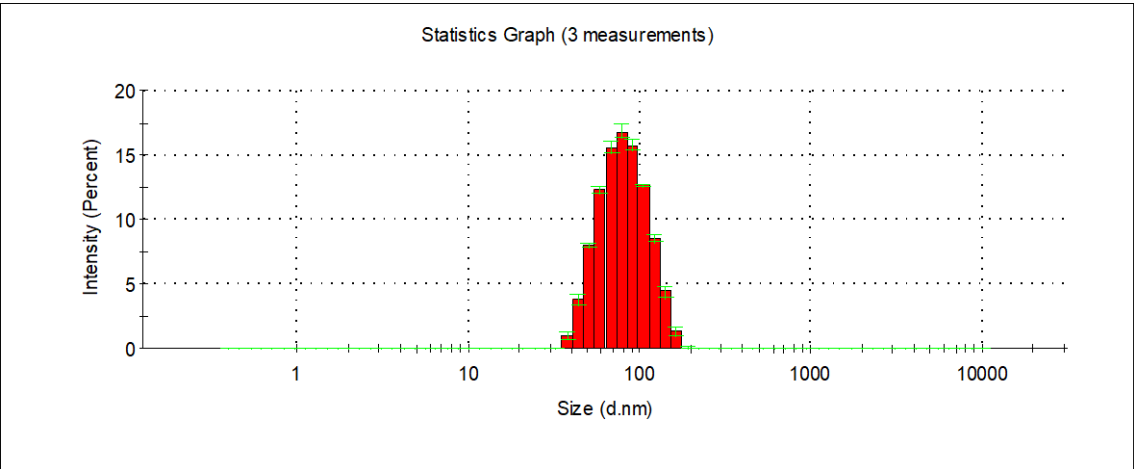
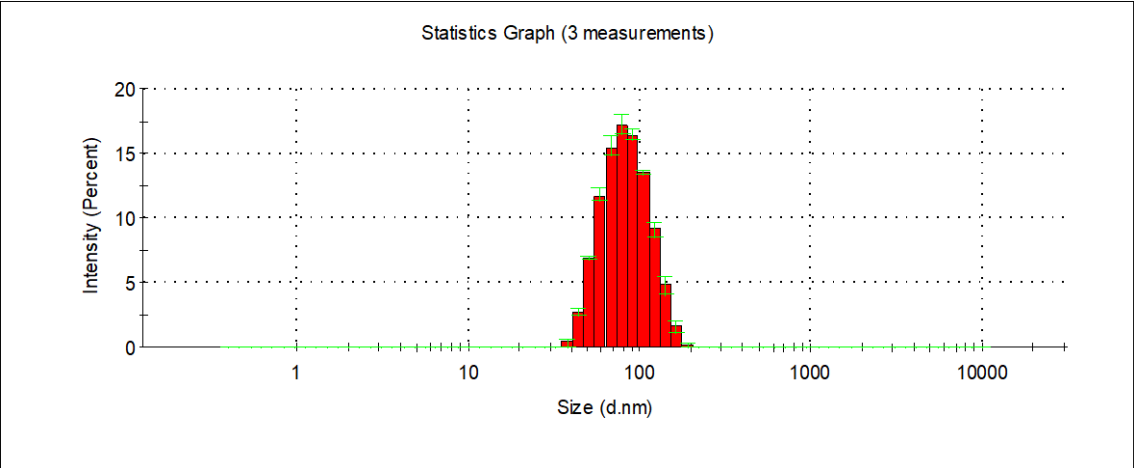


