Dex-*hyd*-DOX<sub>5.9</sub> and (D) DMSO. HPLC analyses were performed with acetonitrile/water (50/50, v/v) as the mobile phase at 30 °C at a flow rate of 1.0 mL min<sup>-1</sup>.

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Fig. S5 Intensity ratios  $(I_3/I_1)$  in fluorescence emission spectra of pyrene as a function of logarithm concentration for (A) Dex-*ss*-CPT<sub>10.6</sub> and (B) Dex-*hyd*-DOX<sub>5.9</sub> in aqueous solution.



Fig. S6 TEM images of nanoparticles formed from (A) Dex-ss-CPT<sub>10.6</sub> and (C) Dex-hyd-DOX<sub>5.9</sub>; (B) and (D) are the
particle size distribution curves corresponding to (A) and (C), respectively.



**Fig. S6** (A) TEM image of nanoparticles formed from Dex-*ss*-CPT<sub>10.6</sub> and Dex-*hyd*-DOX<sub>5.9</sub>, and (B) is the particle size distribution curves corresponding to (A).