Immunogenic Cell Death Photothermally Mediated by Erythrocyte Membrane-Coated Magnetofluorescent Nanocarriers Improves Survival in Sarcoma Model

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Supplementary Information

TEM images and EDS spectra

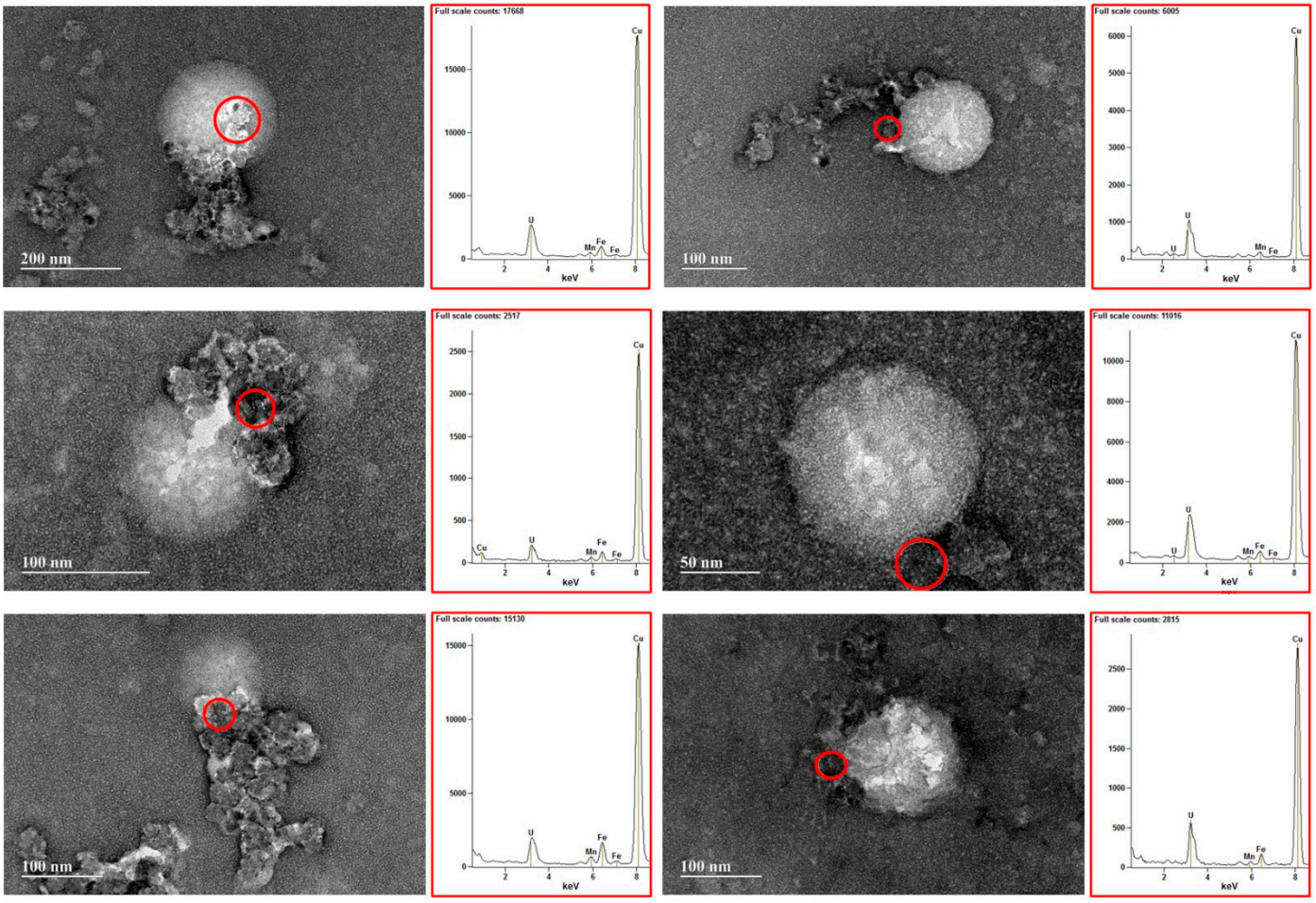

Figure S1 – Representative RBCm-IR-Mn TEM images and corresponding EDS (energy dispersive spectroscopy) spectra

