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Supporting Information

Fabrication of Supramolecular Hyperbranched Polyamidoamine-Dextran Conjugates and their self-assembly in presence of EGCG

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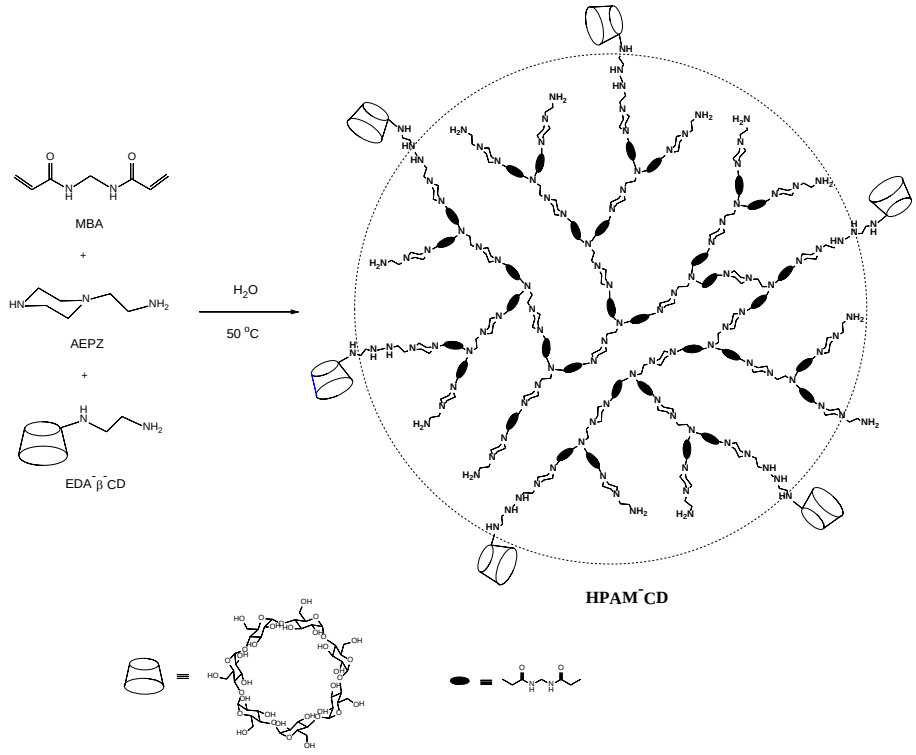

Figure S1. The Synthetic route of HPAM-CD.

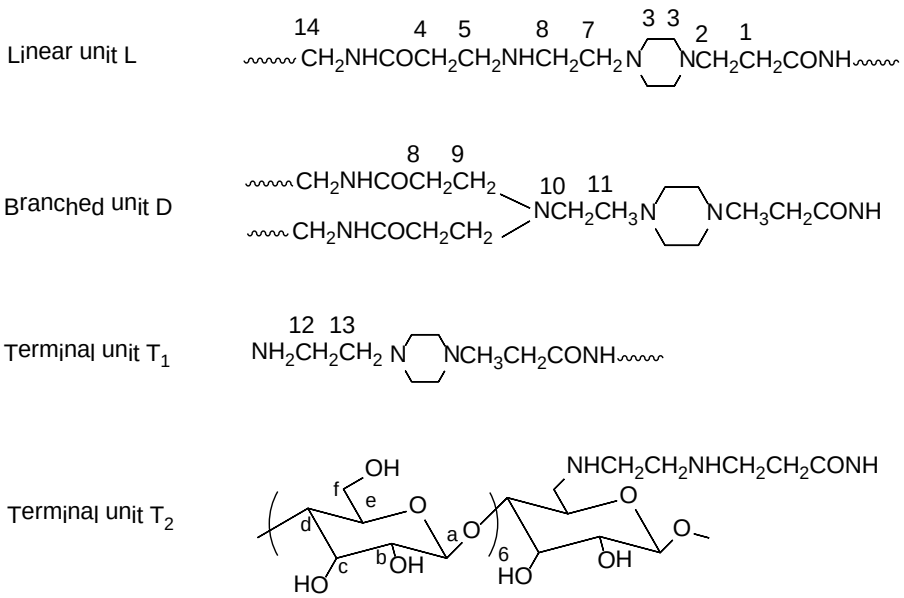

Figure S2. Schematic structure and quantitative ^{13}C NMR spectrum of HPAM-CD in DMSO-d_6.

