

Supplementary Materials: A Unique Core–Shell Structured, Glycol Chitosan-Based Nanoparticle Achieves Cancer-Selective Gene Delivery with Reduced Off-Target Effects

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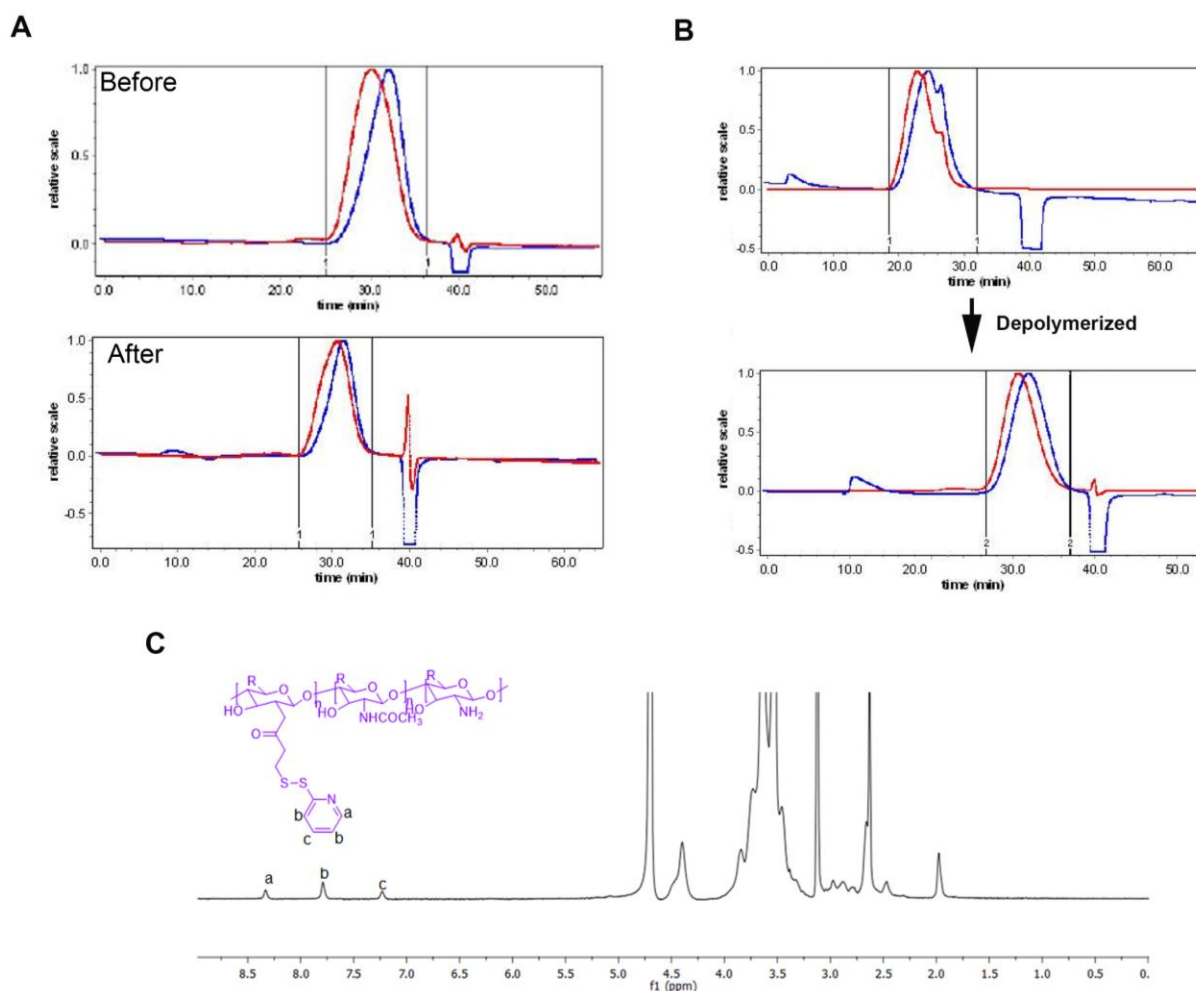


Figure S1. Polymer characterization. (A) Gel permeation chromatography (GPC) spectrum of PEI before and after thiolation; (B) GPC spectrum of GCS before and after depolymerization; (C) ^1H NMR spectrum of GCS-PDP.