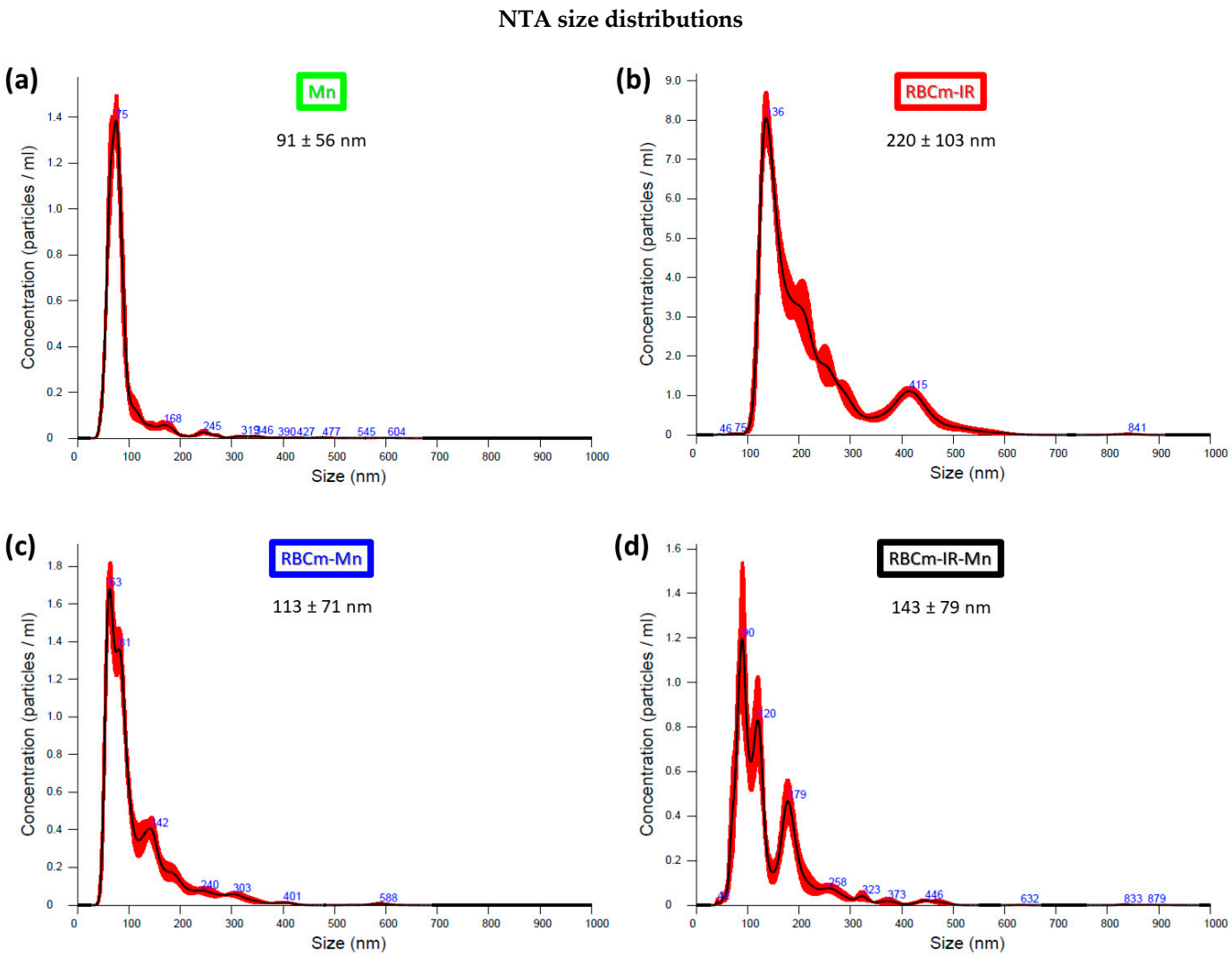

Figure S2 – (a) Mn-ferrite nanoparticles. **(b)** RBCm-IR control sample. **(c)** RBCm-Mn control sample. **(d)** RBCm-IR-Mn nanocarrier. Average diameters are reported as mean ± SD.

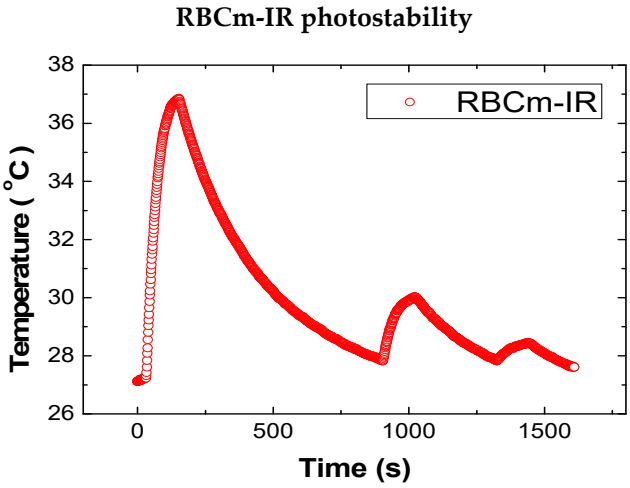

Figure S3 – RBCm-IR shows photobleaching under sequential PTT cycles.

