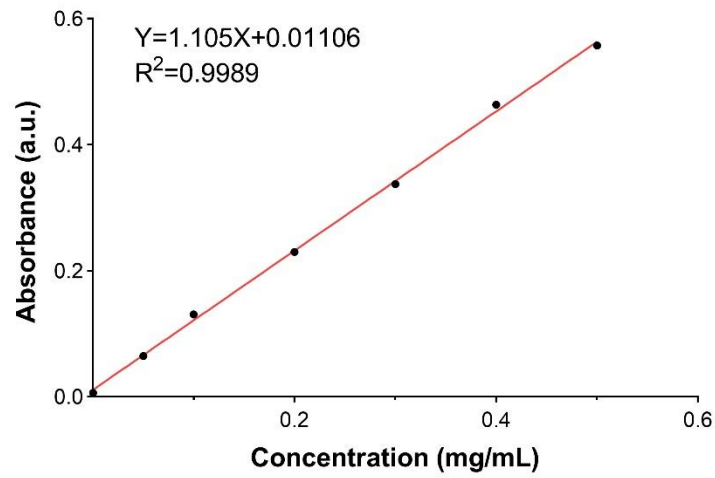
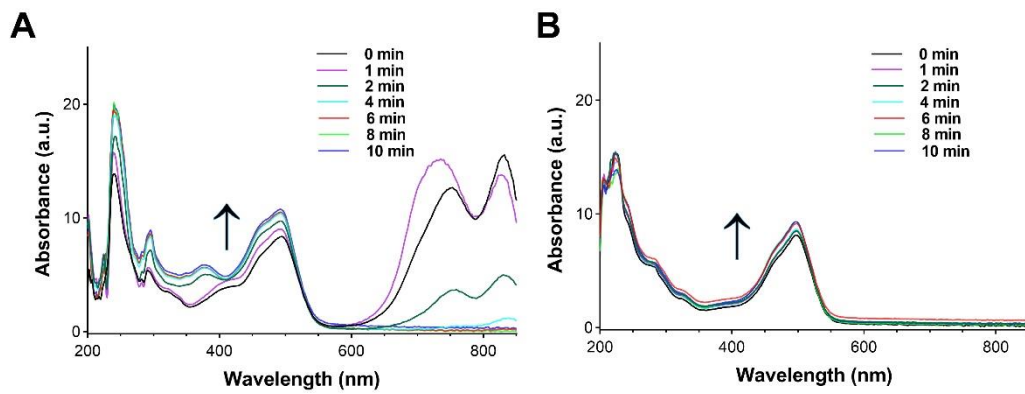


