

Supplementary materials

Cancer-targeted pro-theranostic bi-metallic organo-coordination nanoparticles

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This file includes:

Figures S1 to S8

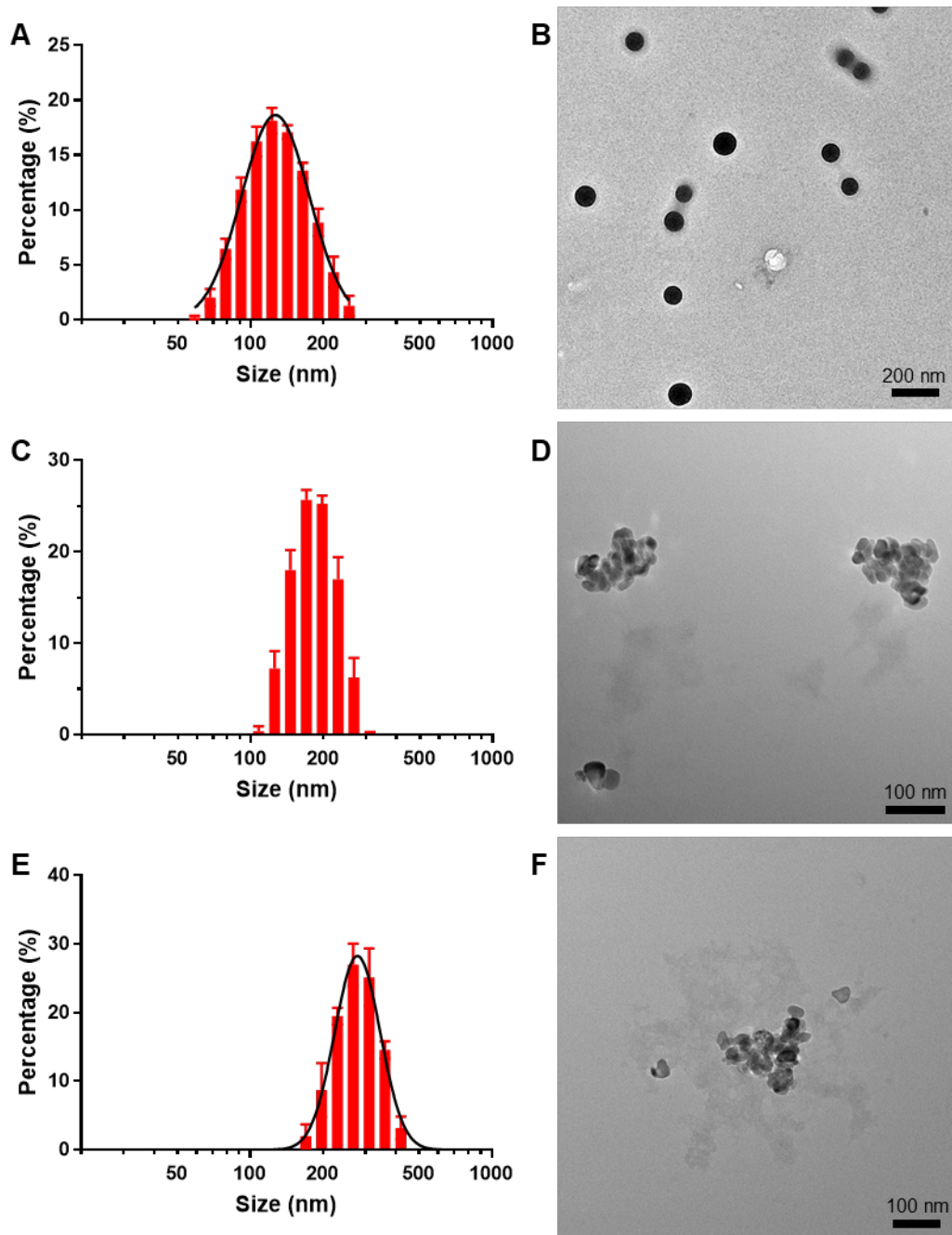


Figure S1. DLS and representative TEM images of Gd-FA-TA NPs, TiO₂ anatase, and TiO₂-Gd-FA-TA NPs. (A) Gd-FA-TA NPs particle size determination by DLS. (B) Representative TEM images of Gd-FA-TA NPs. (Scale bar: 200 nm.) (C) TiO₂ anatase particle size determination by DLS. (D) Representative TEM images of TiO₂ anatase. (Scale bar: 100 nm.) (E) TiO₂-Gd-FA-TA NPs particle size determination by DLS. (F) Representative TEM images of TiO₂-Gd-FA-TA NPs. (Scale bar: 100 nm).

