

Electronic Supporting Information

Constructing Passive Targeting and Long Retention Therapeutic Nanoplatfrom Based on Water-Soluble, Non-Toxicity and Highly Stable Core-Shell Poly(Amino Acid) Nanocomplexes

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Figure S1

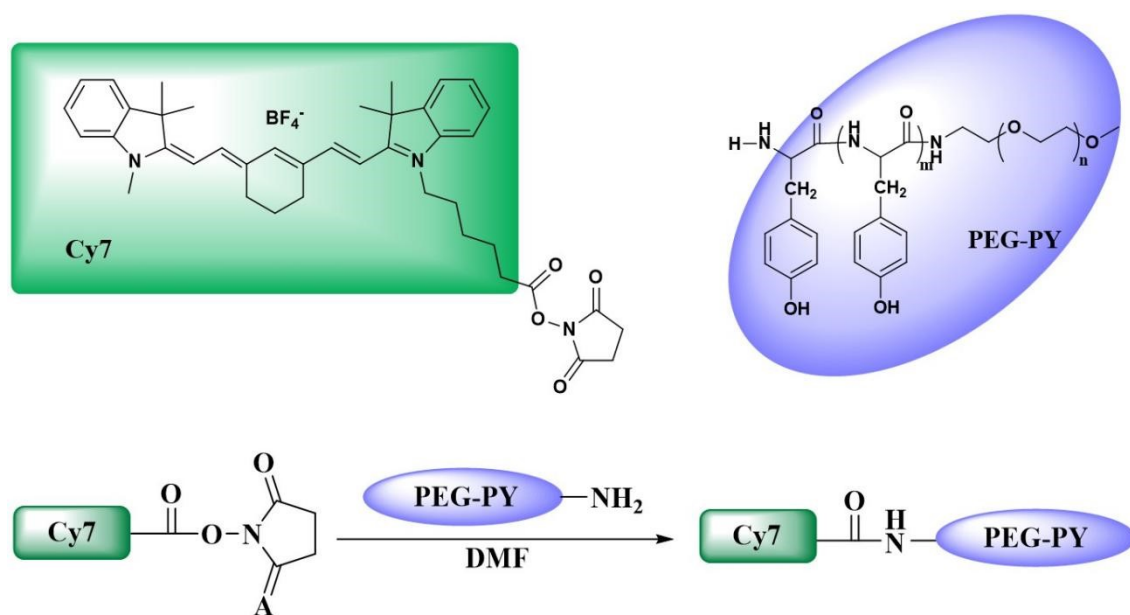


Figure S1. Structure and labeling equation of the Cy7 dye.