Figure S1

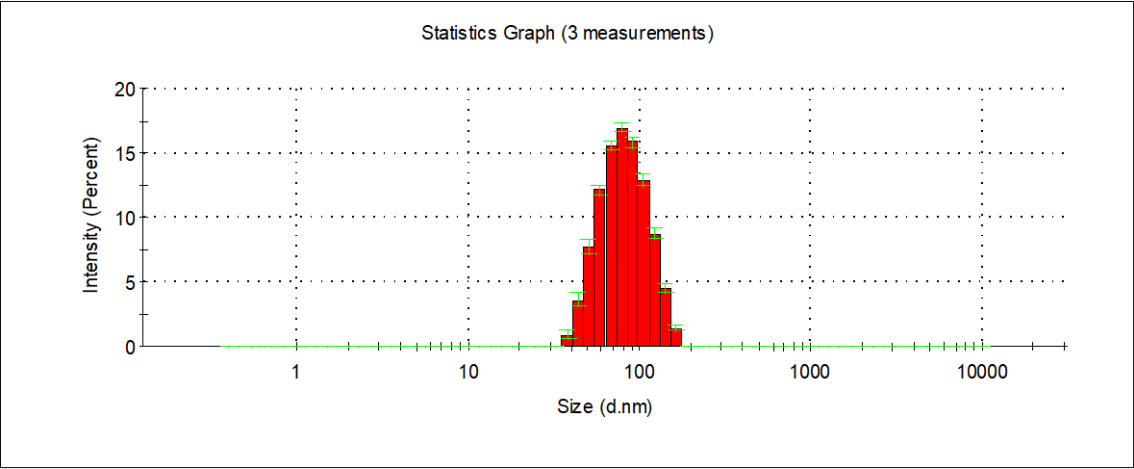
A



B



C



D

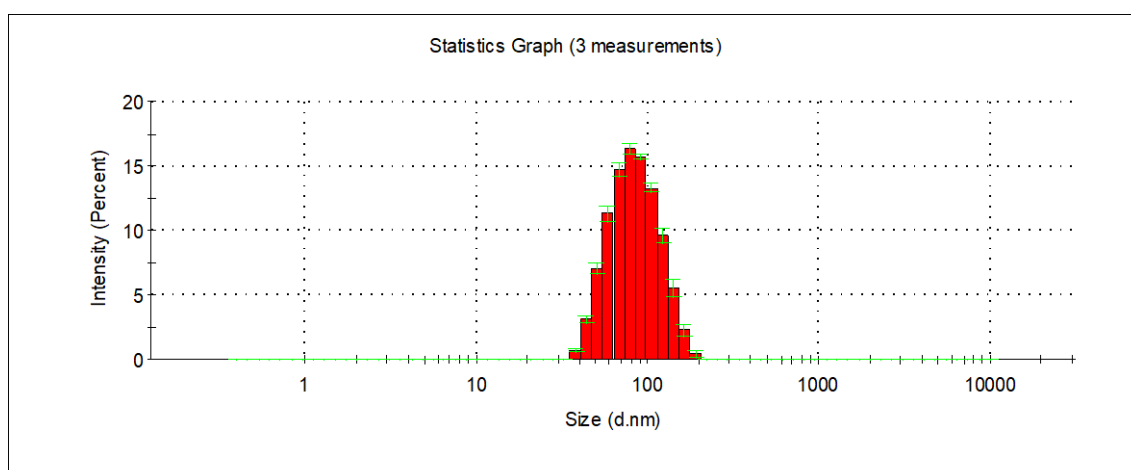
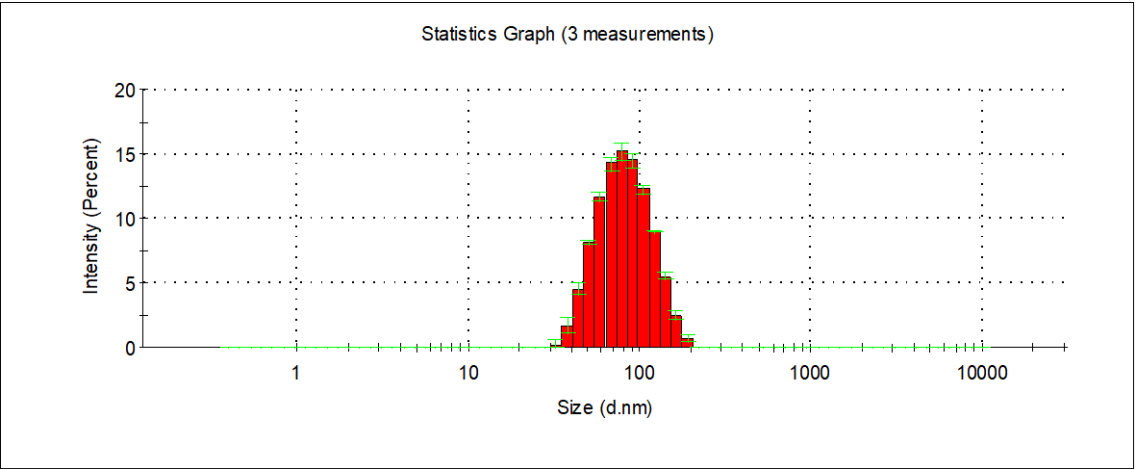