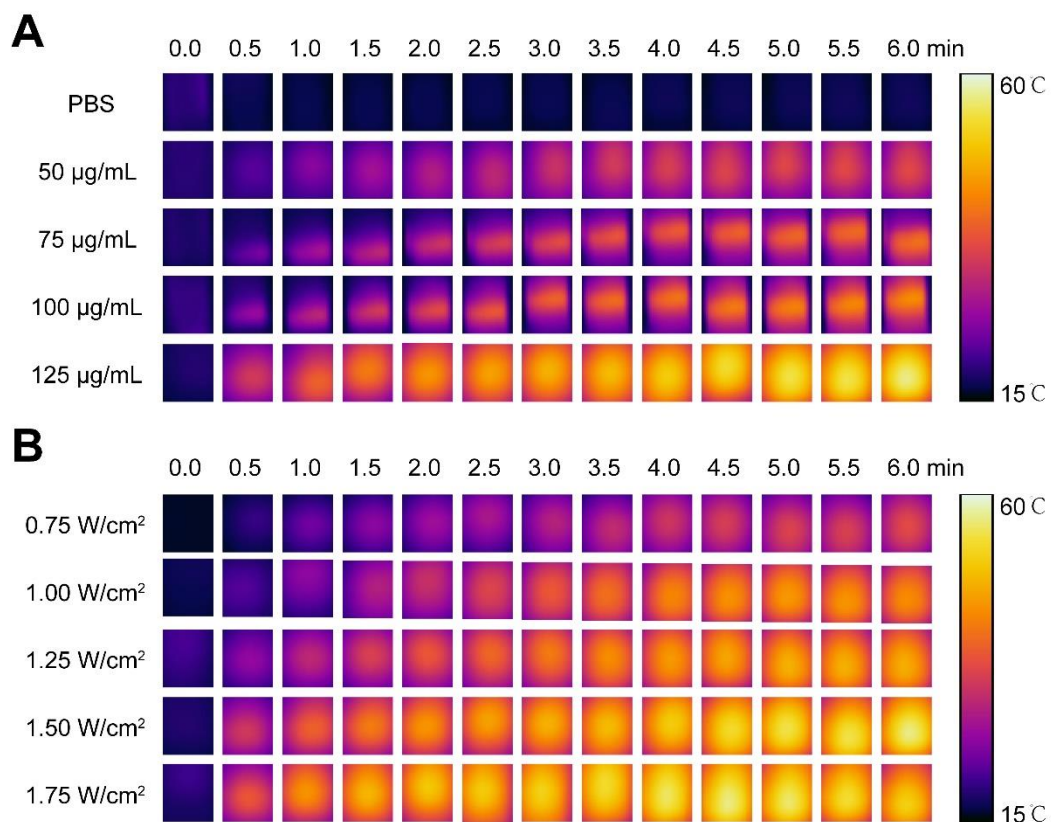
Supplementary Figures



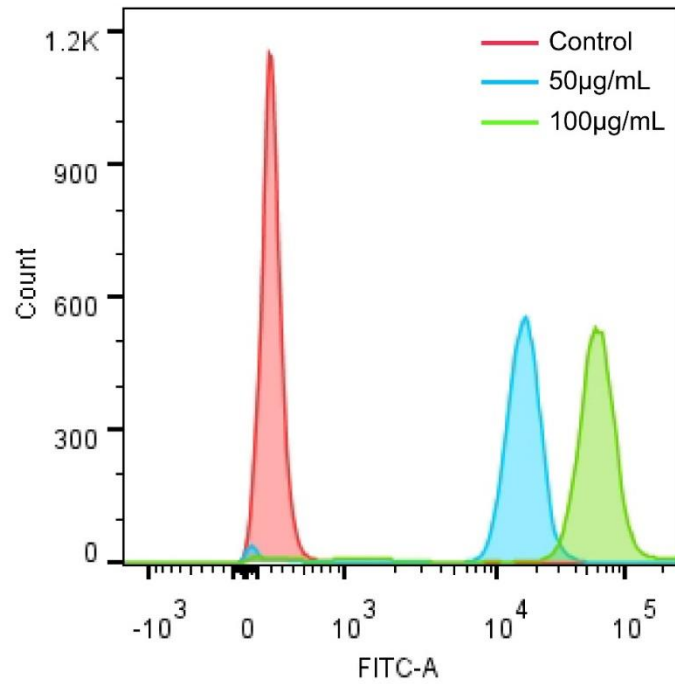
Supplementary Figure S1 CAT spectrum at the relative absorbance intensity wavelength of 562 nm in UV absorption spectrum.



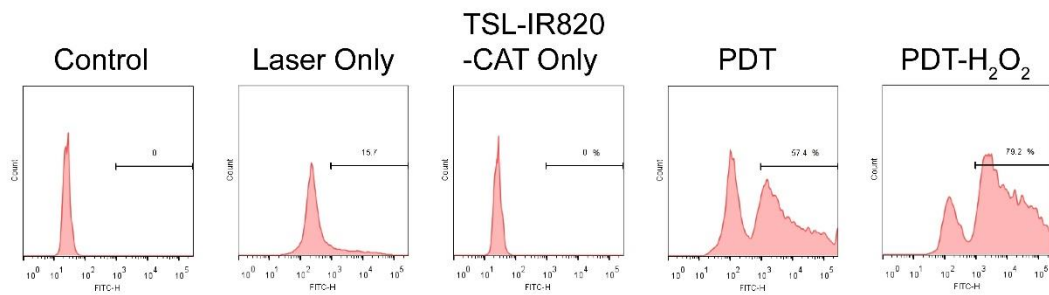
Supplementary Figure S2 (A) NIR laser-triggered UV absorption spectra of calcein released from c-TINP at different times. (B) UV absorption spectra of NIR laser-triggered calcein released from c-TNP at different times.



