**Supplement data**

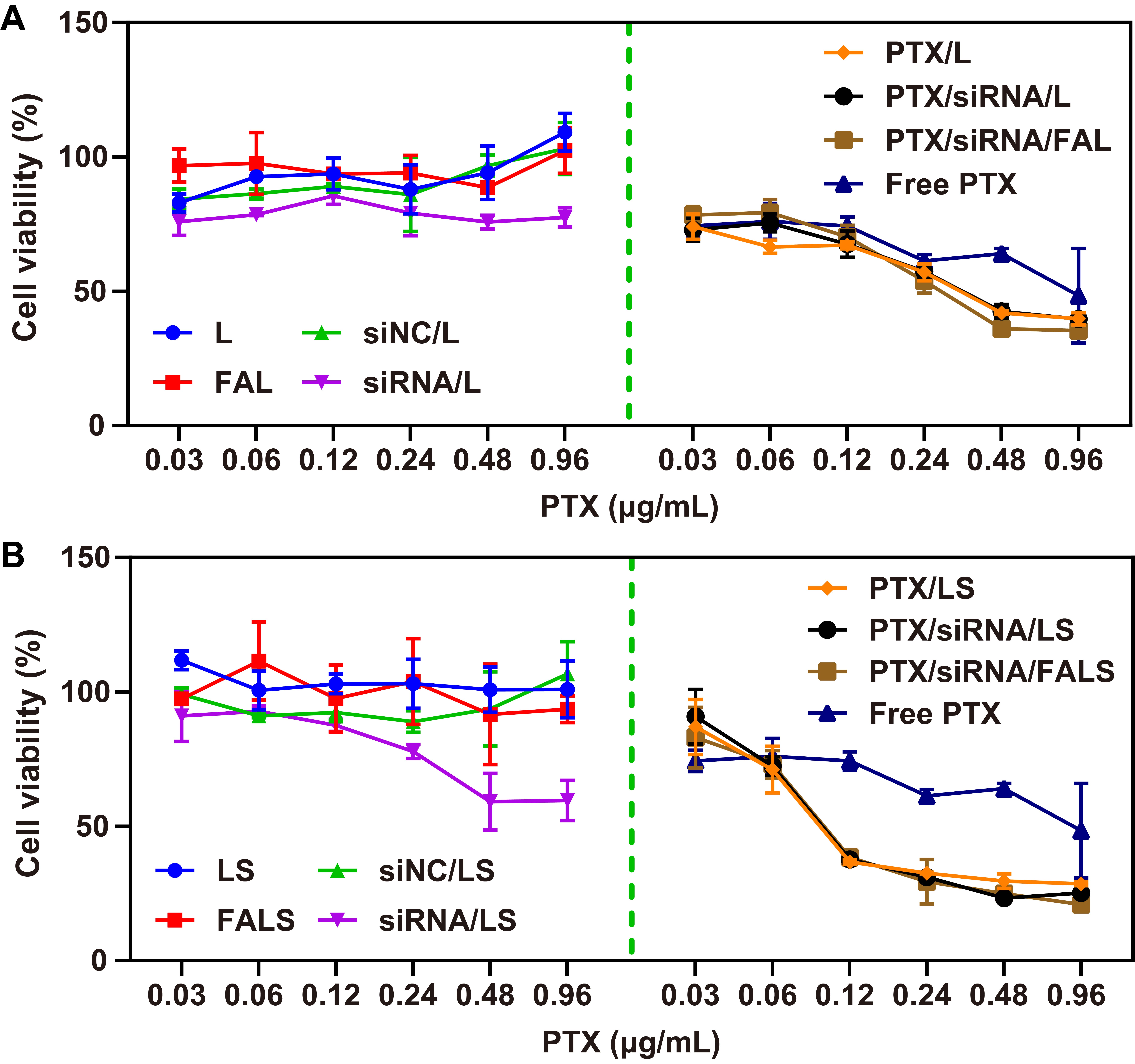


Fig. S1. Cell viability of nanoparticles without sucrose laurate (A) or with sucrose laurate (B) was detected by CCK-8 assay. NCI-H460 cells (5000 cells/well) were seeded in a 96-well plate and treated with different formulations for 48 h. Results are presented as the mean ± SD (n = 3).