Figure S2

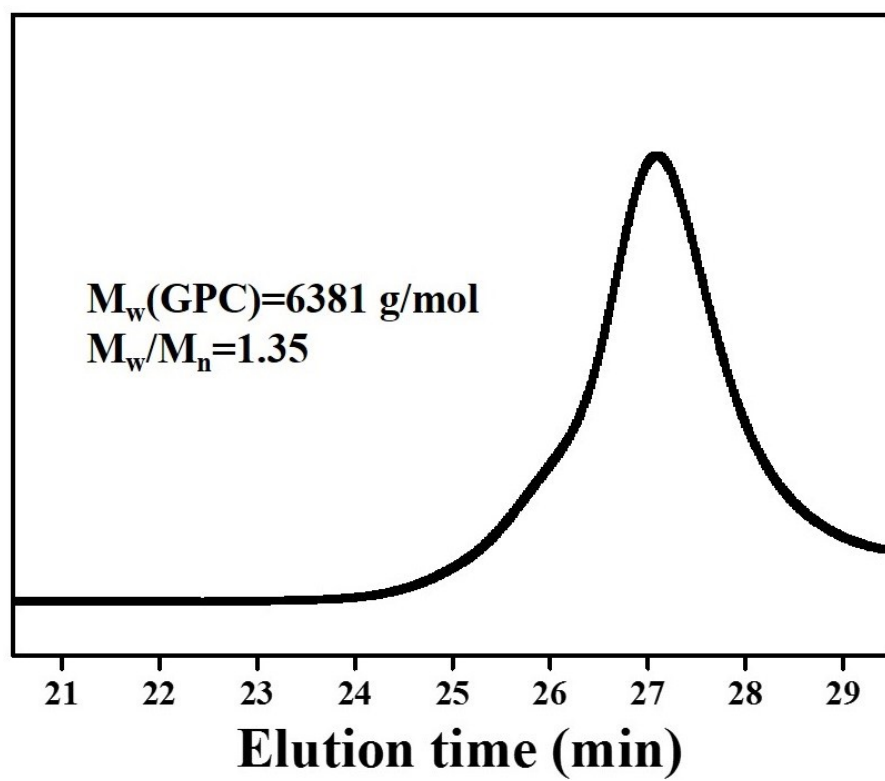


Figure S2. Gel permeation chromatograph of PEG-PY.

Figure S3

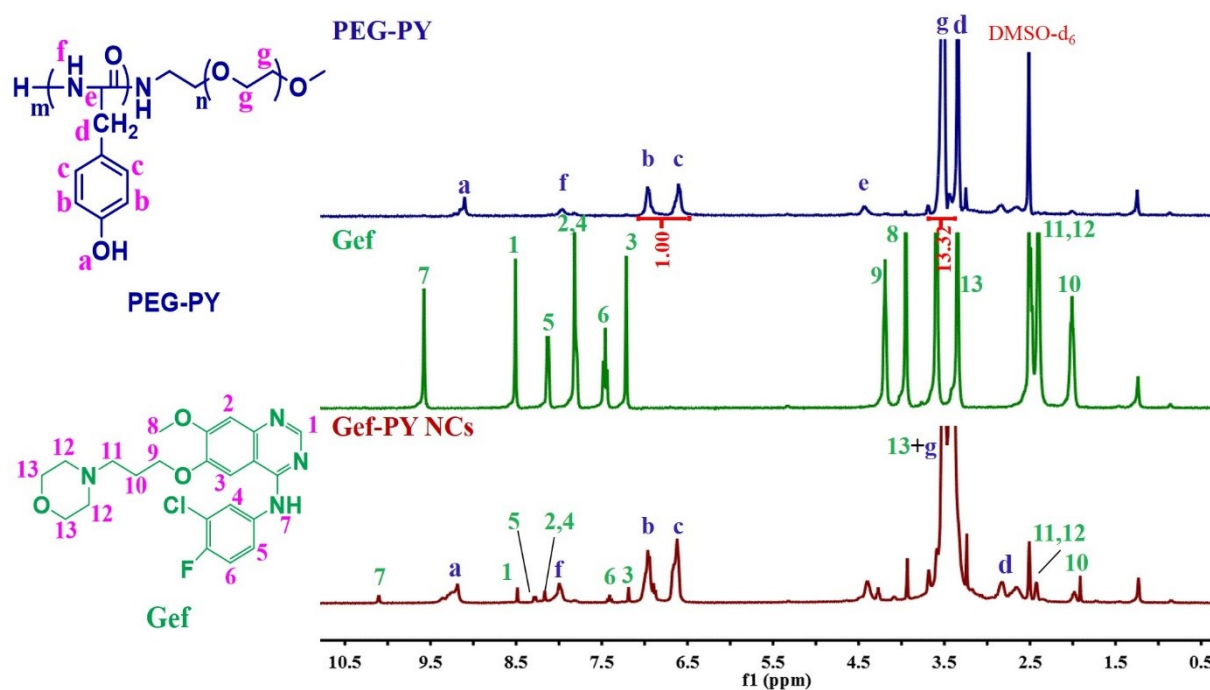


Figure S3. ^1H NMR characterizations of PEG-PY, Gef and Gef-PY NCs.