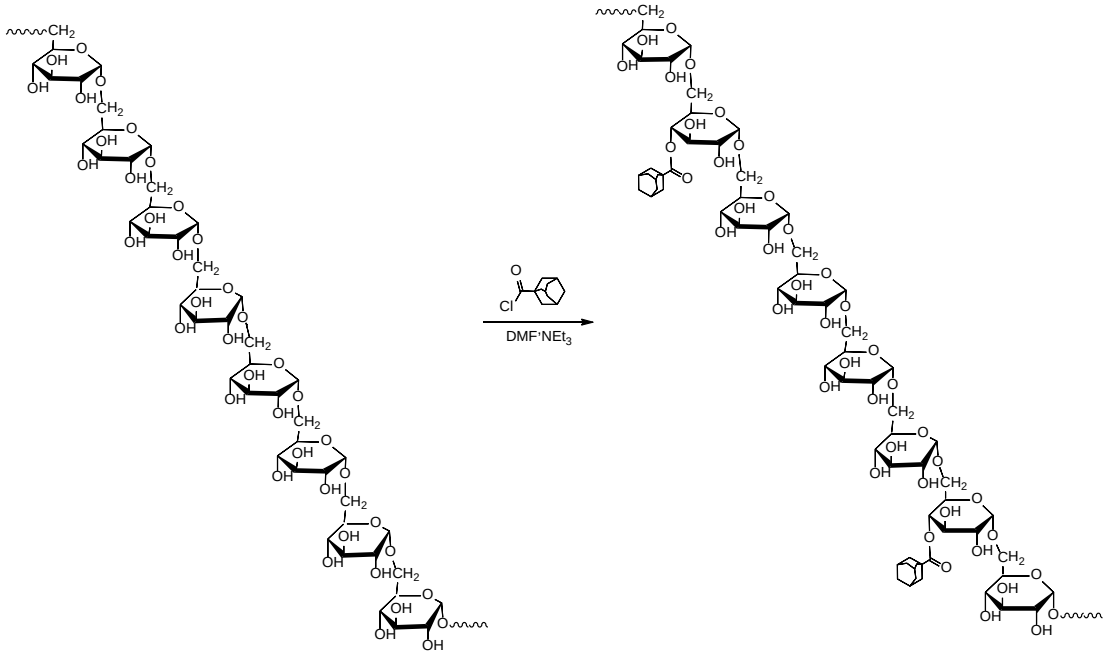

Figure S3. The Synthetic route of Dex-Ad.

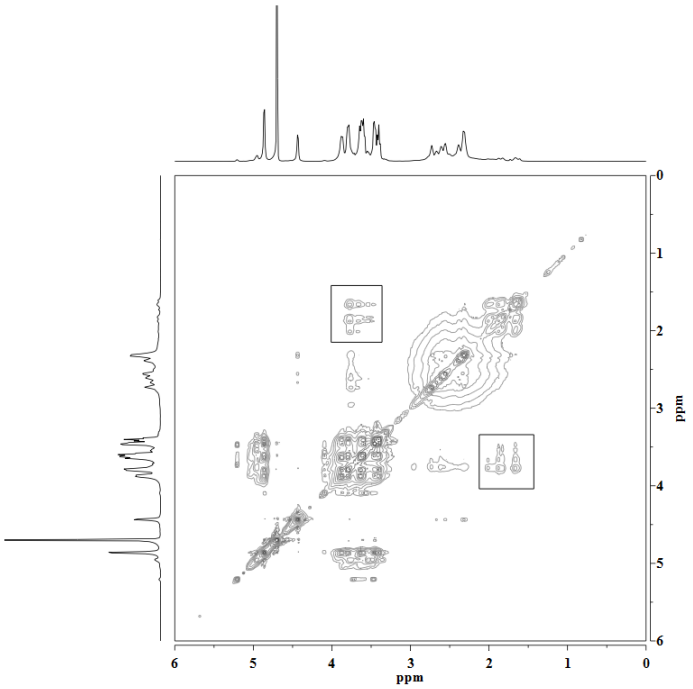

Figure S4. 2D-NOESY NMR spectrum of the HPAM-Dex conjugate in D_2O.

