SUPPORTING INFORMATION

Self-assembled chitosan-sodium usnate drug delivery nanosystems: synthesis, characterization, stability studies, in vitro cytotoxicity and in vivo biocompatibility against 143 B cells

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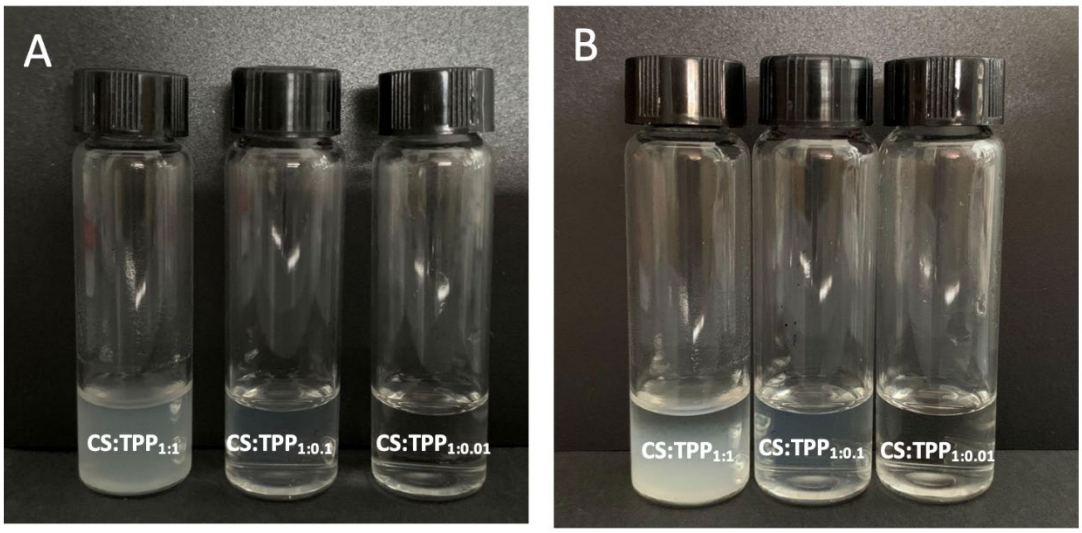

Figure S1A. CS nanoparticle suspensions at three CS:TPP molar ratios, just prepared (A) and after 1 minute (b). The sample obtained with the highest CS:TPP molar ratio (CS:TPP1:1) shows the highest turbidity, which increases with time.

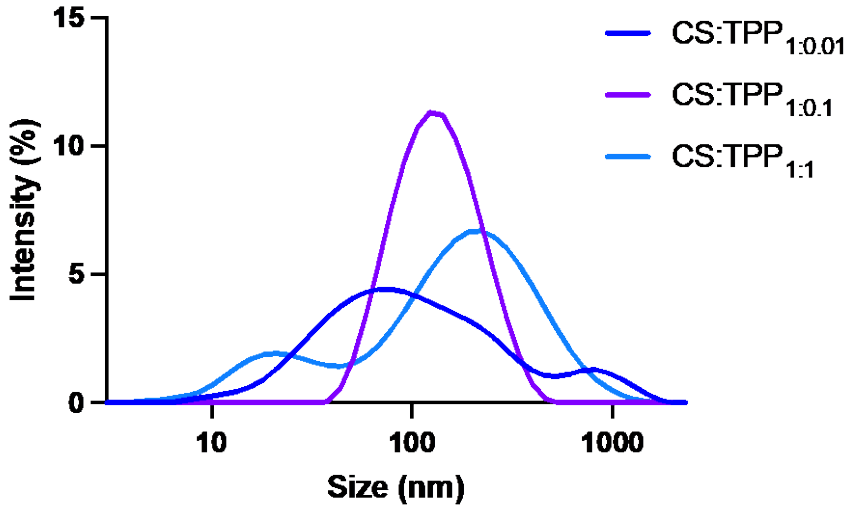

Figure S1B. Size distributions of CS:TPP$_x$ nanoparticles at different molar ratios (x = 1:0.01, 1:0.1, 1:1)

Table S1. Sizes and encapsulation efficiency (EE%) and loading capacity (LC%) of CS:NaU_{5x}

Sample	Hydrodynamic diameter (nm)	PdI	Zeta Potential (mV)	EE(%)	LC(%)
CS:$TPP_{1:0.1}$	117.2 ± 1.3	0.23 ± 0.01	+ 17.7 ± 1.4	-	-
CS:NaU_{5x}	166.9 ± 1.3	0.26 ± 0.10	+ 18.1 ± 0.6	61.28 ± 0.04	22.94 ± 0.07

Table S2. Kinetic release parameters and correlation coefficient of CS:NaU_{5x} obtained with the two models Higuchi and Korsmeyer-Peppas

