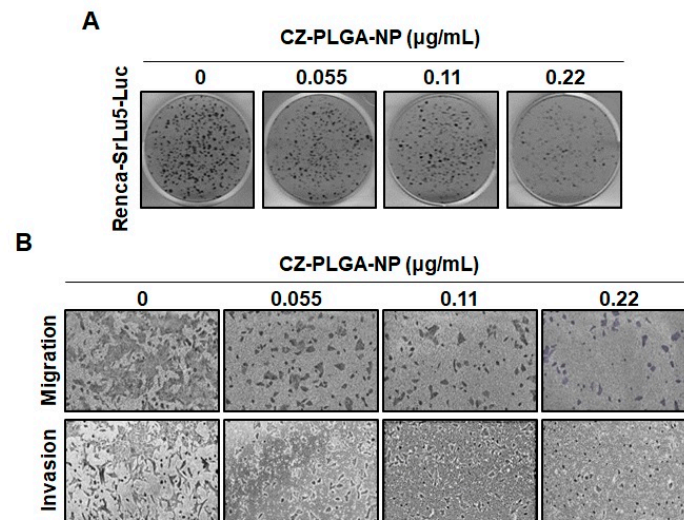
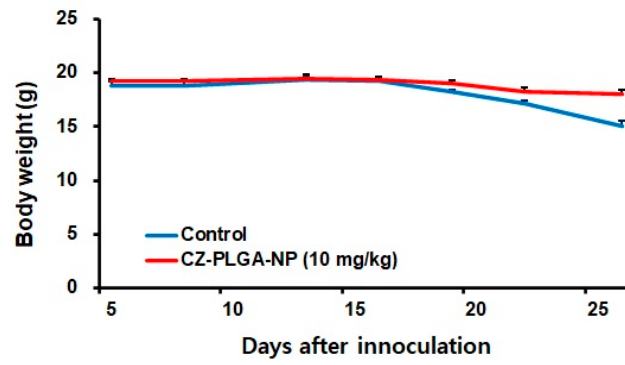


**Supplementary Figure S1. In vitro effects of CZ-PLGA-NPs on cell-cycle progression and apoptosis of Renca-SRLu5-Luc cells.** (A) Effect of CZ-PLGA-NPs on the cell cycle distribution of Renca-SRLu5-Luc cells as determined by flow cytometry based on propidium iodide (PI) staining. (B) Effect of CZ-PLGA-NPs on apoptosis of Renca-SRLu5-Luc cells determined using flow cytometry based on the Annexin V-FITC/PI double staining.



**Supplementary Figure S2. In vitro effects of CZ-PLGA-NPs on cell migration and invasion of Renca-SRLu5-Luc cells.** Representative images of the results from the migration assay (A) and the invasion assay (B) in CZ-PLGA-NP-treated Renca-SRLu5-Luc cells (scale bar = 200  $\mu\text{m}$ ).



**Supplementary Figure S3. In vivo safety of CZ-PLGA-NP in the Renca-SRLu5-Luc RCC lung metastasis model.** Body weight of mice in control and treatment groups over four weeks.