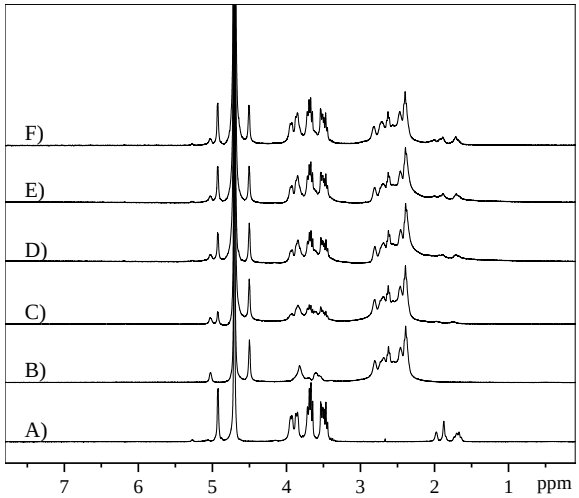

Figure S5. ^1H NMR spectra of Dex-Ad (A), HPAM-CD (B) and HPAM-CD/Dex-Ad at different mass ratios (C: 1/0.25, D: 1/0.5, E: 1/0.75, F: 1/1) in D_2O.

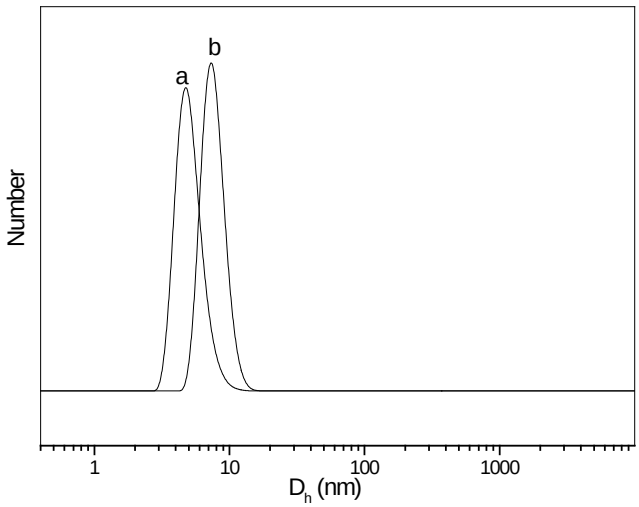

Figure S6. DLS curves of HPAM-CD (a) and HPAM-Dex (b).

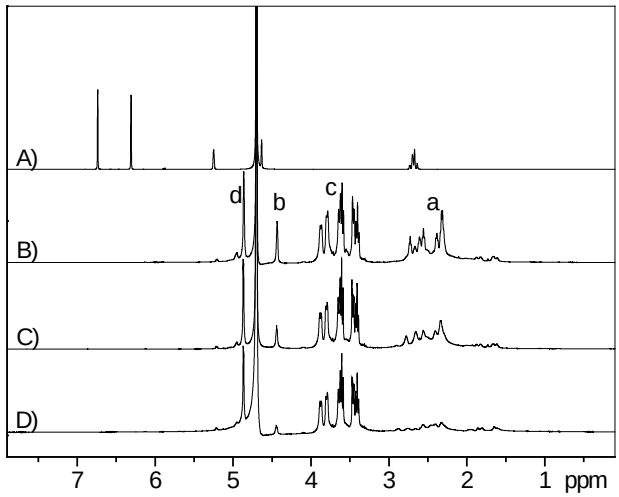

Figure S7. ^{1}H NMR spectra of EGCG (A), HPAM-Dex (B) and HPAM-Dex/EGCG mixtures (C, D) in D_2O.

