

Electronic Supplementary Information (ESI)

Targeted pH/redox dual-responsive nanoparticles for cancer chemotherapy combined with photodynamic/photothermal therapy

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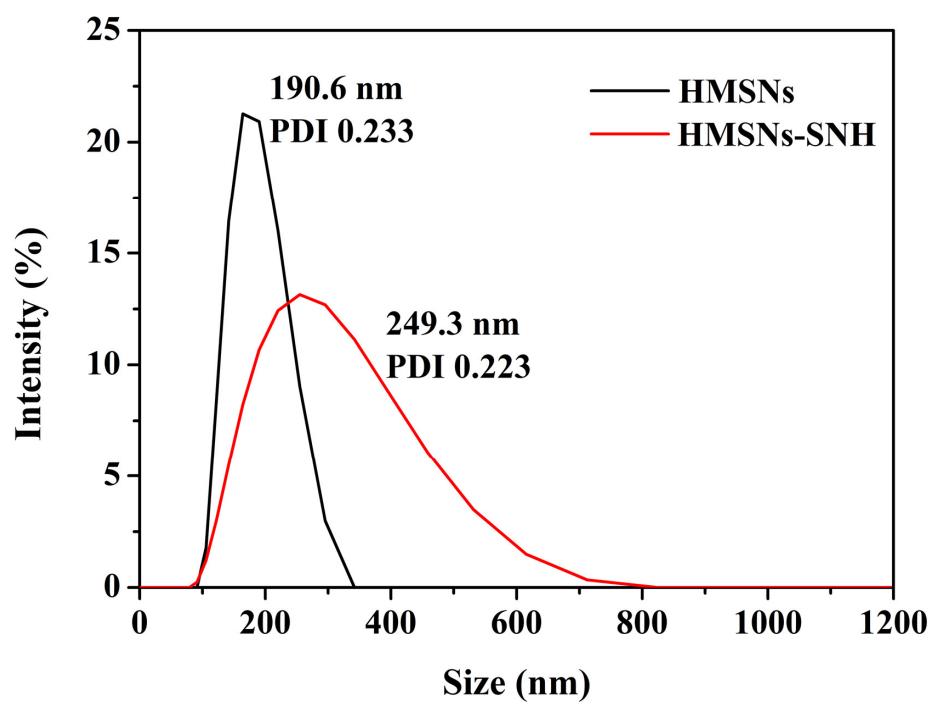


Fig. S1. Hydrodynamic diameters distribution of HMSNs and HMSNs-SNH.

