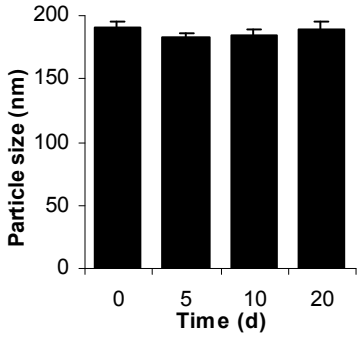
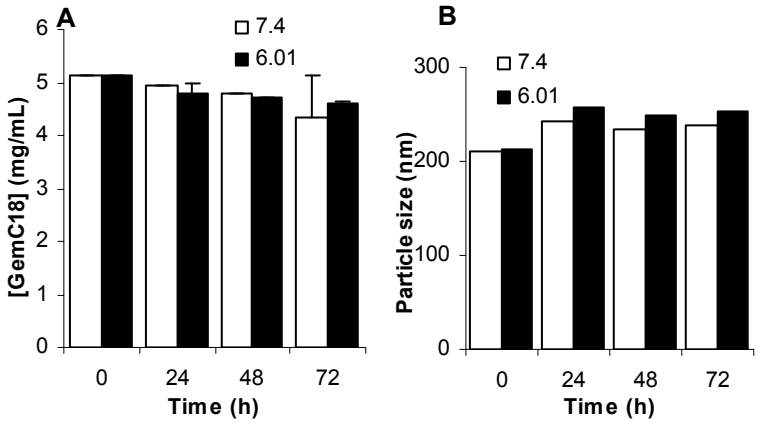
Chung *et al*. Stearoyl gemcitabine nanoparticles overcome resistance related to the over-expression of ribonucleotide reductase subunit M1

Supplemental Figure S1.



The stability of GemC18-NPs in aqueous suspension in ambient condition. Data shown are mean S.D. (n = 3).

Supplemental Figure S2.

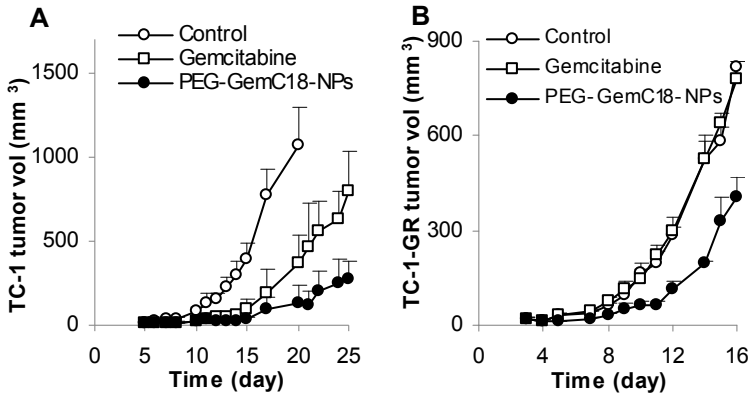


Chemical (A) and physical stability (**B**) of GemC18-NPs at 37 ^{o}C in PBS (pH 7.4 or pH 6.01).

Supplemental Table S1. The cytotoxicity of GemC18-NPs in cell culture media with or without penicillin and streptomycin (p/s). TC-1-GR cells (5,000/well) were incubated with GemC18-NPs for 48 h. Cell viability was determined using an MTT assay.

	% TC-1-GR cells alive (n = 6)
With p/s	28.9 ± 20.6%
Without p/s	30.4 ± 17.5%
p value from t-test	0.89

Supplemental Figure S3.



The anti-tumor activity of PEGylated GemC18-NPs in nude mice with pre-established TC-1 (**A**) or TC-1-GR (**B**) tumors. Tumor cells (5 x 10^5/mouse) were subcutaneously implanted in mice on day 0. On days 5 and 11 for TC-1 cells, and days 3 and 9 for TC-1-GR cells, mice were injected via the tail vein with gemcitabine HCl (0.56 mg), the molar equivalent of GemC18 in PEG-GemC18-NPs (1 mg GemC18), or 200 µL of sterile mannitol (5%, w/v) as a negative control. Data reported are mean ± SD (n = 3-4).