Supplementary Information

pH-sensitive Magnetite Mesoporous Silica nanocomposites

for Controlled Drug Delivery and Hyperthermia†

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Figure S1. XRD pattern for (a) magnetite (b) magnetite mesoporous silica nanoparticles (c) MMSN@CS hydrogel

Figure S2. (a) $N_2$ adsorption / desorption isotherm (b) Pore size distribution curve (BJH method) of MMSN particles before drug loading
Figure S3. (a) $N_2$ adsorption / desorption isotherm (b) Pore size distribution curve (BJH method) of MMSN particles after drug loading

Figure S4. TGA graphs of MMSN before and after drug loading and MMSN@CS hydrogel
**Figure S5.** Scheme of the circulation of chitosan hydrogel in the body