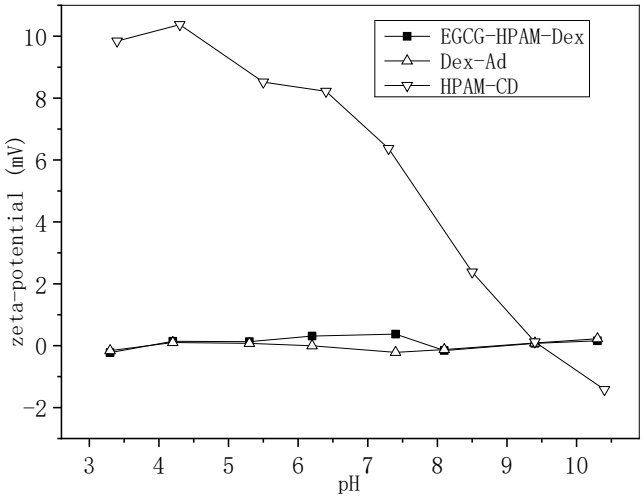

Figure S8. ζ-potentials of HAPM-CD, Dex-Ad and EGCG-HPAM-Dex.

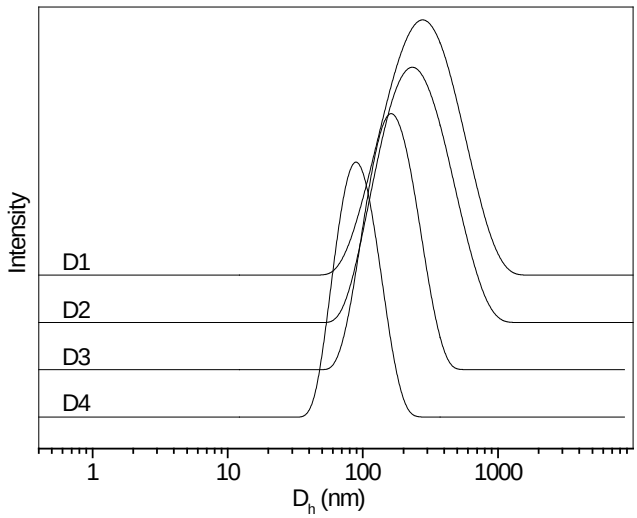

Figure S9. DLS curves of EGCG-HPAM-Dex at different mass ratio in DMEM solution (sample D1-D4).

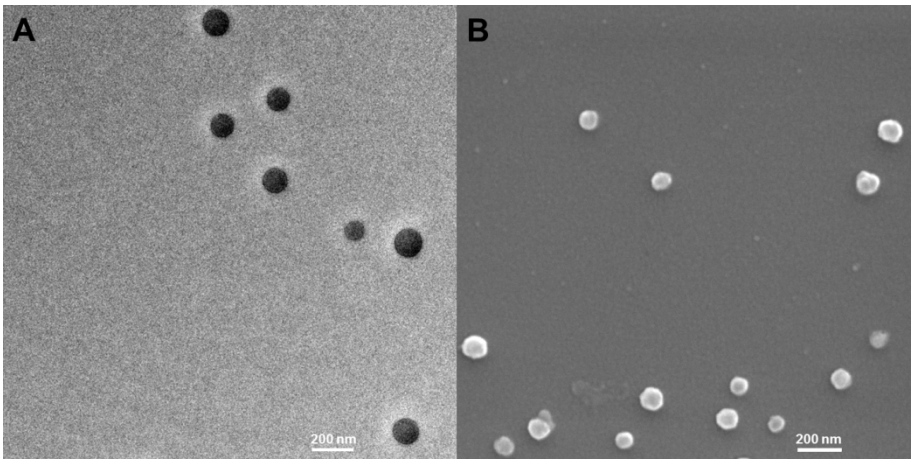

Figure S10. TEM (A) and SEM (B) images of the EGCG-HPAM-Dex micelles in DMEM solution.