Korsmeyer-Peppas			Higuchi	
K	n	R^2	K_H	R^2
0.92	0.68	0.96	1.68	0.86

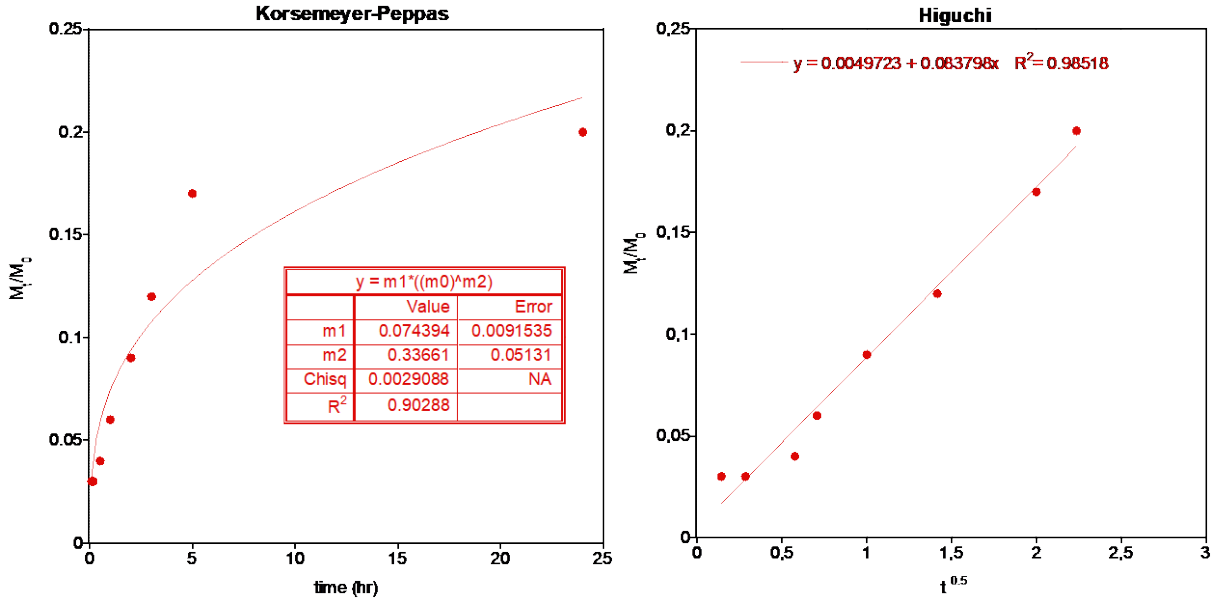

Figure S1. Korsemeyer-Peppas and Higuchi plots: released UA (%) vs time and the root square of time, respectively.

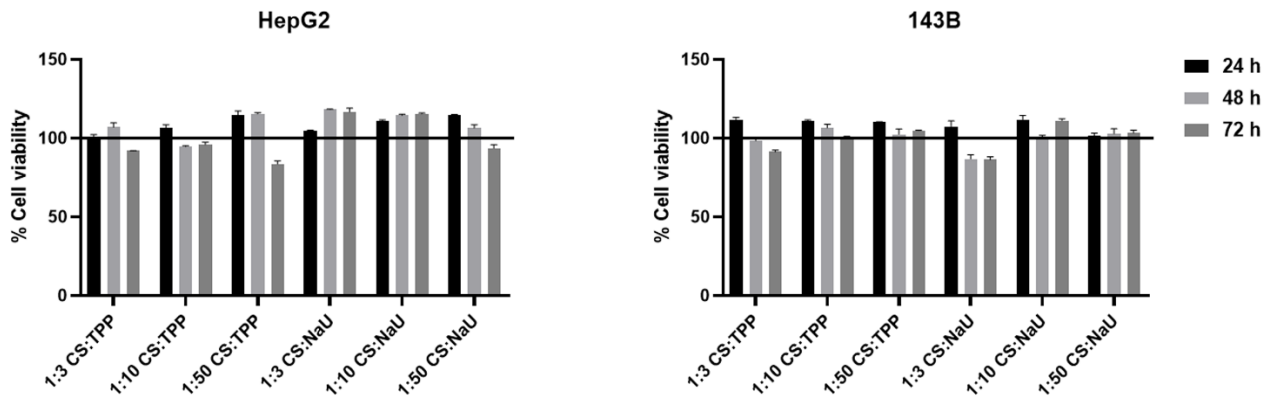

Figure S3. Cell viability was assessed by the MTS colorimetric method. The viability of HepG2 and 143B cells treated with 1:3 (0.312 mg/mL), 1:10 (0.093 mg/mL) and 1:50 (0.019 mg/mL) dilutions of CS:$TPP_{1:0.1}$ and CS:NaU_{5x} suspensions, after 24, 48 and 72 h. Cell viability of samples was normalized to the untreated cells which is reported as 100% and represented by a horizontal line. Results are expressed as mean ± SEM of data obtained by three different experiments.