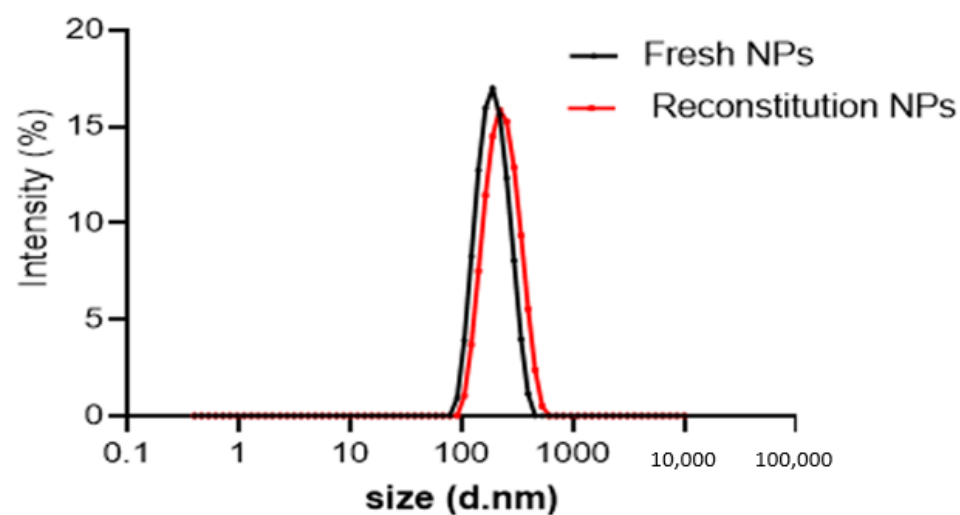


Figure S2. Size distribution of GCS-PDP/PEI-SH/DNA nanoparticles (GNP) before and after the lyophilization.

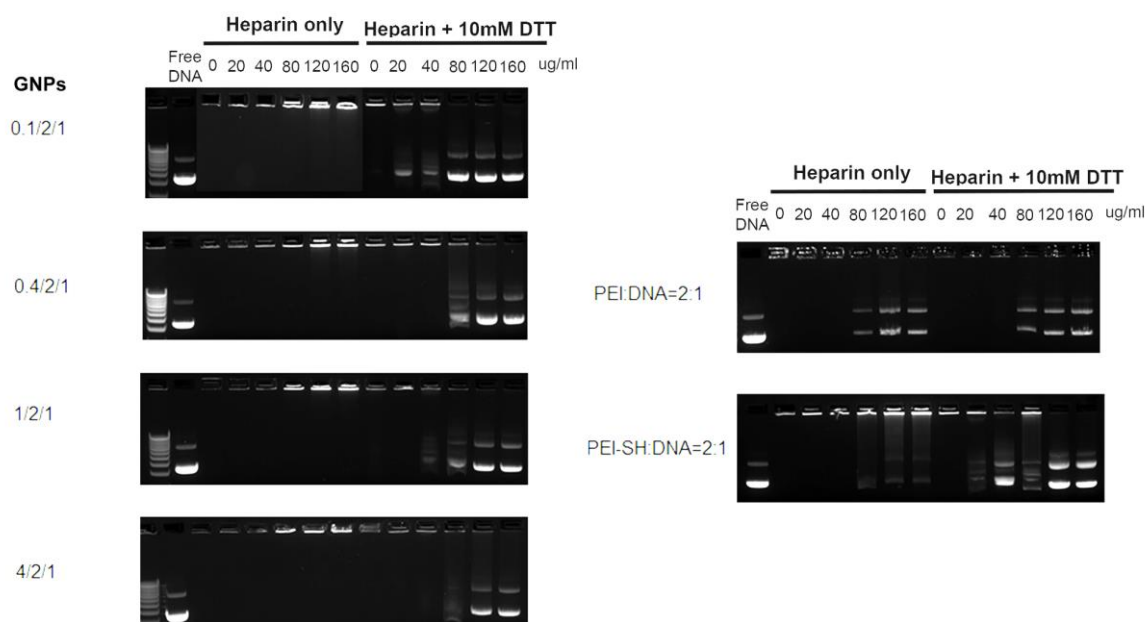


Figure S3. DNA release from GNPs, PEI/DNA, and PEI-SH/DNA in response to DTT and heparin.

