Electronic supplementary information (ESI)

Dual-responsive, hyaluronic acid targeted drug delivery system based on hollow mesoporous silica nanoparticles for cancer therapy

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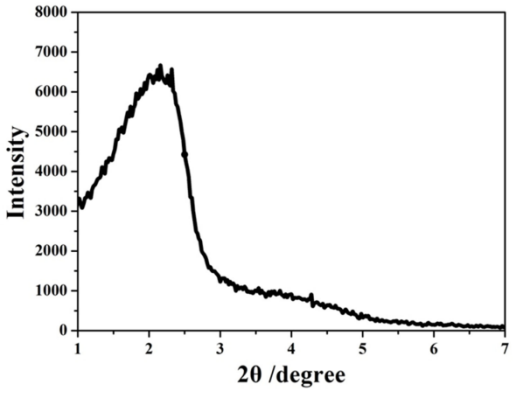

Fig. S1 Low-angle X-ray diffraction (XRD) spectrum of HMSNs.

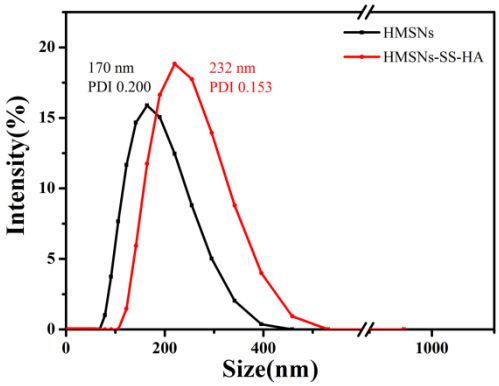

Fig. S2 Hydrodynamic diameter distributions of HMSNs and HMSNs-SS-HA.

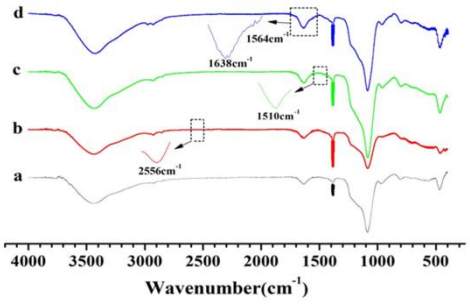

Fig. S3 FTIR spectra of HMSNs (a), HMSNs-SH (b), HMSNs-SS-NH_2 (c), HMSNs-SS-HA (d), respectively.

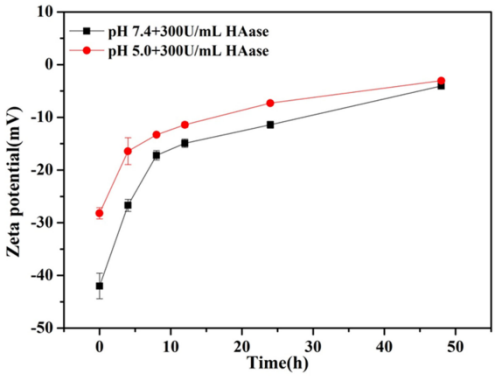

Fig. S4 Zeta potential changes of HMSNs-SS-HA being shaken in pH 5.0 and pH 7.4 PBS at 37 °C.

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Table S1 BET and BJH parameters of HMSNs, HMSNs-SS-NH_2, and HMSNs-SS-HA.

Sample	BET surface area $S_{BET}(m^2/g)$	BET pore volume $V_P(cm^3/g)$	BJH pore diameter $V_{BJH}(nm)$
HMSNs	1132	1.36	4.81
HMSNs-SS-NH_2	1045	1.14	4.35
HMSNs-SS-HA	74	0.36	/

Table S2 IC_{50} values of free DOX and DOX@HMSNs-SS-HA in 4T1 and 293T cells.

	free DOX (μg/mL)	DOX@HMSNs-SS-HA (μg/mL)
4T1 cells	0.75	0.39
293T cells	2.83	8.57