

Supplementary Information

CaP/DTX	EE of DTX (%)	LC of DTX (%)	Size (d. nm)	Zeta Potential (mV)
10/1	82.42	3.06	198.6±1.13	-29.85±0.35
15/1	85.60	1.46	196.2±1.00	-30±0.57
30/1	88.07	0.76	192.6±1.10	-28.13±0.20
60/1	89.76	0.34	188.5±0.45	-29.2±0.25

Table S1. The influences of formulation parameters on DTX drug loading content (LC) and encapsulation efficiency (EE)

PCNPs/D to CQ	EE of CQ (%)	LC of CQ (%)	Size (d. nm)	Zeta Potential (mV)
20/1	16.67	0.79	194.1±0.12	-30.0±0.30
15/1	18.58	1.16	186.2±1.20	-29.3±0.02
10/1	19.87	4.76	177.2±0.32	-28.9±0.05
5/1	21.15	2.43	172.7±1.25	-29.9±0.68

Table S2. The influences of formulation parameters on the LC and EE of CQ.

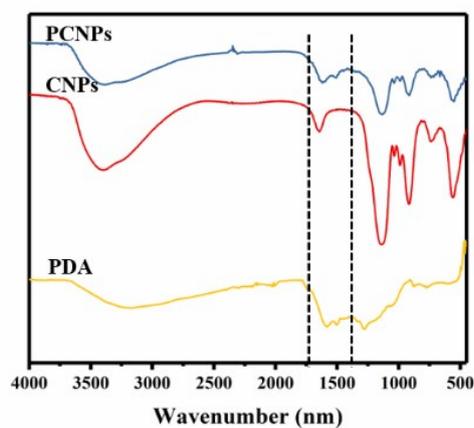


Fig. S1 FT-IR analysis of PDA, CNPs and PCNPs.

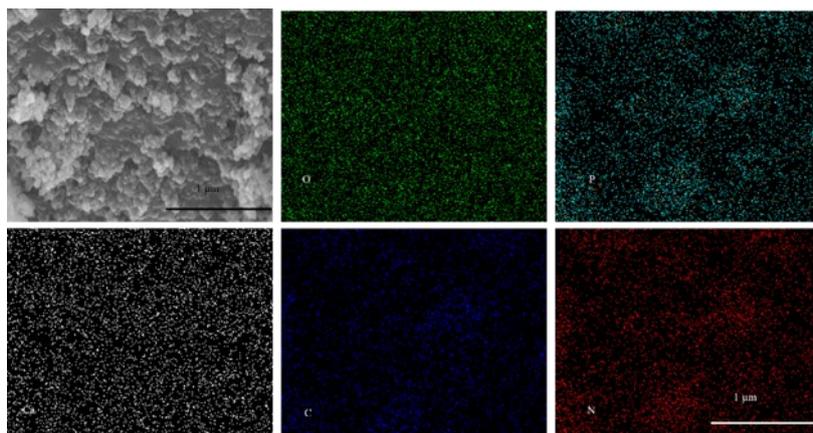


Fig. S2 Corresponding elemental (O, P, Ca, C and N) mappings of PCNPs. Scale bar=1 μm

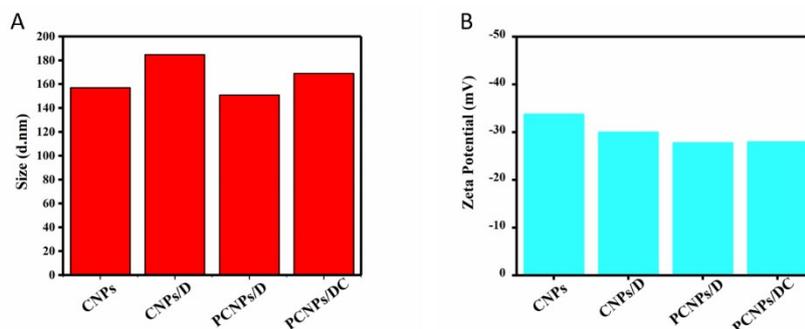


Fig. S3 (A) The sizes and (B) zeta potentials of CNPs, CNPs/D, PCNPs/D, PCNPs/DC.