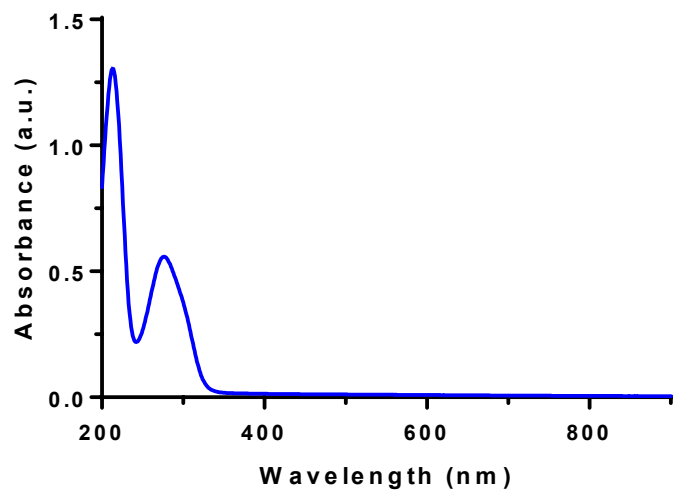


Figure S2. UV-vis absorption spectra of tannic acid (TA).

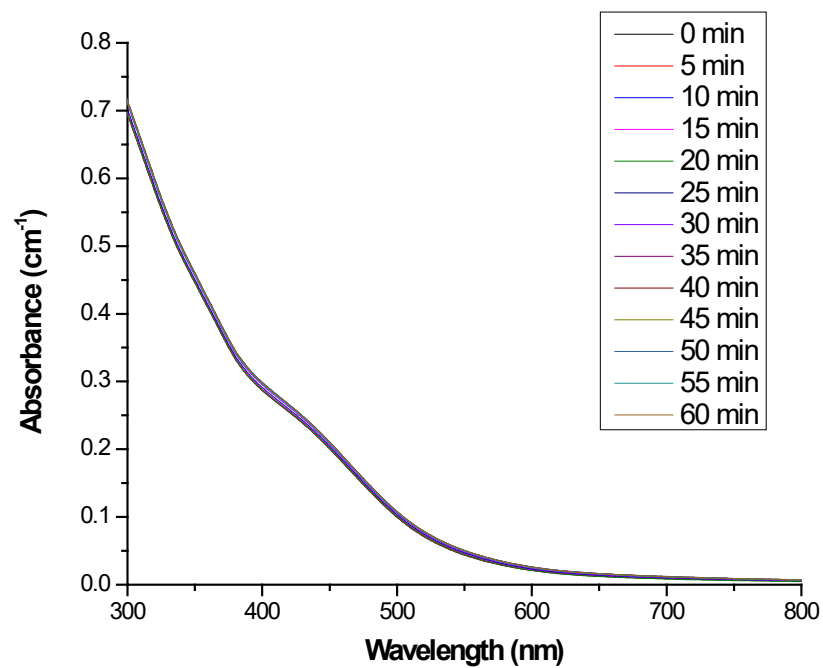


Figure S3. The absorption spectra of Gd-Ti-FA-TA NPs after UV light irradiation for 5-60 min.

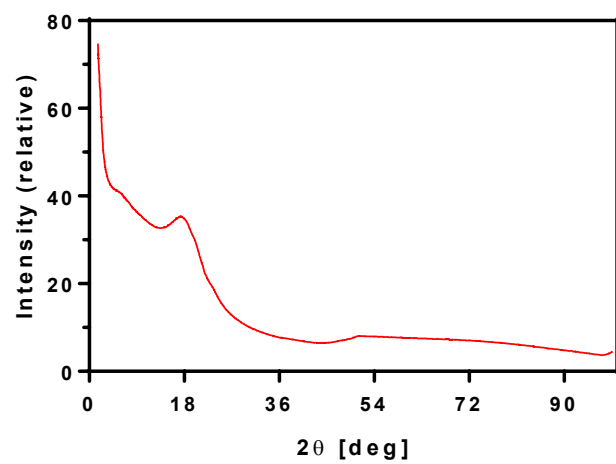


Figure S4. XRD spectrum of Gd-Ti-FA-TA NPs.