Figure S4

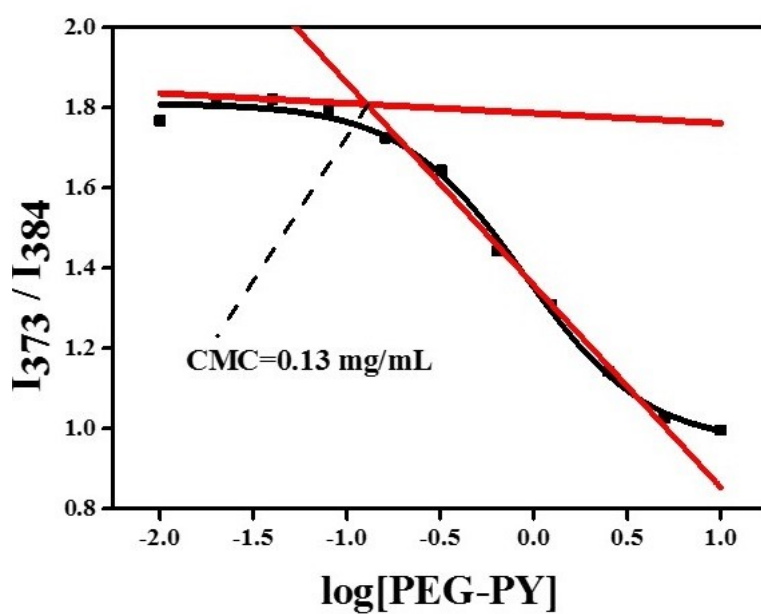


Figure S4. Critical micelle concentration (CMC) of PYNPs measured by fluorescence techniques and using pyrene as the probe.

Figure S5

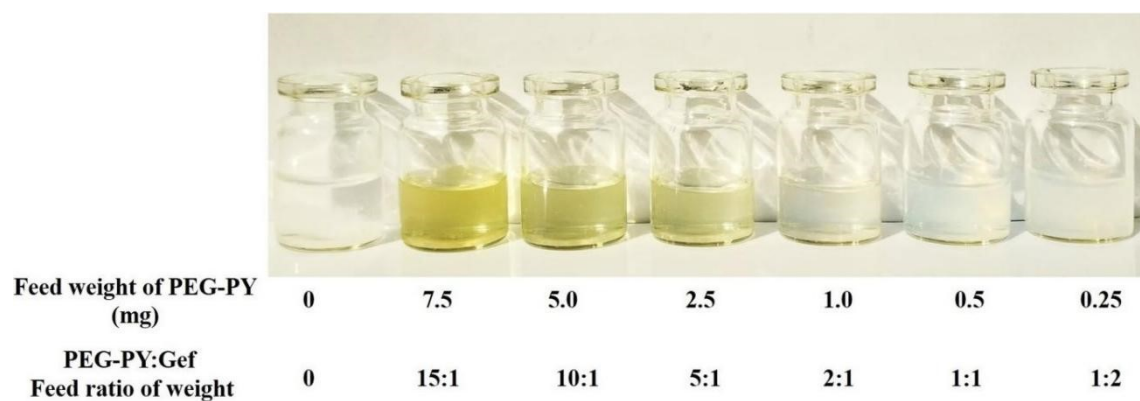


Figure S5. Digital photos of Gef-PY NCs solutions prepared by different feeding mass ratios of PEG-PY to Gef without further removal of unloaded drug.

Figure S6

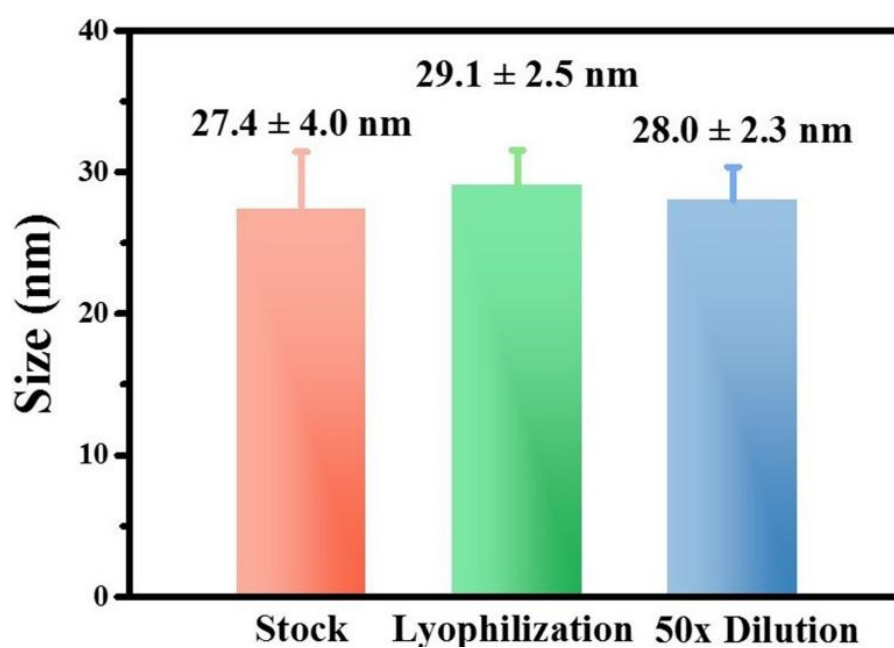


Figure S6. Stability of Gef-PY NCs versus 50x dilution of water and lyophilization.