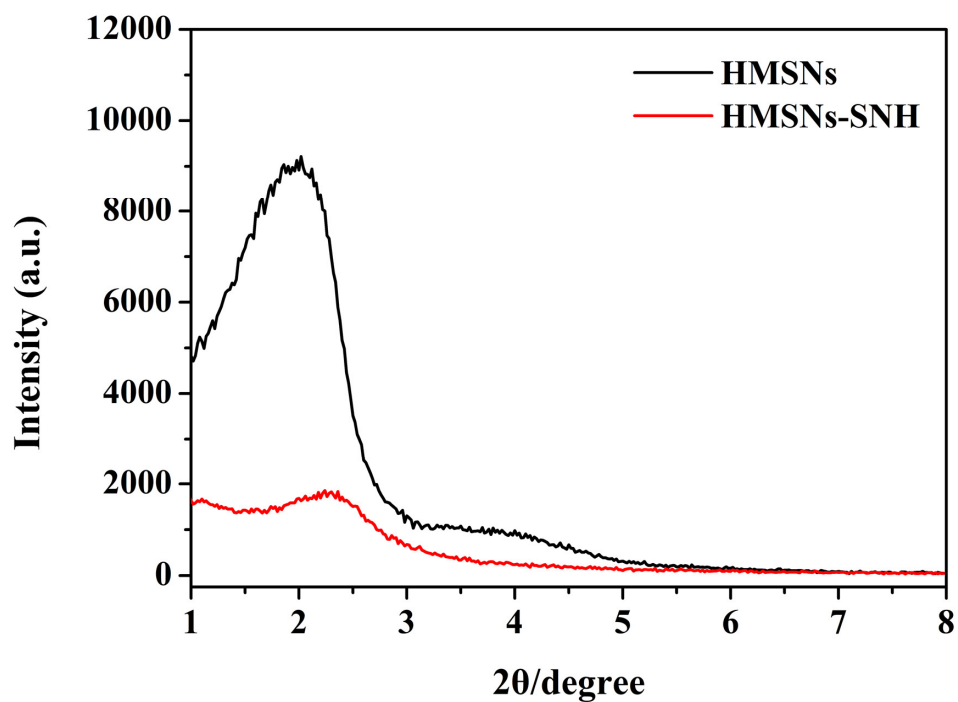


Fig. S2. XRD spectra of HMSNs and HMSNs-SNH.

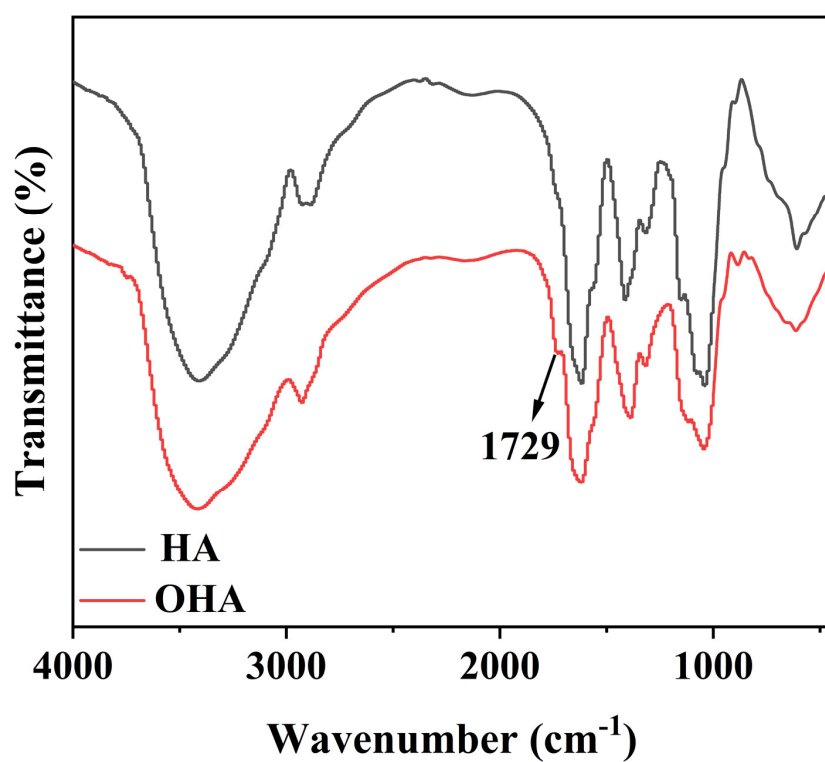


Fig. S3. FTIR spectra of HA and OHA.