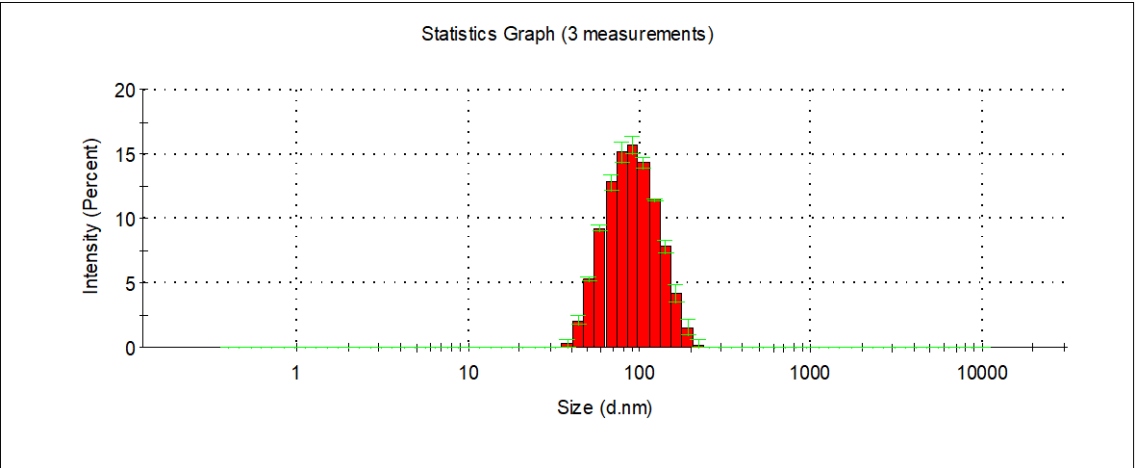
Figure S1. Micellar size and size distribution (PDI) of free and drug-loaded Soluplus® micelles (5% w/v) at 25 °C. A) Soluplus® (5% w/v) micelles. B) Histamine (5 mg/mL)-loaded Soluplus® (5% w/v) micelles. C) Paclitaxel (4 mg/mL)-loaded Soluplus® (5% w/v) micelles. D) Histamine (5 mg/mL) and Paclitaxel (4 mg/mL)-loaded Soluplus® (5% w/v) micelles. Data are expressed as mean \pm S.D. (n = 3).