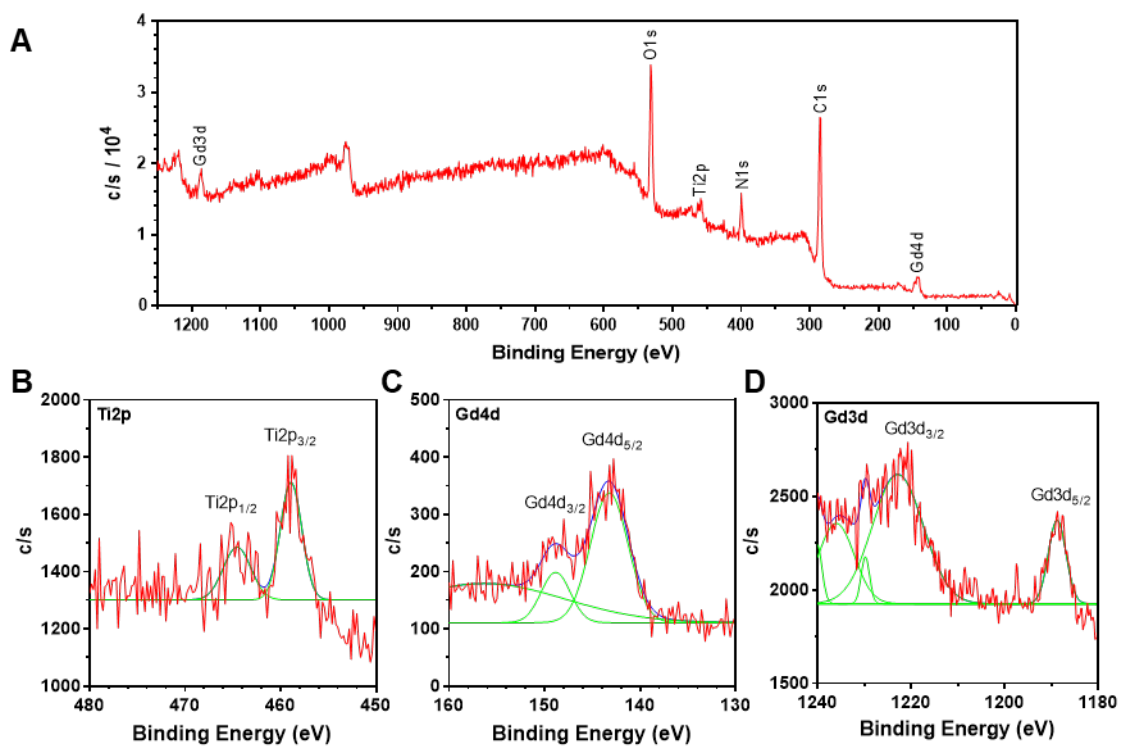


Figure S5. XPS spectra for Gd-Ti-FA-TA NPs, (A) Survey spectra, (B) Ti 2p, (C) Gd 4d, and (D) Gd 3d spectra.

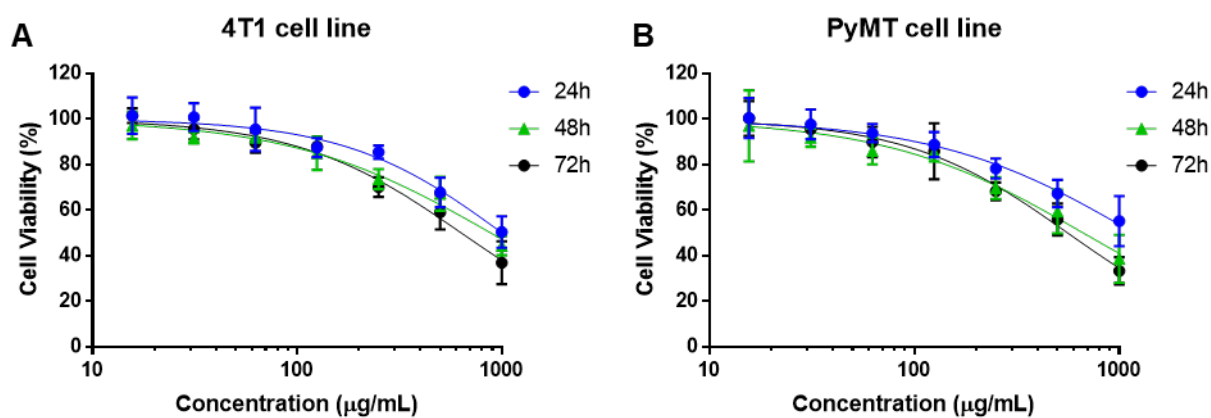


Figure S6. (A) 4T1 and (B) PyMT-Bo1 cell viability after incubating with Gd-Ti-FA-TA NPs using MTT assay. The concentration of Gd-Ti-FA-TA NPs ranged from 15.6 $\mu\text{g/mL}$ to 1,000 $\mu\text{g/mL}$. The viability was measured at 24 h, 48 h, and 72 h time points.

