Electronic Supporting Information (ESI)

Impact of polyethylene glycol and polydopamine coatings on the performance of camptothecin-loaded liposomes for localised treatment of colorectal cancer

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Fig. S1 Macroscopic appearance of CPT-L (left) and CPT-L-PDA (right).

Table S1 Physicochemical properties of liposomes without the incorporation of CPT. Results are presented as mean ± SD (*n* = 3).

Formulation	Mean diameter (nm)	PDI	ζ-potential (mV)
L (non-coated)	140 ± 1	0.05 ± 0.01	−2.5 ± 0.7
L-PEG	122 ± 0	0.08 ± 0.02	−19.5 ± 0.4
L-PDA	161 ± 1	0.11 ± 0.01	−8.8 ± 0.8

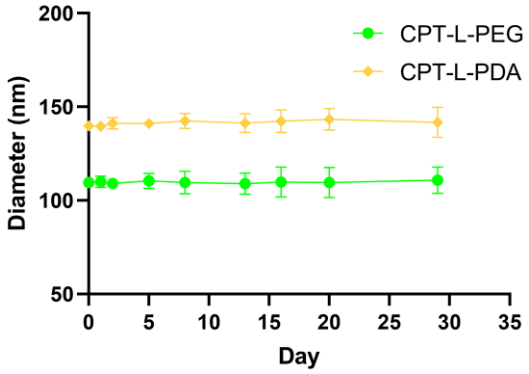

Fig. S2 Changes in mean diameter of liposomes upon storage at 4 °C. Data presented as mean ± SD (*n* = 3).

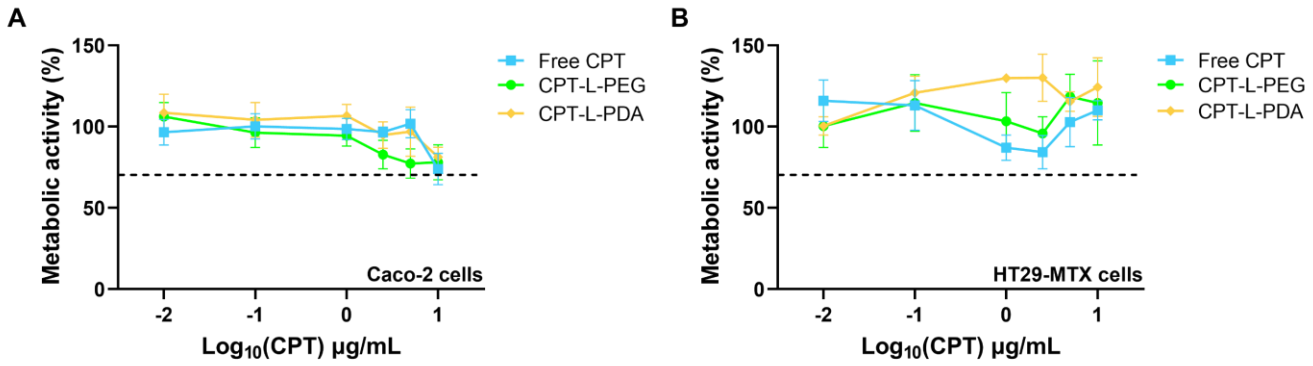

Fig. S3 Metabolic activity of (A) Caco-2 and (B) HT29-MTX cell lines after 4 h of incubation with free CPT or CPT-loaded liposomes, as assessed by the resazurin reduction assay. The horizontal dotted line indicates the 70% threshold usually considered for assessing cell compatibility, according to ISO 10993. Data are expressed as mean ± SD (*n* = 3).

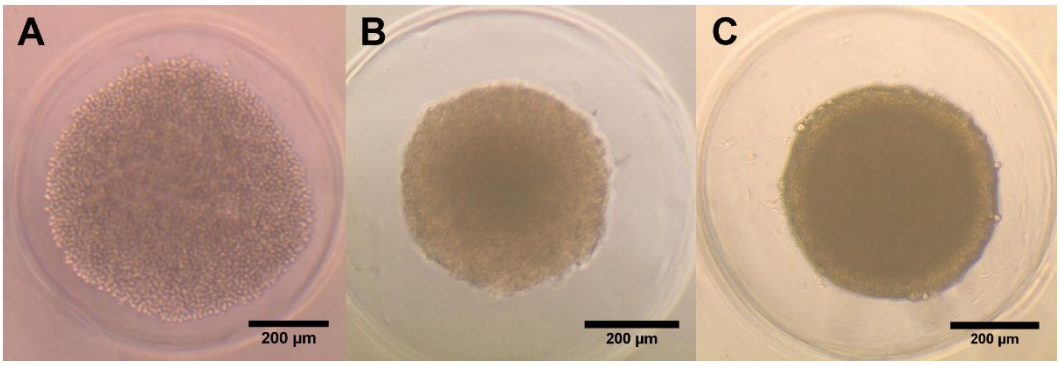

Fig. S4 Microphotographs of HCT 116 spheroids at (A) day 1, (B) day 4, and (C) day 7 of culture. Images denote the progressive development of spherical and compact spheroids.

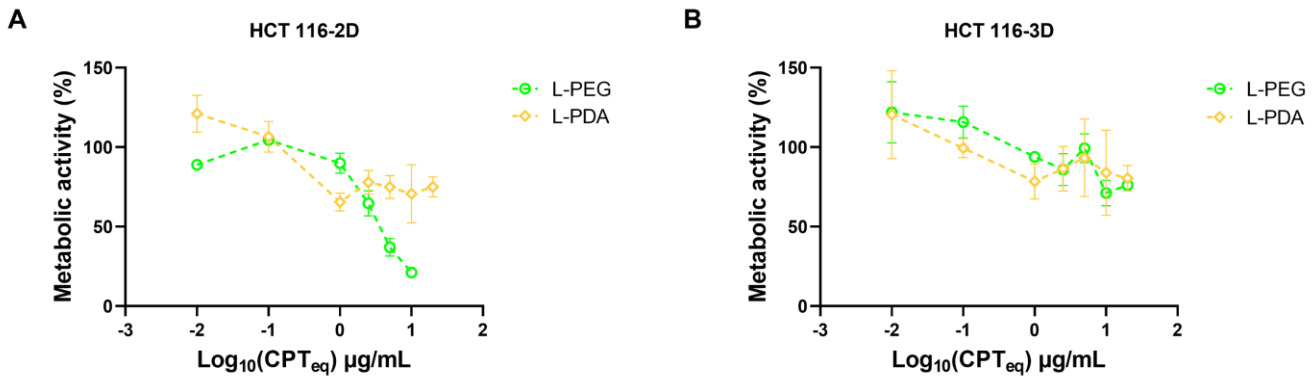

Fig. S5 Metabolic activity of HCT 116 cells under (A) 2D and (B) 3D configurations upon 24 hours of incubation with empty liposomes. The concentration of liposomes is expressed as 'equivalent of CPT' (CPT_{eq}) in order to facilitate comparisons with results presented in the main text. Data are expressed as mean ± SD (*n* = 3).