Figure S7

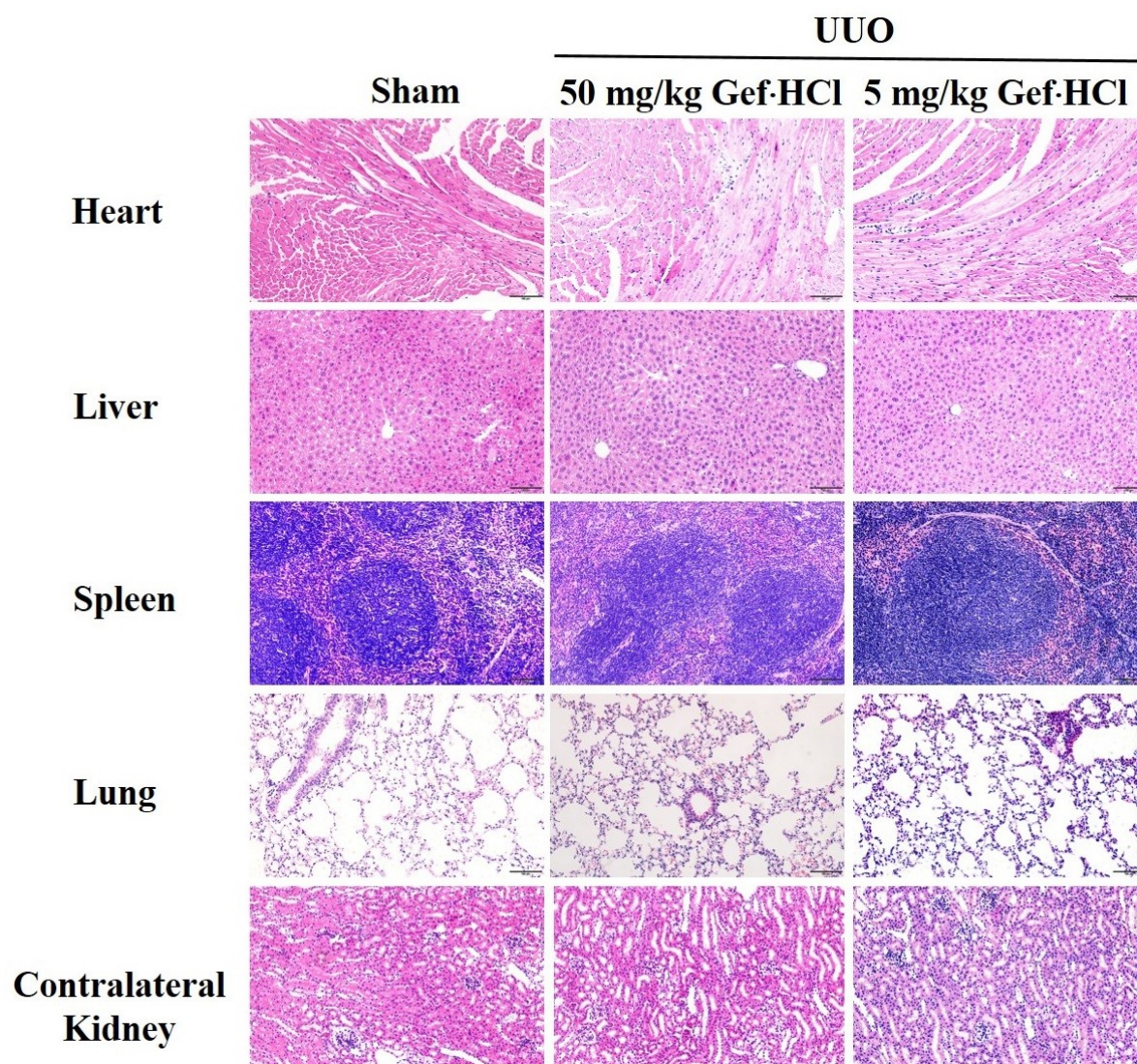


Figure S7. H&E stained section of major organs (heart, liver, spleen, lung and contralateral kidney) extracted from mice (200× magnification).