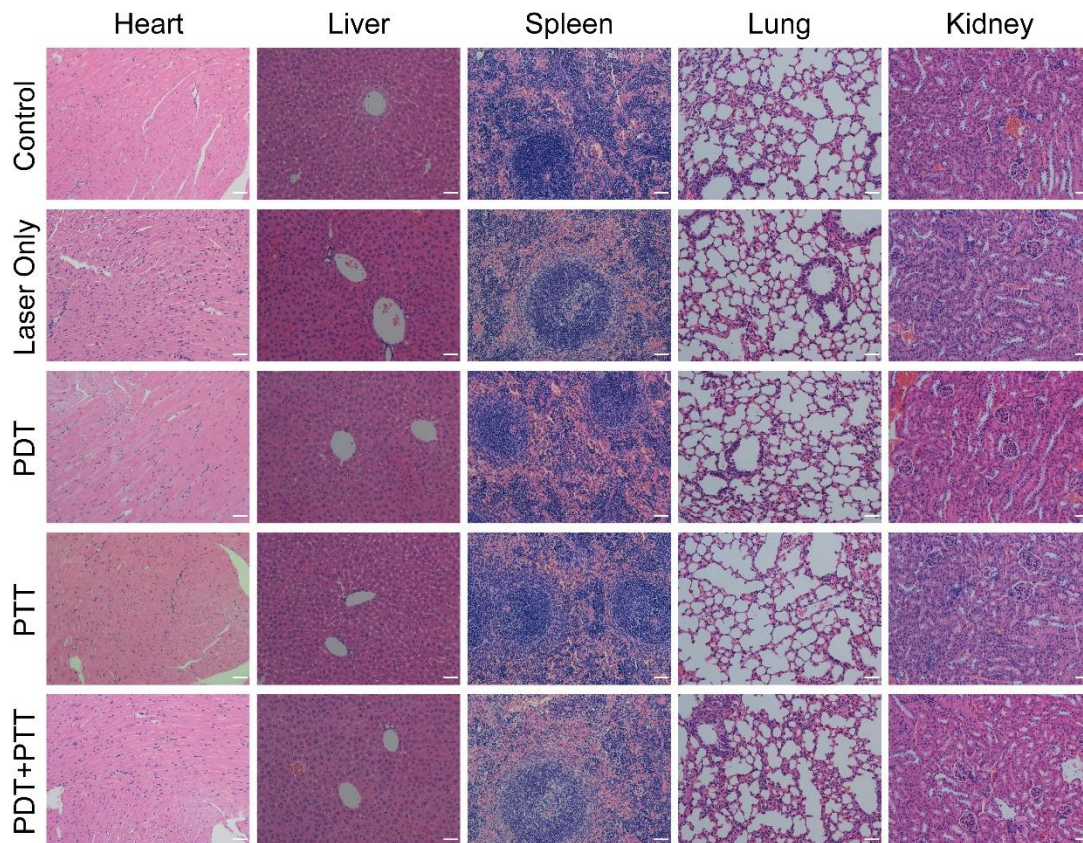
Supplementary Figure S3 (A) Representative photothermal images in vitro of PBS and suspensions containing different IR820 concentrations of TSL-IR820-CAT under light irradiation (808 nm, 1.5 W/cm^2). (B) In vitro representative photothermal images of suspensions of TSL-IR820-CAT under 808 nm laser at different power densities with a fixed IR820 concentration (125 $\mu\text{g/mL}$).



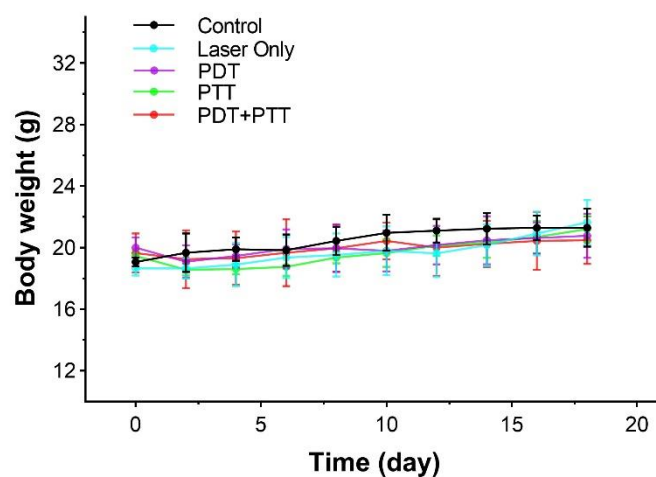
Supplementary Figure S4 Flow cytometry to analyze the intracellular uptake of f-TICNP after incubation with different concentrations of f-TICNP.



Supplementary Figure S5 Flow cytometry analysis of ROS generated by different treatments.



Supplementary Figure S6 H&E staining of the main organs (heart, liver, spleen, lung, and kidney) of five groups of tumor-bearing mice after different treatments. Scale bar, 50 µm.



Supplementary Figure S7 A431 tumor-bearing mice body weight changes during treatment.