

Figure S1. Scheme of the chemical synthesis of CHA-CUR conjugate. Part I: CHA conjugate was synthesized by modification of hyaluronic acid (HA) cholesteryl-amine linker (L-Chol) in reaction using water-soluble EDC carbodiimide. Part II: Curcumin (CUR) was conjugated with CHA by esterification of carboxyl groups in the HA in the presence of EDC and DMAP.

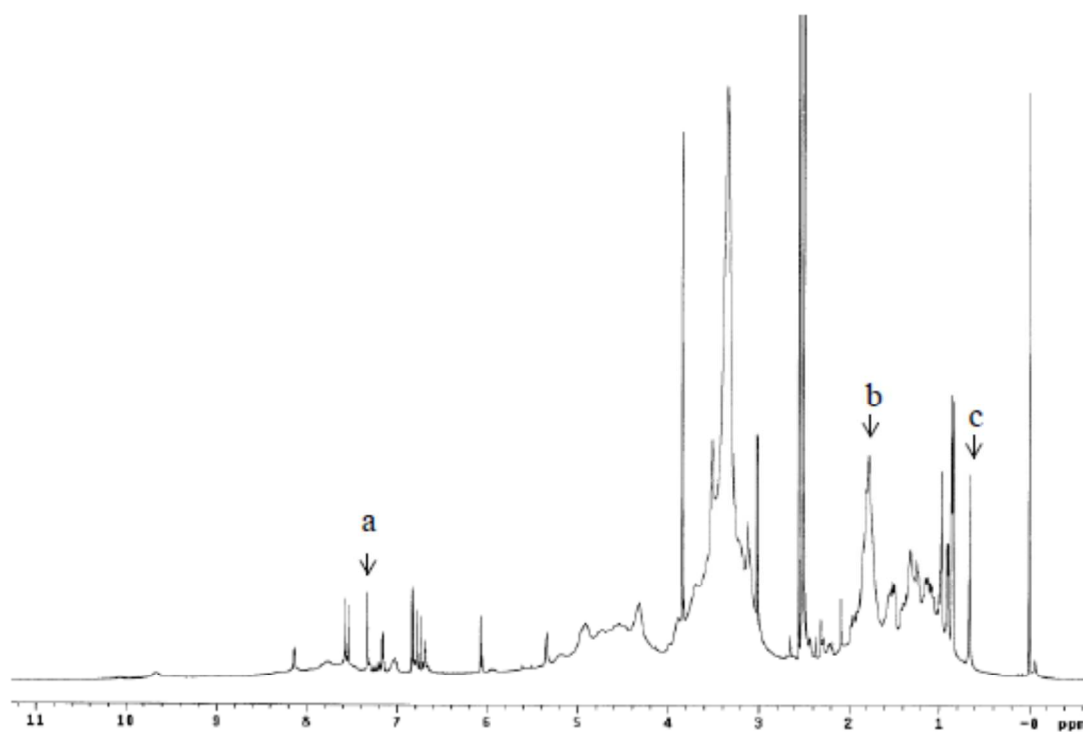


Figure S2. Proton NMR (500 MHz) spectrum of CHA-CUR in d-DMSO. Peaks a, b and c are characteristic to CUR, HA and cholesterol, respectively, have been used to calculate their contents.

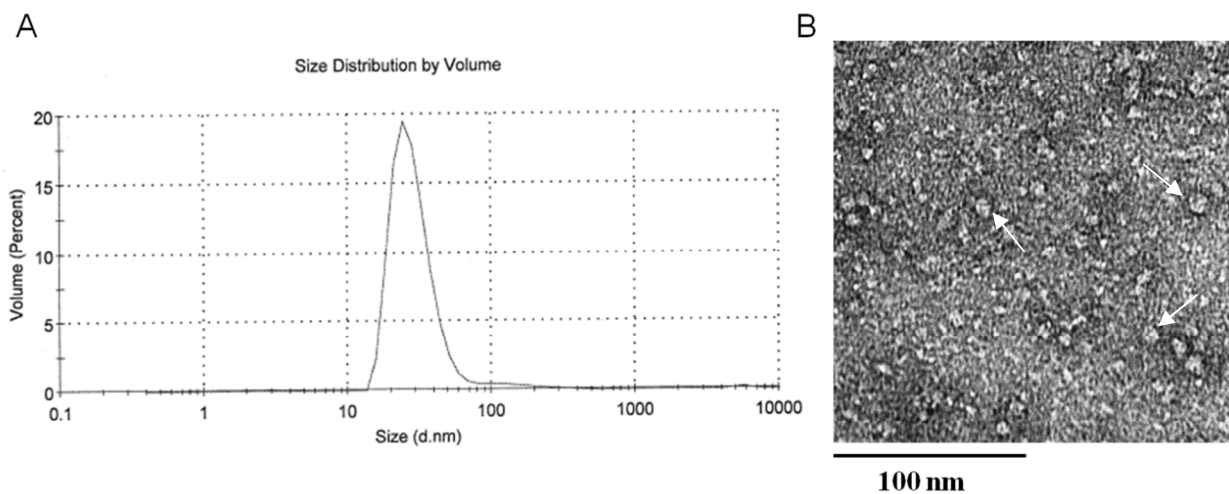


Figure S3. (A) Size distribution of CHA-CUR measured by the dynamic light scattering (1%, PBS, 25°C). (B), Morphology of CHA-CUR particles determined by transmission electronic microscopy (TEM, vanadate staining).

Table S1. Physicochemical properties of CHA-CUR

Nanogel	Size (nm)	PDI	Drug content by weight (%)	Cholesterol content by weight (%)	Zeta potential (mV)
CHA-CUR	29.2±5.4	0.4±0.1	7.0±0.6	3.9±0.1	-38.4±3.9

Values are mean ± standard deviation (SD) (n=3).