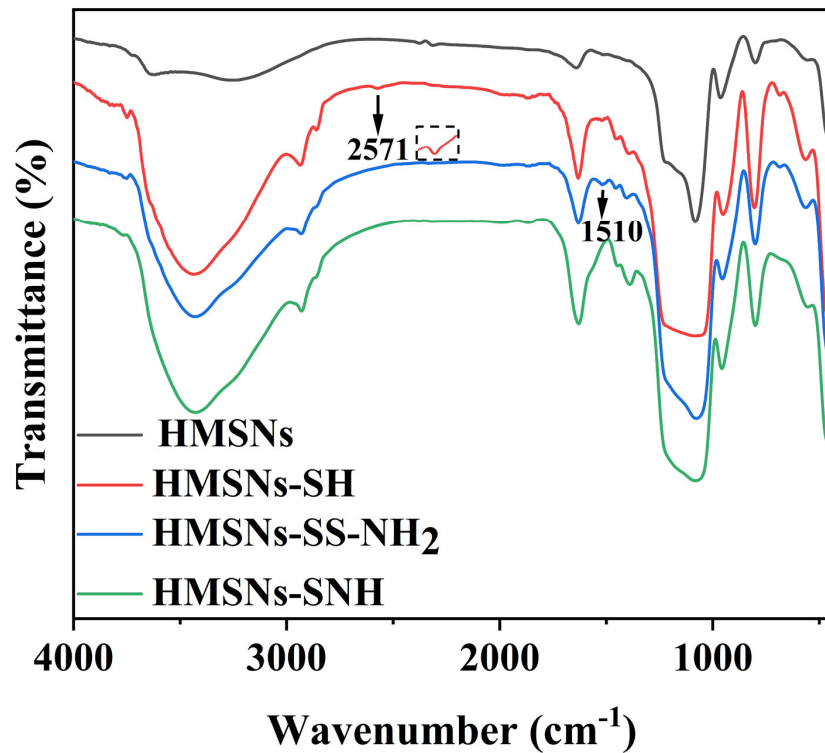


Fig. S4. FTIR spectra of HMSNs, HMSNs-SH, HMSNs-SS-NH₂ and HMSNs-SNH.

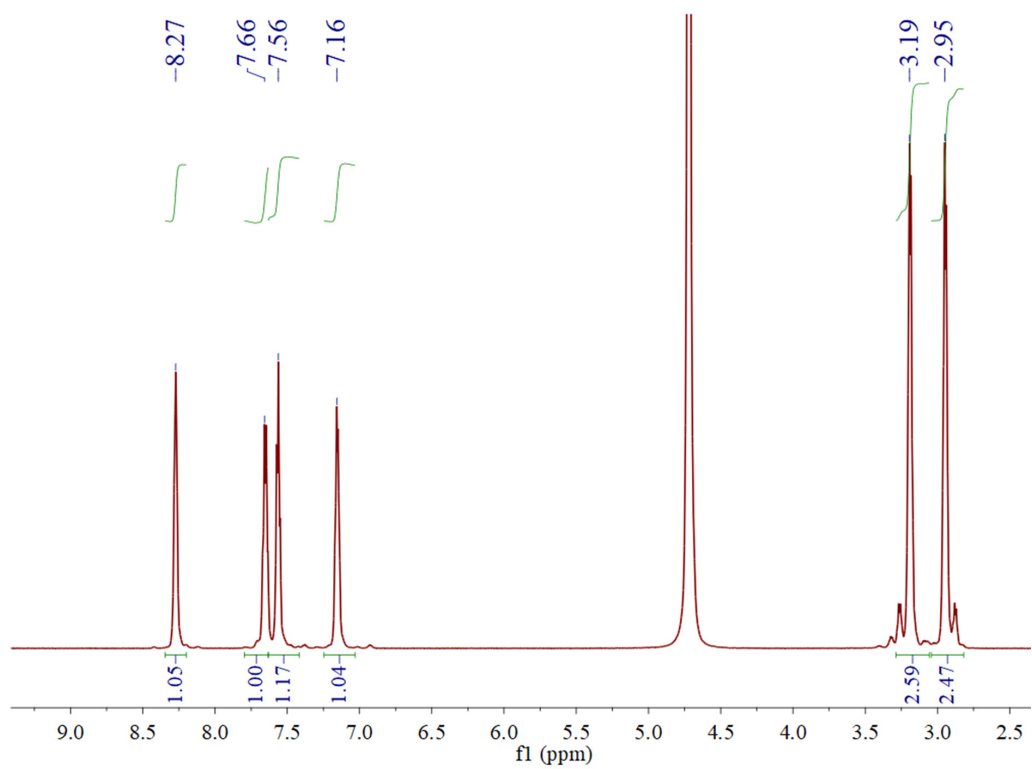


Fig. S5. ^1H NMR spectra of Py-SS-NH₂.