Figure S2

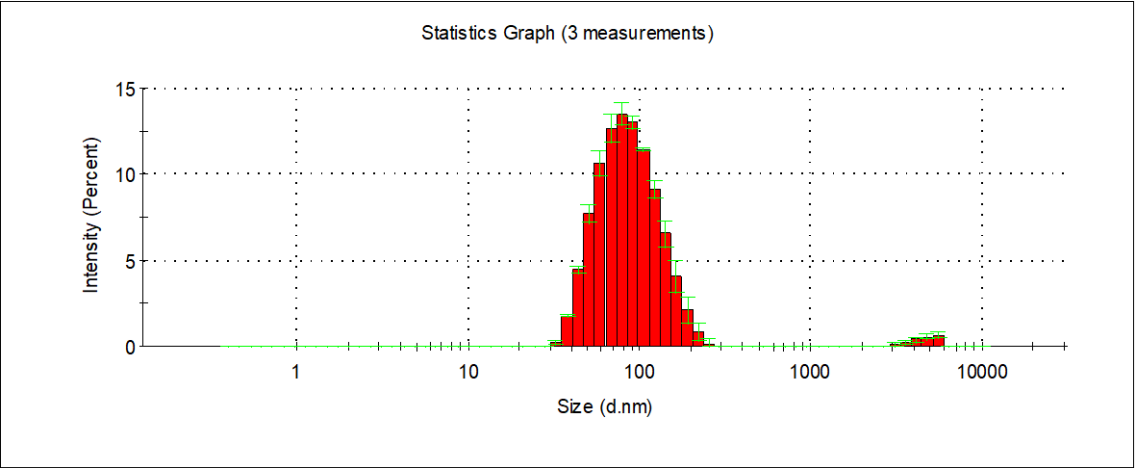
A



B



C



D

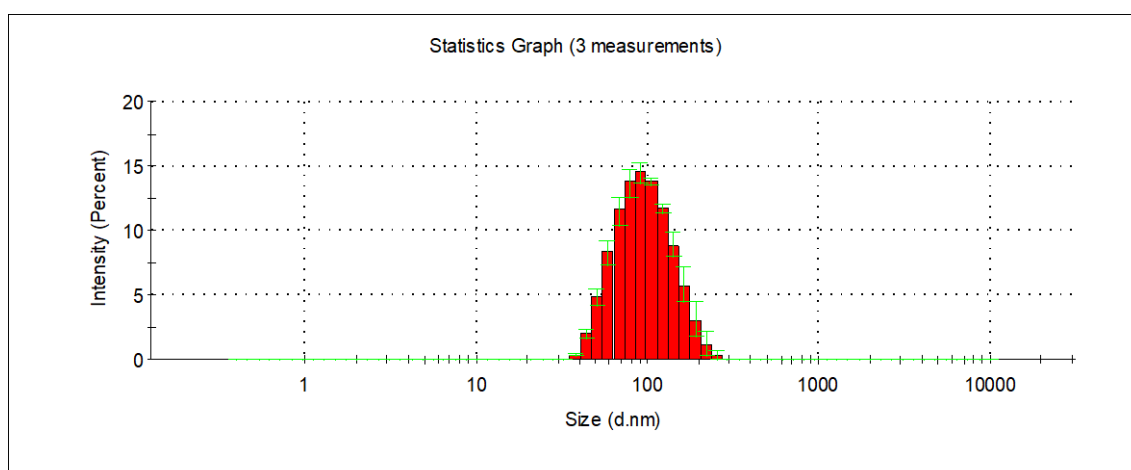


Figure S2. Micellar size and size distribution (PDI) of free and drug-loaded Glucose-Soluplus® micelles (5% w/v) at 25 °C. A) Glucose-Soluplus® (5% w/v) micelles. B) Histamine (5 mg/mL)-loaded Glucose-Soluplus® (5% w/v) micelles. C) Paclitaxel (4 mg/mL)-loaded Glucose-Soluplus® (5% w/v) micelles. D) Histamine (5 mg/mL) and Paclitaxel (4 mg/mL)-loaded Glucose-Soluplus® (5% w/v) micelles. Data are expressed as mean \pm S.D. (n = 3).