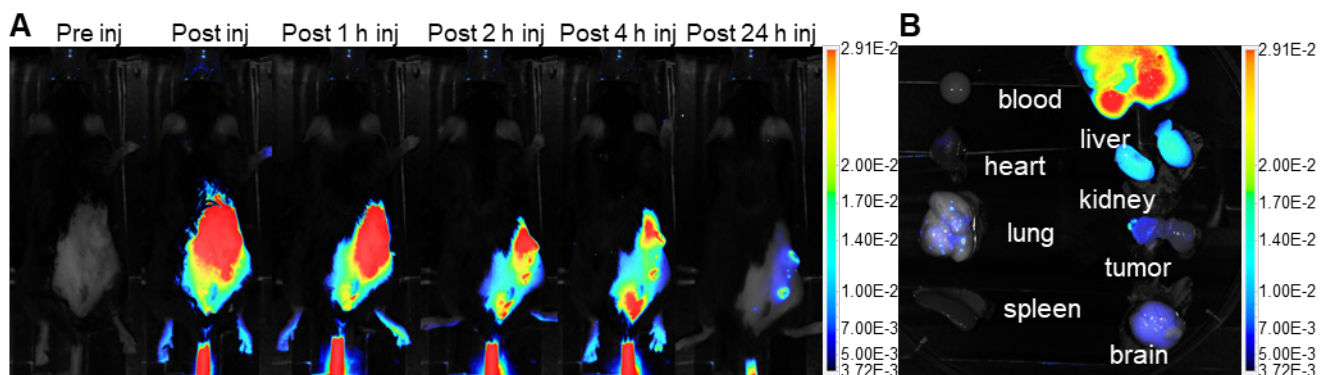


Figure S7. *In vivo* and *ex vivo* fluorescence imaging of cypate-loaded Gd-Ti-FA-TA NP distribution. (A) Dorsal view fluorescence images of representative mouse after tail vein injection of cypate-loaded Gd-Ti-FA-TA NPs. Images were acquired pre-injection, immediately post-injection, and 1, 2, 4, and 24 h post-injection. (B) *Ex vivo* fluorescence biodistribution of major organs after mouse euthanasia 24 h post-injection of the NPs.

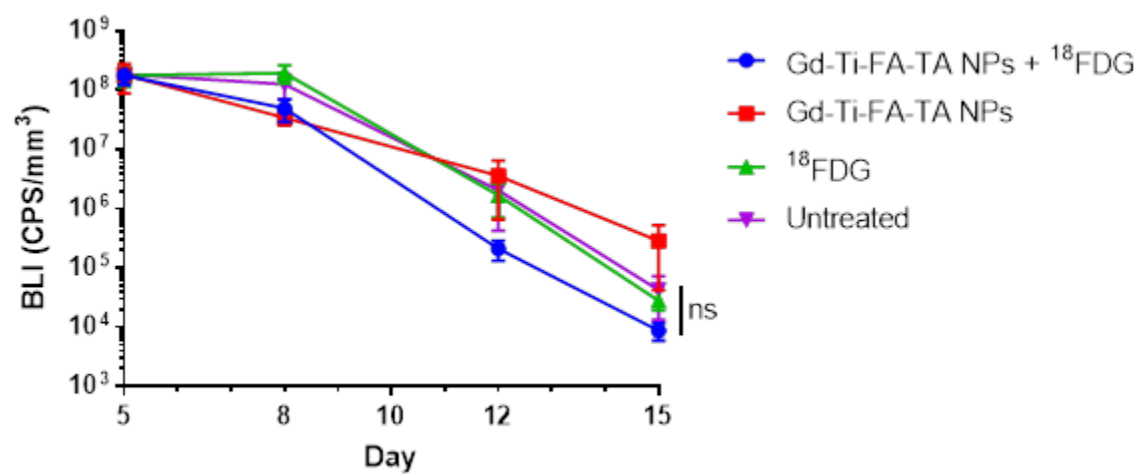


Figure S8. BLI intensity in untreated and different treatment groups from day 5 to day 15.