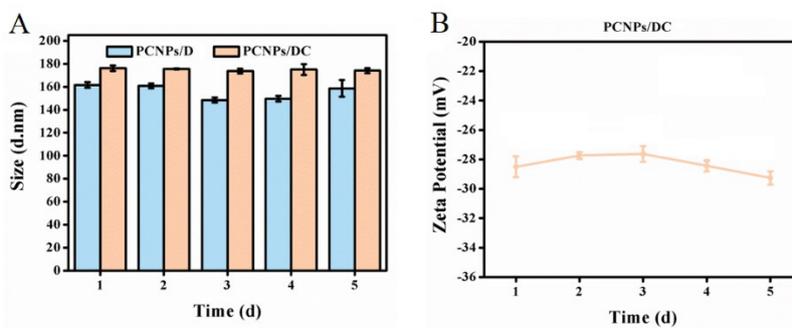


Fig. S4 (A) The sizes and (B) zeta potentials of PCNPs and PCNPs/DC for 5 days.

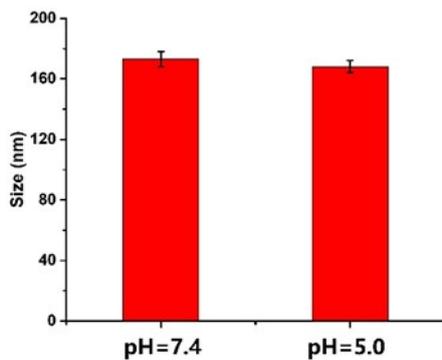


Fig. S5 Size changes of PCNPs/DC at pH 7.4 and pH 5.0.

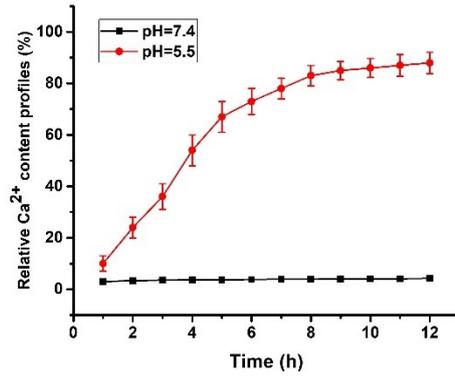


Fig. S6 The Ca²⁺ content profiles for the PCNPs/DC in different conditions measured at pH 7.4 and 5.0 in PBS at room temperature.

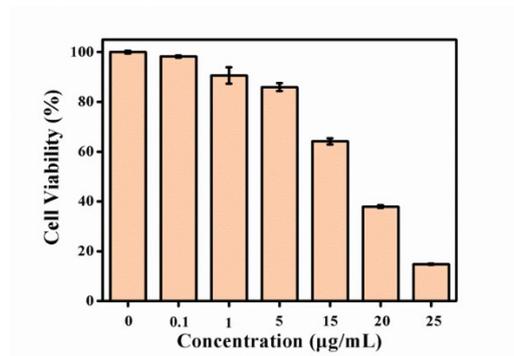


Fig. S7 Relative viability of MDA-MB-231 cancer cells incubated with PCNPs/C at different concentrations of CQ for 24 h.

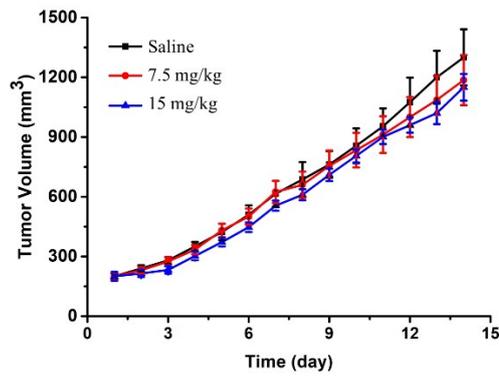


Fig. S8 Tumor growth curves of mice after saline and 7.5 mg/kg and 15 mg/kg of CQ treatments in 15 days.