Supporting information for:

In Vivo Near-Infrared Photothermal Therapy and Computed Tomography Imaging of Cancer Cells Using Novel Tungsten-based Theranostic Probe

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Fig. S1. TEM images of WO$_{3-x}$ nanoparticles achieved via different temperature: 250 °C (a), 270 °C (b), 290 °C (c), and 310 °C (d).
Fig. S2. TEM images of WO$_{3-x}$ nanoparticles achieved via different volume ratio: 0.5g/30mL (a), 0.7g/30mL (b), 0.9g/30mL (c), and 1.1g/30mL (d).
Fig. S3. UV–vis absorption spectra of PEGylated WO$_{3-x}$ nanoparticles in water with different concentrations.
Fig. S4. Linear absorption data versus concentration obtained from the Figure S3.
Fig. S5. Photothermal conversion capability with PEGylated WO$_{3-x}$ nanoparticles at different power density.
**Fig. S6.** The absorption spectra taken before and after laser irradiation at 0.5 w/cm² (Left image), TEM images of WO₃ₓ nanoparticles after laser irradiation (Right image).
Fig. S7. Confocal microscopic images of differently treated 4T1 cells stained with calcein AM and propidium iodide: control (a), laser irradiation only (b), PEGylated WO$_{3-x}$ nanoparticles only(c), and with both PEGylated WO$_{3-x}$ nanoparticles and laser irradiation (d).
Fig. S8. Histological changes in the heart, liver, spleen, kidney, and lung of the rat three weeks after intravenous injection of a single dose of PEGylated WO$_{3-x}$ nanoparticles.
Fig. S9. Digital photos of a 4T1 tumor-bearing mouse before (a) and after photothermal therapy (b).
Fig. S10. The axial tumor images without the WO$_{3-x}$ nanoparticles (a) and with the WO$_{3-x}$ nanoparticles (b).