Figure S8

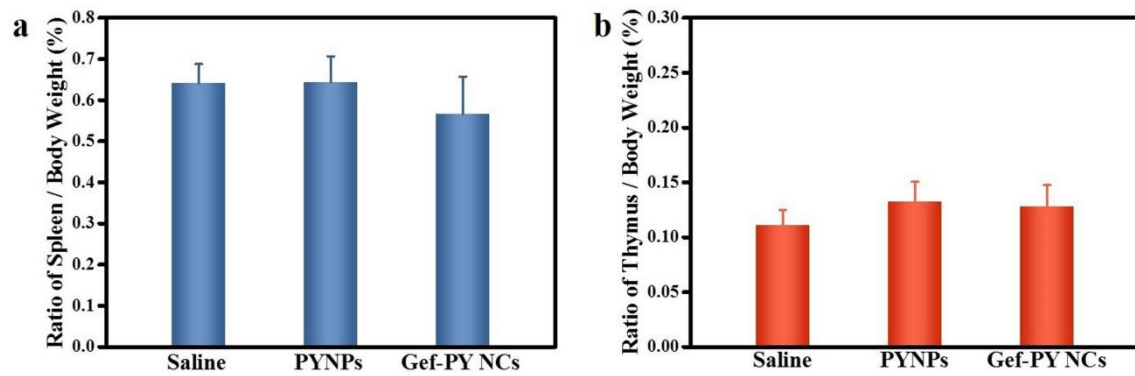


Figure S8. Weight ratio of (a) thymus and (b) spleen after 7 days injection of Saline, PYNPs and Gef-PY NCs (n=5).