Figure S3

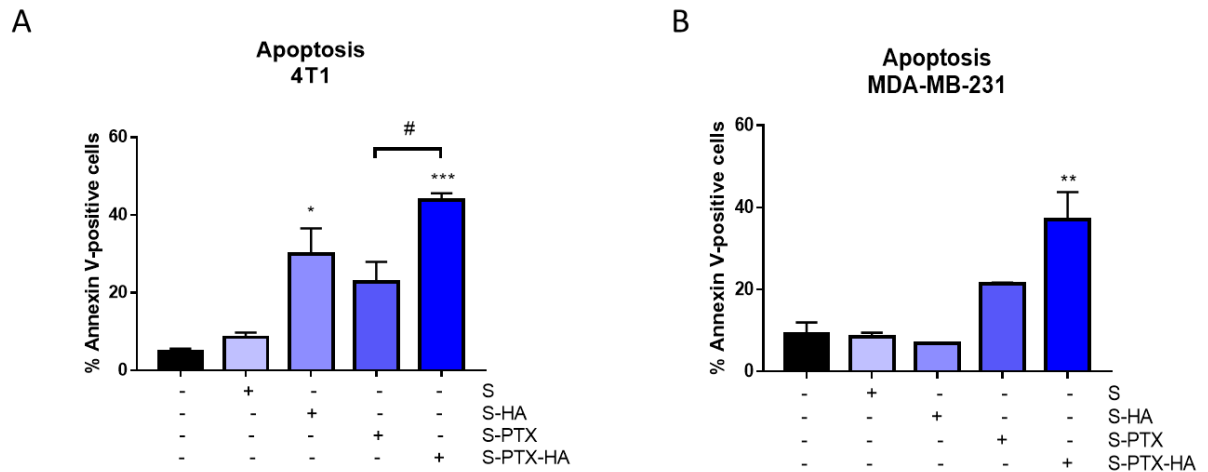


Figure S3. Modulation of apoptosis in 4T1 and MDA-MB-231 cells by nanomicellar formulations. A) 4T1 and B) MDA-MB-231 cells were treated with micellar systems (PTX 0.1 $\mu\text{g/mL}$) for 72 h. The percentage of Annexin-V was evaluated by flow cytometry. Error bars represent the mean \pm SEM ($n = 3$ independent experiments performed in triplicates). (ANOVA, Tukey's multiple comparisons test, * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$ vs. control, # $P < 0.05$).

Figure S4

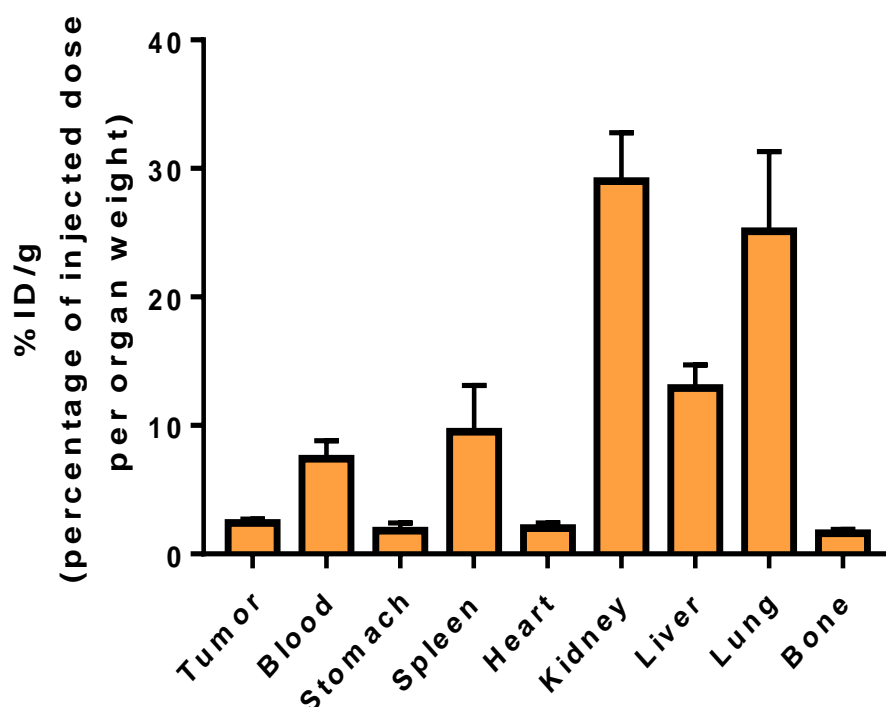


Figure S4. ^{99m}Tc -radiolabeled micelles bio-distribution in 4T1 TNBC model developed in BALB/c mice. Animals were anesthetized with isoflurane 2%v/v and O_2 as carrier. ^{99m}Tc -radiolabeled GS micelles were i.v. administered (tail vein) in 0.05–0.1mL (3.7–37 MBq or 0.1–1 mCi/animal) to 4T1 tumor-bearing animals. An *ex vivo* study was performed to evaluate biodistribution of radioactive 1 h after inoculation. Mice were euthanized in a CO_2 chamber, and organs of interest were excised, weighed, and radioactivity was measured in a well-type solid scintillation counter (Alfanuclear, ZX, Argentina) to express results as percentage of injected radioactive dose normalized by the organ weight (%ID/g). Bars represent mean \pm SD (n=4 animals per group).