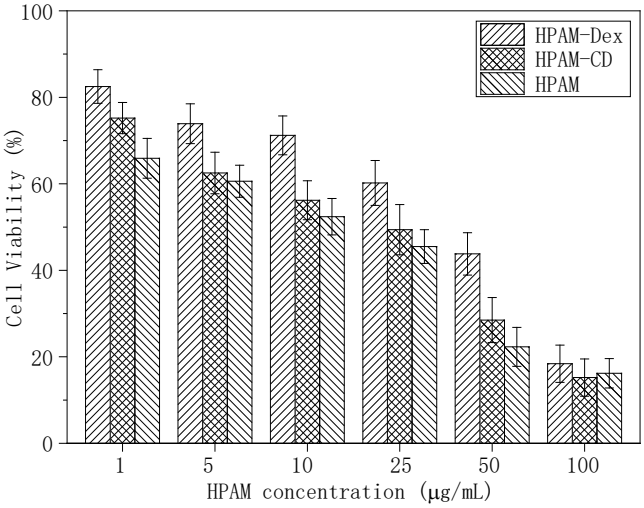

Figure S11. Cell viability of 4T1 cells against HPAM-Dex, HPAM-CD and HPAM at same HPAM concentrations after culturing for 24 h.

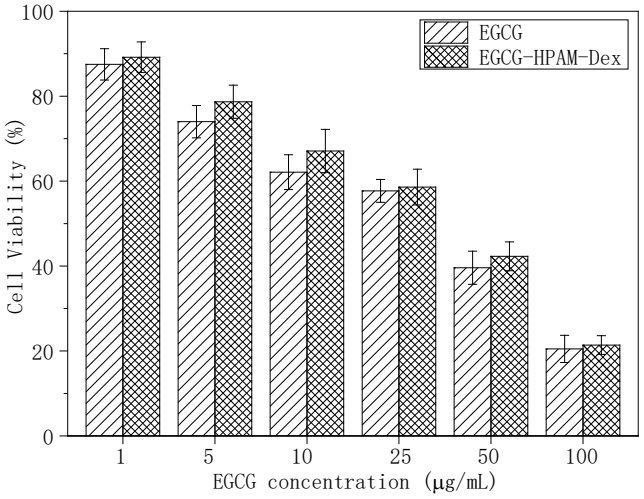

Figure S12. Cell viability of 4T1 cells against EGCG and EGCG-HPAM-Dex after culturing for 24 h.

Table S1. The feed and characterization results of HPAM and HPAM-CD.

Sample	MBA/AEPZ/EDA-β-CD (mmol)	Yield (wt %)	DB (%)	CD (%)
HPAM	20.0 / 20.0 / 0.0	70.6	33.0	0
HPAM-CD	20.0 / 18.0 / 2.0	41.7	34.7	5.6

Table S2. The DLS results of EGCG-HPAM-Dex micelles at different mass ratio in DMEM solution.

Sample	Mass ratio	HPAM-CD (mg mL^{-1})	Dex-Ad (mg mL^{-1})	EGCG (mg mL^{-1})	D_h (nm)	PDI
D1	1:1:1	0.5	0.5	0.5	253.7	0.225
D2	1:2:1	0.5	1	0.5	213.3	0.204
D3	1:4:1	0.5	2	0.5	157.3	0.165
D4	1:8:1	0.5	4	0.5	86.1	0.116
D5	1:4:0.5	0.5	2	0.25	194.3	0.231
D6	1:4:1.5	0.5	2	0.75	122.4	0.124
D7	1:4:2	0.5	2	1	120.4	0.140

Table S3. DLS analysis of EGCG-HPAM-Dex micelles after incubation under different conditions.

DLS results	H_2O	0.6 M NaCl	5.0 M urea	0.5% SDS
Intensity (Kcps/Attenuator)	174.9/6	160.2/8	184.3/8	262.8/8
D_h (nm)	94.2±0.34	208.0±4.2	184.9±1.4	250.9±3.8
PDI	0.07±0.01	0.25±0.02	0.20±0.02	0.26±0.01