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Figure S1.FT-IR spectrum of HPMA, PEG acrylate and P(HPMA-MPEGA)



Figure S2.<sup>1</sup>H-NMR spectrum of P(HPMA-MPEGA) in (d6)DMSO



Figure S3. Size exclusion chromatography curve of P(HPMA-MPEGA) and PEG (1 kDa)



Figure S4.FT-IR spectra of Tos.Cl, CD and CD-Tos



Figure S5. <sup>1</sup>H-NMR spectrum of CD-Tos in (d6)DMSO



Figure S6.FT-IR spectra of cystamine, CD-Tos and bisCD



Figure S7.<sup>1</sup>H-NMR spectrum of bisCD in (d6)DMSO



Figure S8. . <sup>13</sup>C NMR spectrum of bisCD in  $D_2O$ .



Figure S9. .<sup>1</sup>H-NMR spectrum of bisCD nanogel in D<sub>2</sub>O.



Figure S10. bisCD nanogel particle size stability over time