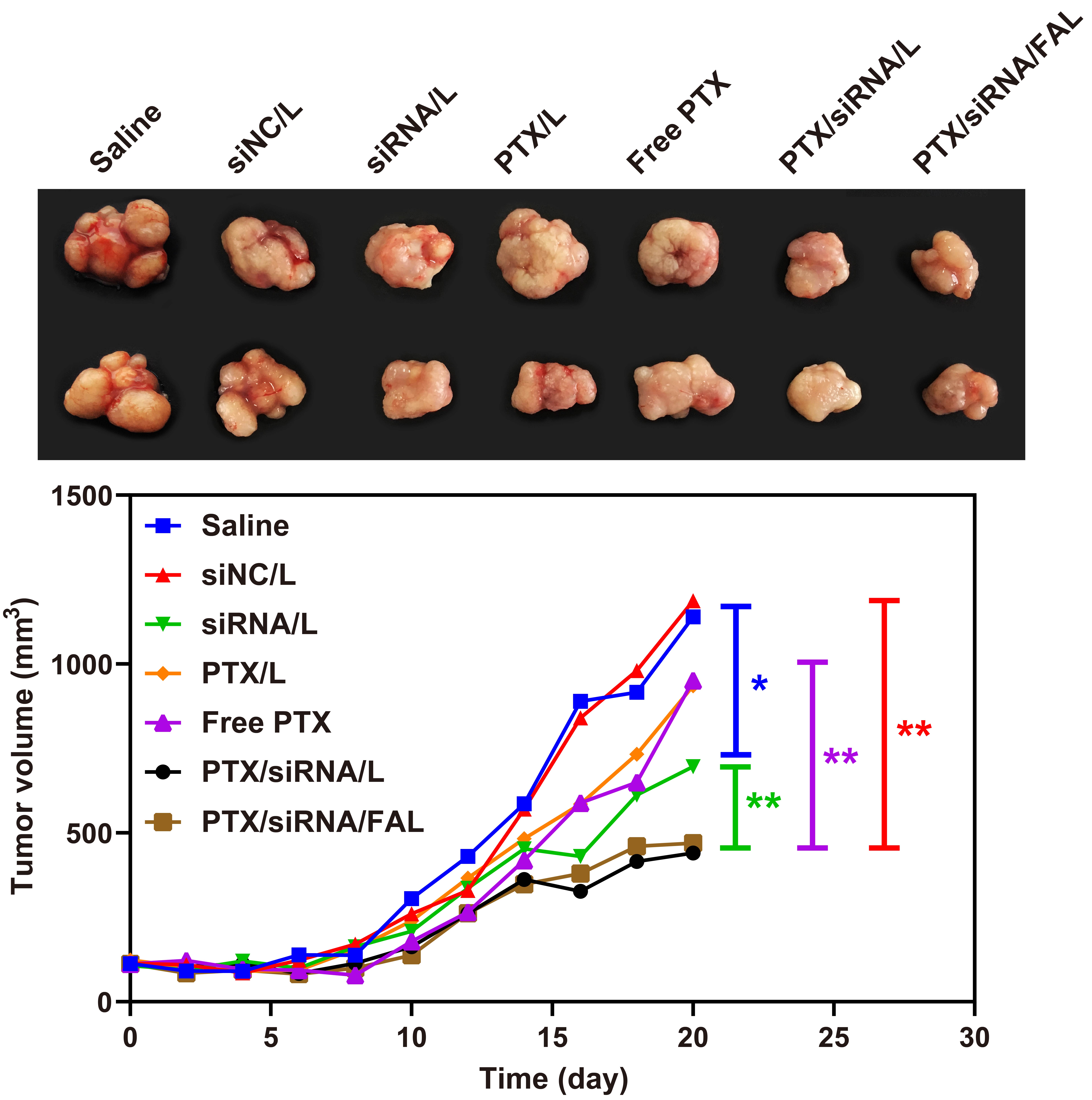


Fig. S2. *In vivo* anti-tumor efficacy of various nanoparticle formulations against NCI-H460 tumor in mice. (A) Imaging of the tumors collected from mice at the termination of treatment. (B) Tumor growth curve after injection of nanoparticles for a total 10 doses. \*p < 0.05, \*\*p < 0.01.

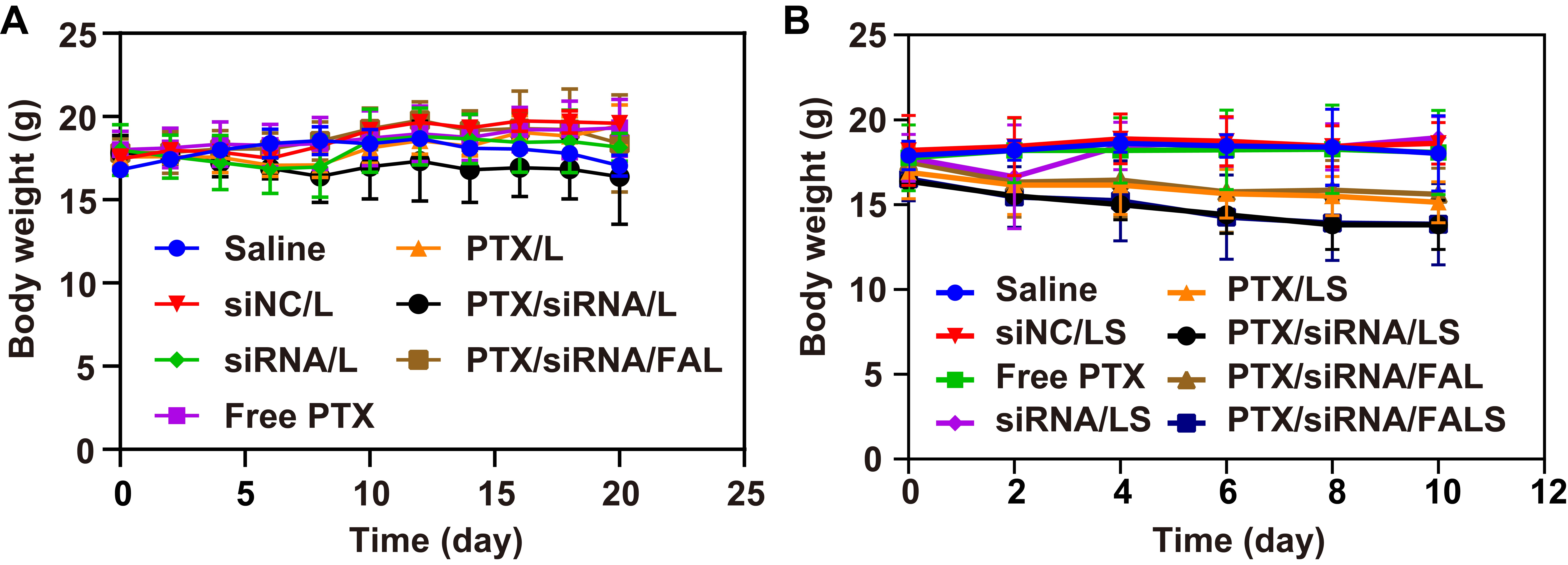


Fig. S3. Changes in mouse body weight during the period of tumor treatment. Mouse body weight of nanoparticles without sucrose laurate (A) or with sucrose laurate (B) was measured. Mice were treated with different formulations every other day for the intravenous injections with a dose of 8 mg/kg PTX and/or 0.55 mg/kg VEGF siRNA. Data are shown as mean ± SD (n = 3).