Figure S9

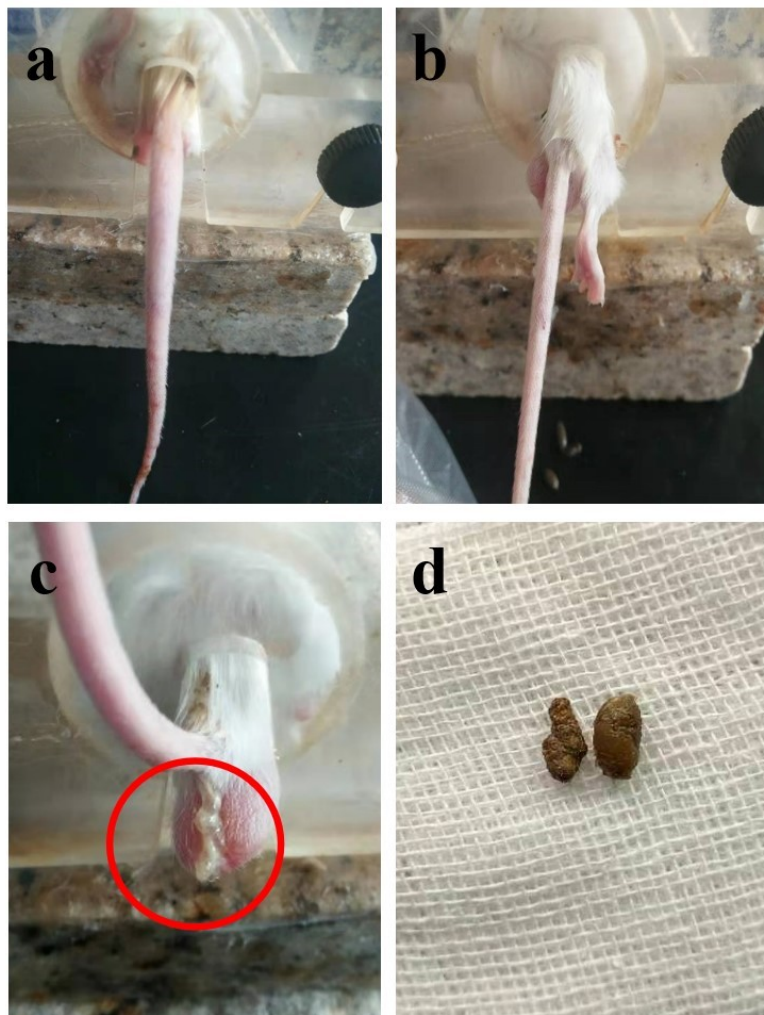


Figure S9. Physiological manifestation (tail swelling and faeces forming condition) of mice after administration of (a, c) free Gef·HCl or (b, d) Gef-PY NCs.

Figure S10

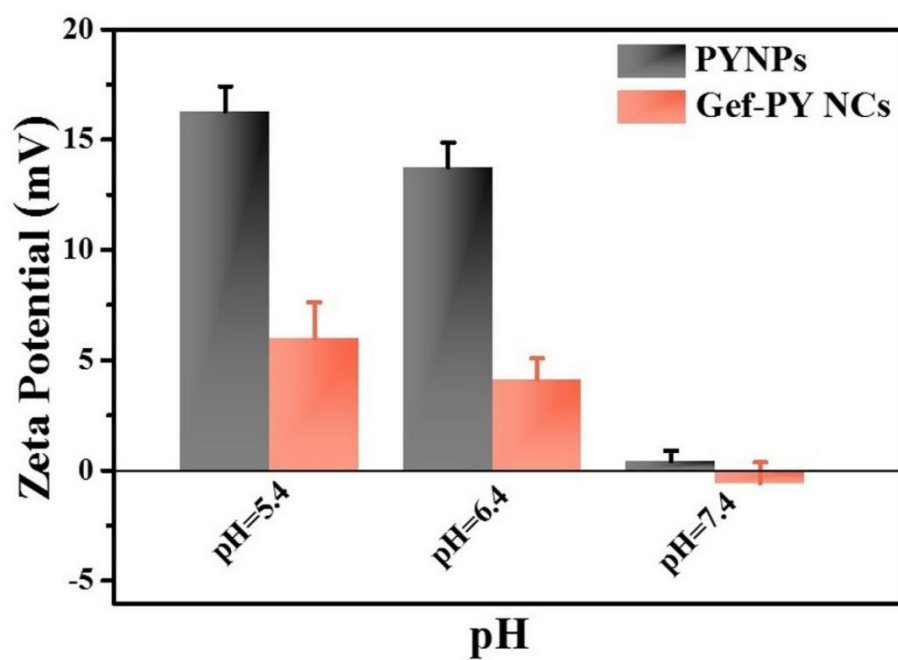


Figure S10. Zeta potentials of PYNPs and Gef-PY NCs in different pH.