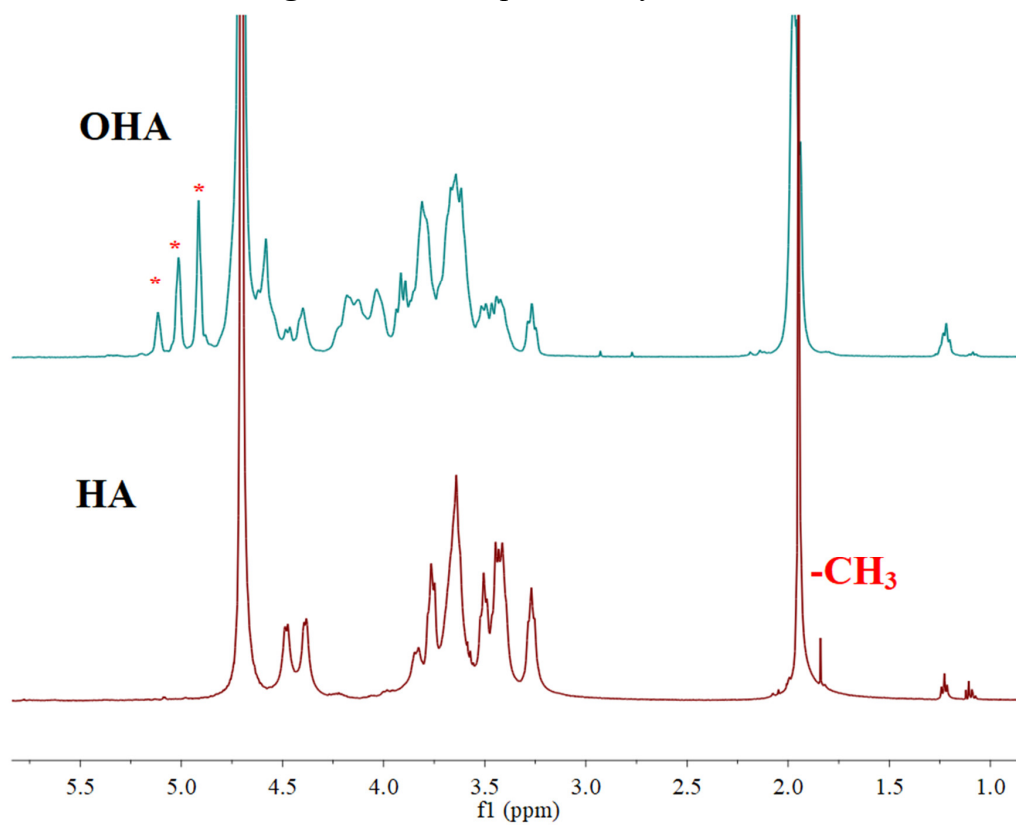


Fig. S6. ^1H NMR spectra of HA and OHA.

Table S1. BET and BJH parameter values of various HMSNs.

Sample	BET surface area S_{BET} (m ² /g)	BJH pore volume V_{P} (cm ³ /g)	BJH pore diameter V_{BJH} (nm)
HMSNs	1036.56	1.04	4.03
ID@HMSNs-SS- NH ₂	622.48	0.70	4.40
ID@HMSNs-SNH	9.90	0.16	/

Table S2. IC₅₀ values of various samples in HepG2 cells after 24 h.

	DOX ($\mu\text{g/mL}$)	DOX@HMSNs-SNH ($\mu\text{g/mL}$)	DOX+ICG ($\mu\text{g/mL}$)	ID@HMSNs-SNH ($\mu\text{g/mL}$)
Dark	1.12	0.39	1.10	0.30
Laser	1.31	0.42	0.36	0.09