

Electronic Supplementary Information

Thermo- and pH-responsive poly[(diethylene glycol methyl ether methacrylate)-co-(2-diisopropylamino ethyl methacrylate)] hyperbranched copolymers: Self-assembly and drug-loading

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TABLE S1: Light scattering results for the P(DEGMA-co-DIPAEMA) hyperbranched copolymers in aqueous media at different pHs and temperatures.

Sample	pH	Intensity (a.u)		R_h (nm)		PDI		ζ_p (mV)	
		25°C	55°C	25°C	55°C	25°C	55°C	25°C	55°C
HB-I	3	102	6890	357	240	0.45	0.12	+5	+10
	7	2547	47000	17/85	54	0.36	0.2	-16	-17
	10	162	467	9	11	0.16	0.07	-21	-49
HB-II	3	851	250	380	350	0.47	0.48	+8	+12
	7	54500	75000	102	69	0.4	0.31	-19	-23
	10	85400	98300	67	63	0.23	0.22	-36	-55
HB-III	3	208	166	440	410	0.53	0.55	+12	+15
	7	76700	87300	78	41/172	0.35	0.38	-25	-33
	10	126450	137090	92	92	0.19	0.22	-42	-66

UV-Vis spectroscopy of hyperbranched copolymer/drug formulations

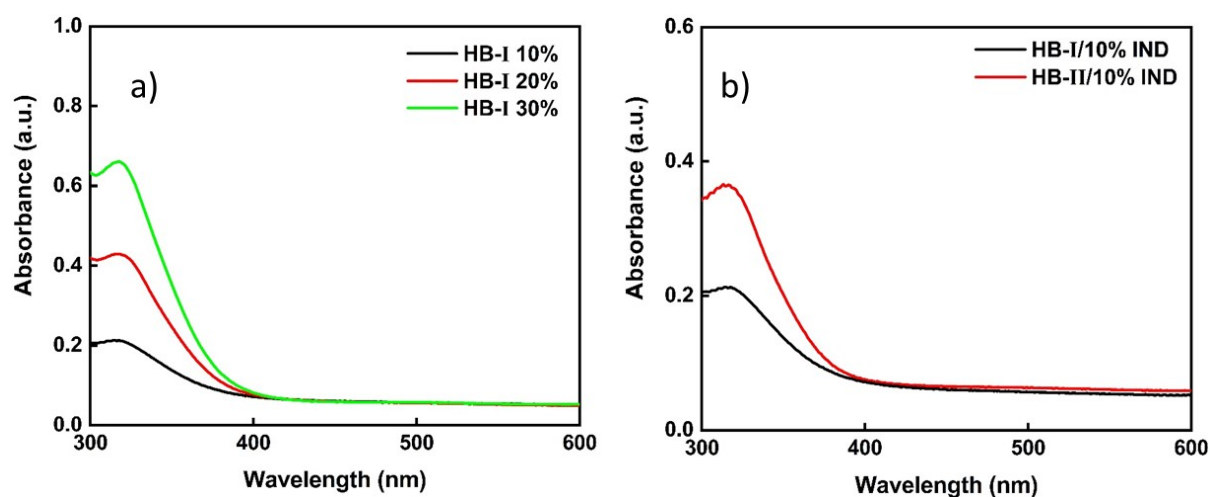


FIGURE S1: UV-Vis spectra from IND-loaded HB-I and HB-II copolymer nanoassemblies in aqueous media.

TABLE S2: Indomethacin entrapment in P(DEGMA-co-DIPAEMA) hyperbranched nanoassemblies

Sample	Quantity of indomethacin used (mg)	Maximum encapsulation level (%w/w)	Actual % encapsulation	
			efficiency	loading
HB-I	0.18	10	7	0.28
	0.36	20	9.5	0.44
	0.54	30	13	0.7
HB-II	0.4	10	6.5	0.25