Figure S11

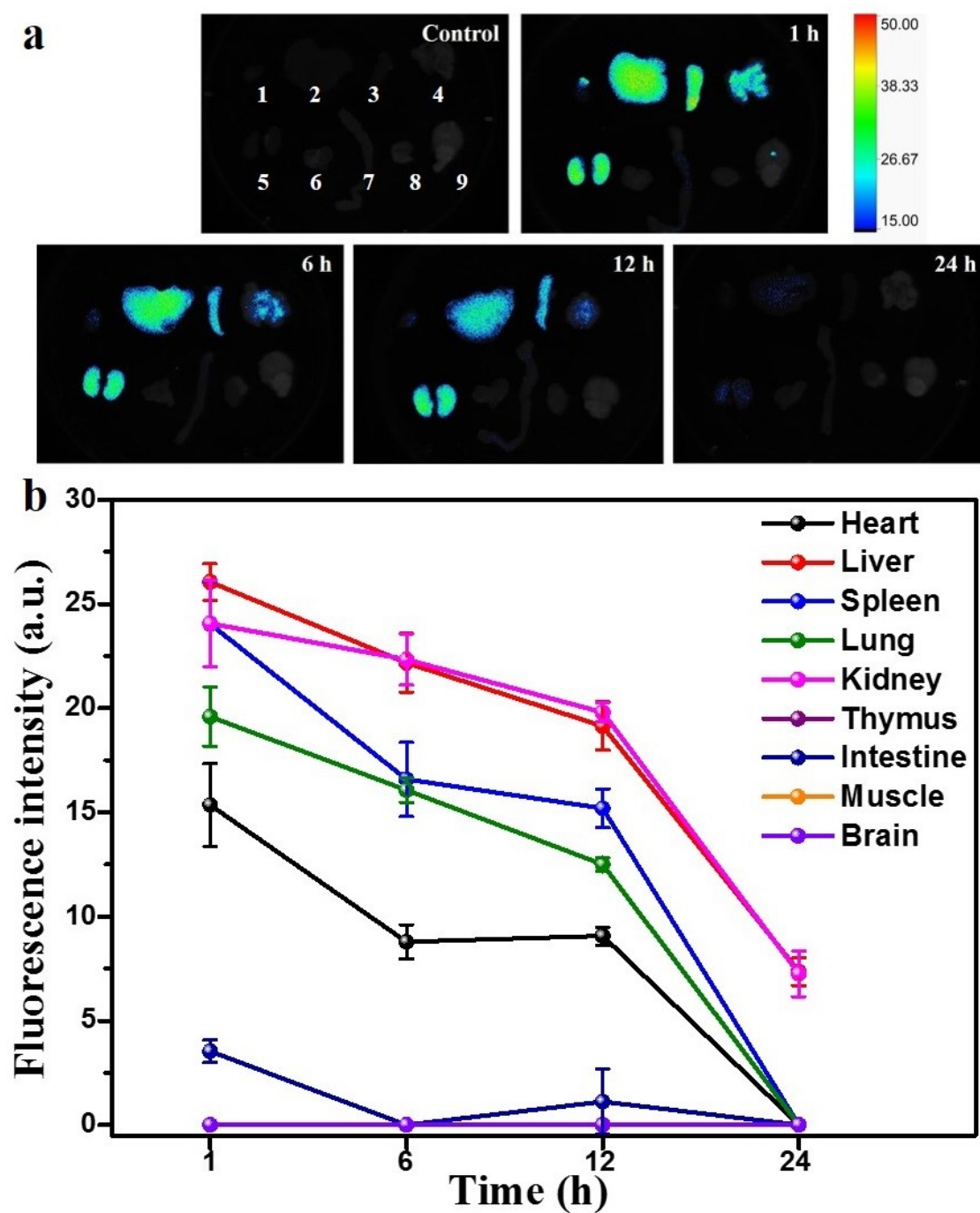


Figure S11. (a) Ex vivo fluorescence images and (b) fluorescence intensities of major organs collected from free Cy7 treated mice after intravenous injection for 1, 6, 12 and 24 h, 1-9: heart, liver, spleen, lung, kidney, thymus, intestine, muscle and brain.