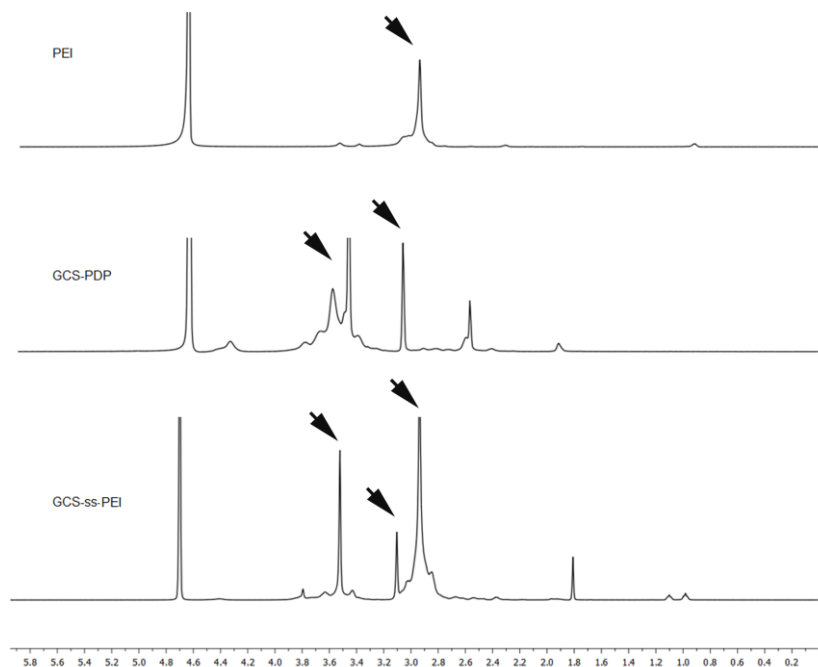


Figure S4. ^1H NMR spectra of PEI, GCS-PDP and GCS-ss-PEI. Arrows points to the characteristic proton resonance peaks correspond to PEI, GCS-PDP, and GCS-ss-PEI.

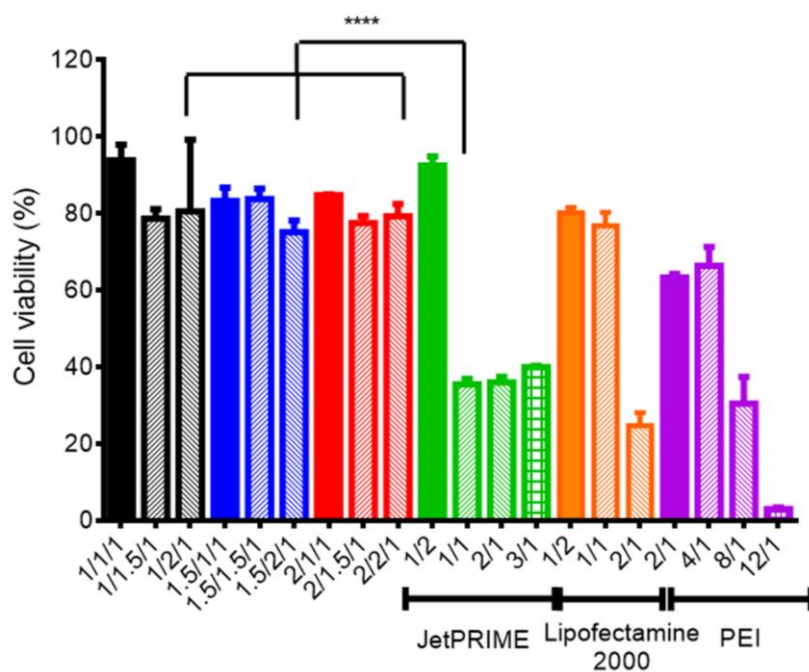


Figure S5. Cytotoxicity of different formulations in the medium containing 20% FBS as determined by MTT assay (**** $p < 0.0001$).

