Supporting information

Nano-graphene oxide-manganese dioxide nanocomposites for overcoming tumor hypoxia and enhancing cancer radioisotope

therapy



Supporting information, Figure S1. XRD patterns of rGO-MnO₂



Supporting information, Figure S2. UV–vis-NIR spectra of GO and rGO-MnO2-PEG (Inset: photographs of rGO-MnO2-PEG in different physiological solutions).



Supporting information Figure S3. FTIR spectra of rGO, rGO-MnO₂ and rGO-MnO₂-PEG



Supporting information Figure S4. (a) Flow cytometry measurement of Cy5.5 fluorescence intensities in 4T1 cells after 0.5, 2, 4, and 6 h of incubation with rGO-MnO₂-PEG-Cy5.5. (b) The cell efflux of rGO-MnO₂-PEG-Cy5.5 in 4T1 cells measured by flow cytometry.



Supporting information Figure S5. (a&b) Average mice body weights after various treatments. c H&E stained tumor slices from mice with different treatments.



Supporting information, Figure S6. H&E stained organs slices from mice i.v injected with ¹³¹I-rGO-MnO₂-PEG or PBS after 15 days post injection.



Supporting information Figure S7. UV-vis spectra of DMXAA, rGO-MnO₂-PEG and rGO-MnO₂-PEG/DMXAA.