Figure S5

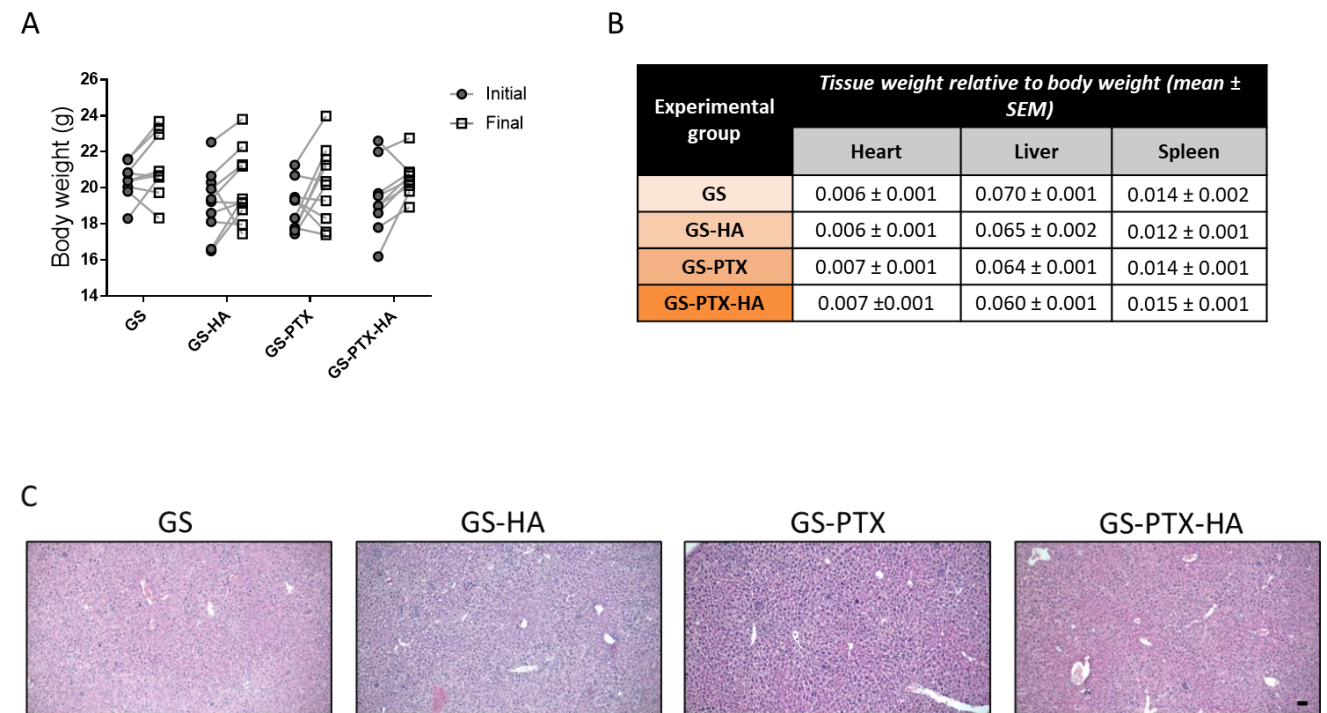


Figure S5. A) Initial and final body weights. B) The weight of heart, liver, and spleen relative to final body weight of 4T1 tumor-bearing mice are shown (n= 9-10). Data represent the mean \pm SEM. C) Representative images of the liver samples stained with hematoxylin & eosin. x100 original magnification. Scale bar = 20 μ m.