Supporting information



Supporting Figure S1. (a&b) TEM images of SWNT@PDA-PEG (a) and SWNT@PDA-PEG/Mn (b). Inset is a TEM image with higher resolution. (c) Zeta potential of nanoparticles in water after each step of surface coating. (d) Hydrodynamic sizes of the nanoparticles in water after each step of surface coating.



Supporting Figure S2. (a) IR thermal images of SWNT@PDA-PEG with various concentrations (0, 10, 20, 40, 80 nM) under 808 nm laser irradiation at the power density of 0.7 W cm⁻² for 5 min. (b) Temperature change curves of SWNT@PDA and PDA solution at the same PDA concentration (19 μ g/ml), corresponding to 11 μ g/ml of SWNT in the SWNT@PDA sample. The two solutions were exposed to the 808 nm laser with a power density of 0.7 W cm⁻² (starting from 120 s).



Supporting Figure S3. The relative viabilities of 293T cells incubated with various concentrations of SWNT@PDA-PEG/Mn, free ¹³¹I and SWNT@PDA-¹³¹I-PEG/Mn. For SWNT@PDA-PEG/Mn and SWNT@PDA-¹³¹I-PEG/Mn, SWNT concentrations varied from 0 to 80 nM. For free ¹³¹I and SWNT@PDA-¹³¹I-PEG/Mn, ¹³¹I concentrations varied from 0 to 80 µCi.





Supporting Figure S4. (a) Overlaid gamma & X-ray imaging of the mouse bearing 4T1 tumor after i.v. injection of SWNT@PDA-¹³¹I-PEG at 48 h. (b) Photos of mice taken at day 0 and 14 days after various treatments indicated.





Supporting Figure S5. (a) Body weights of the mice recorded after various treatments. (b) H&E stained images of major organs collected from healthy untreated mice and SWNT@PDA-¹³¹I-PEG injected mice with NIR photothermal treatment collected at 14 days p.i.