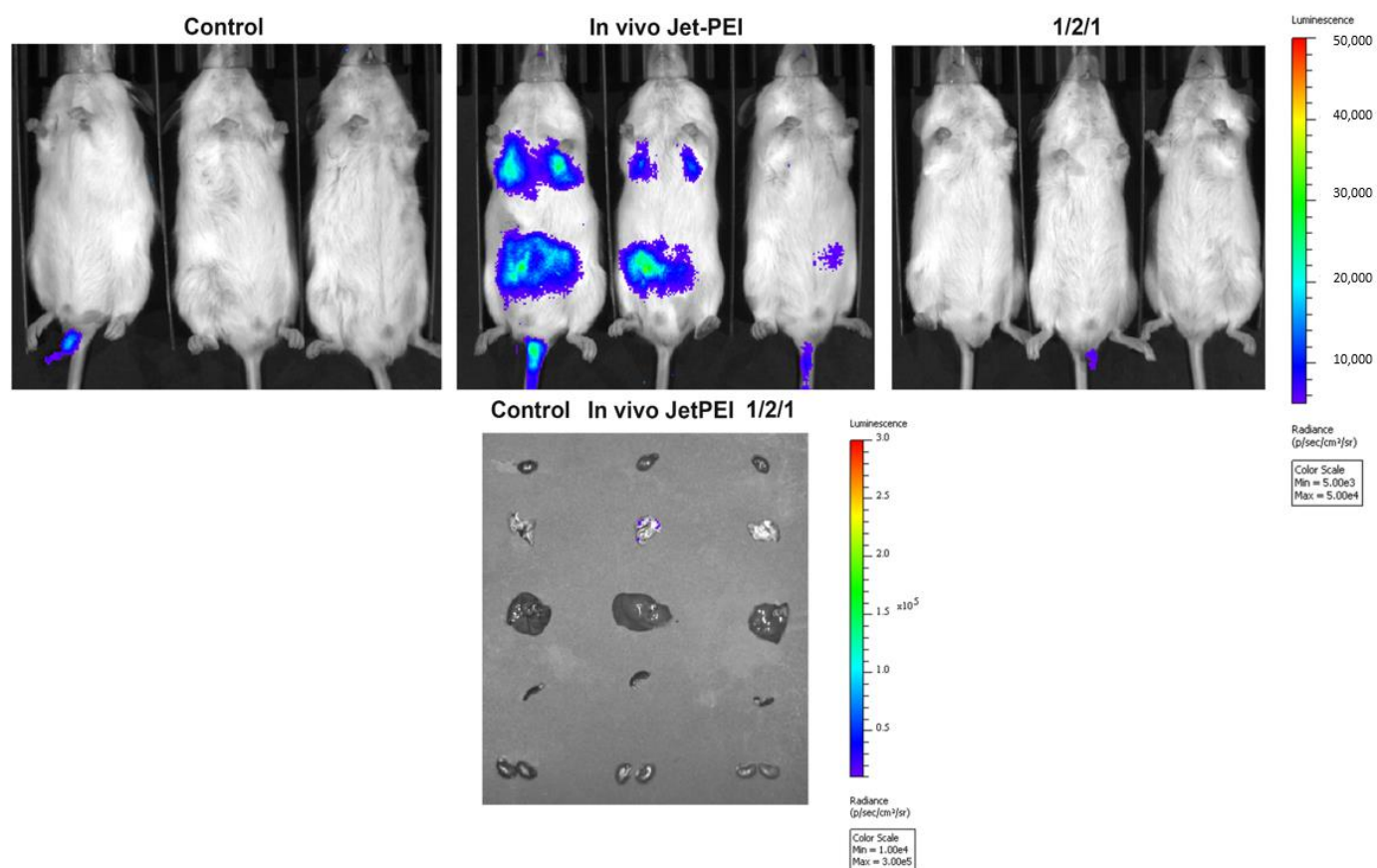


Figure S6. NSG mice without PC3 cancer cell injections were treated with GNP (1/2/1) and in vivo JetPEI containing pSur-fLuc for 3 days, and whole-body luciferase expression was quantified.