Figure S12

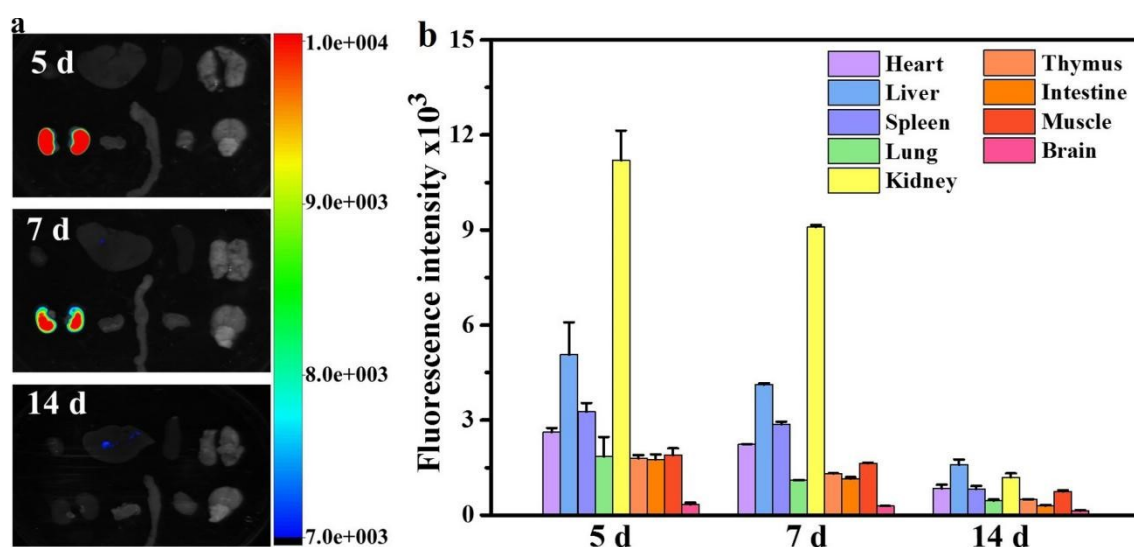


Figure S12. (a) Ex vivo fluorescence images of major organs collected from Cy7-Gef-PY NCs treated mice after intravenous injection for 5, 7 and 14 days. (b) Fluorescence intensity of Cy7-Gef-PY NCs cumulated in major organs.

Figure S13

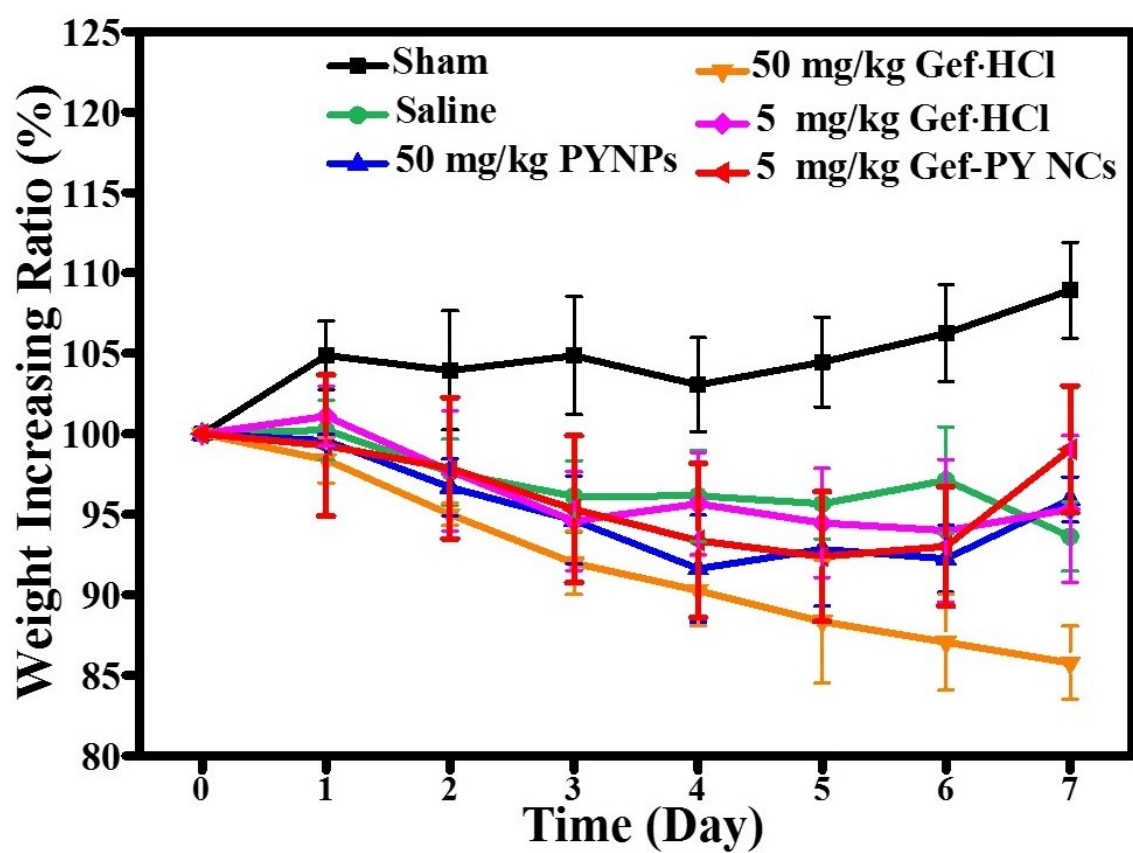


Figure S13. Increasing tendency of body weight after 7-day injection of saline, PYNPs, free Gef·HCl and Gef-PY NCs. Data were expressed as mean $\pm$ SD, n=5.