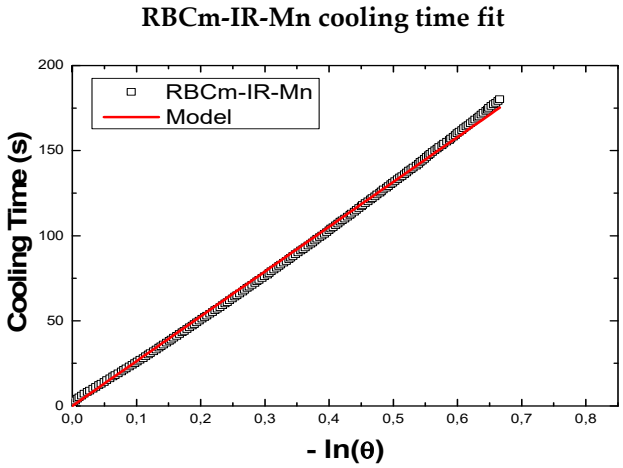

Figure S4 – Linear fit corresponding to the cooling time of RBCm-IR-Mn (step for PCE determination).

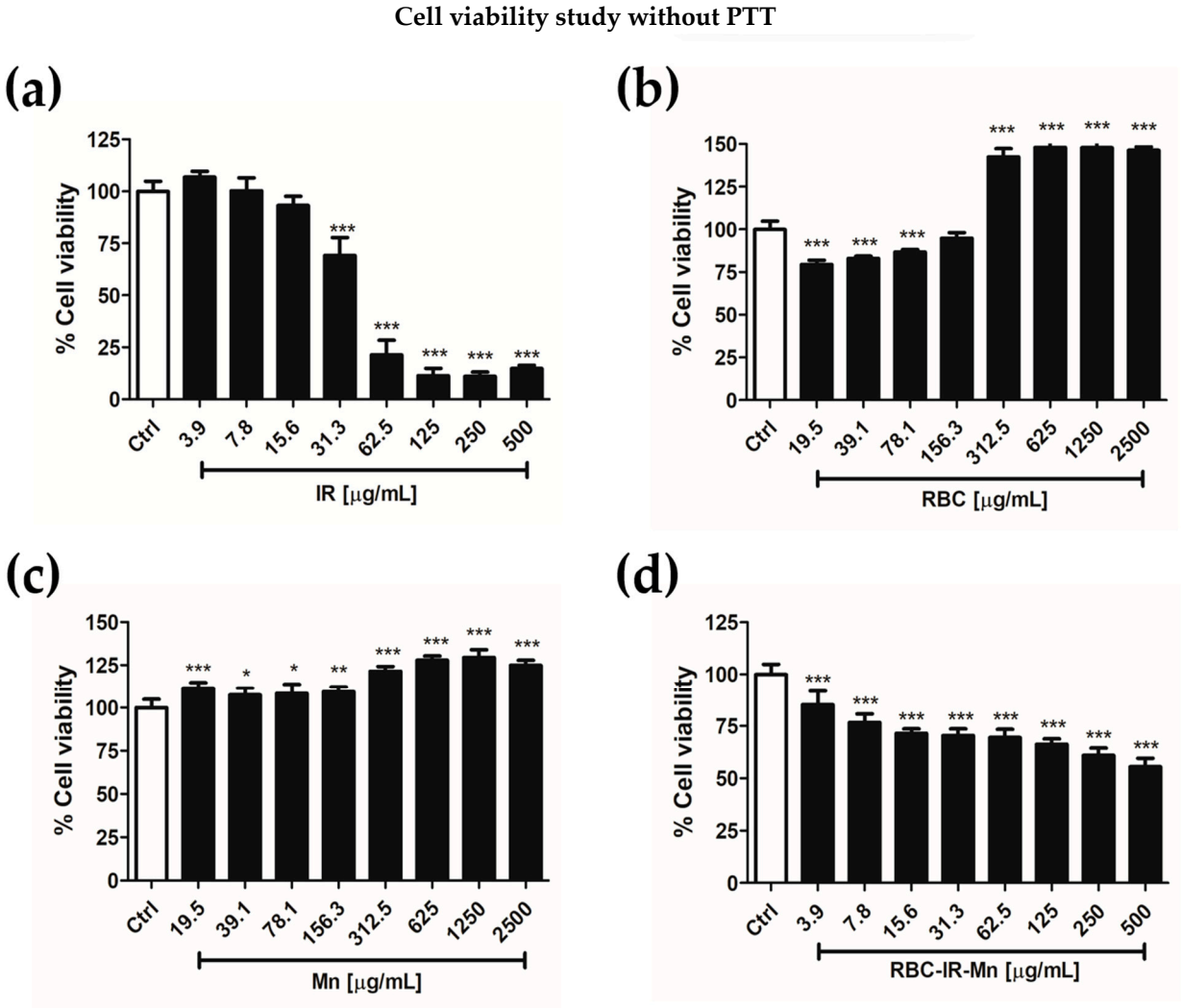

Figure S5 – Cell viability study without laser irradiation. MTT study as function of the concentration of **(a)** free IR-780 concentration; **(b)** erythrocyte membrane vesicles (without IR-780 and without magnetic nanoparticles); **(c)** Mn-ferrite nanoparticles; and **(d)** RBCm-IR-Mn nanocarriers.

PTT for nonspecific laser heating

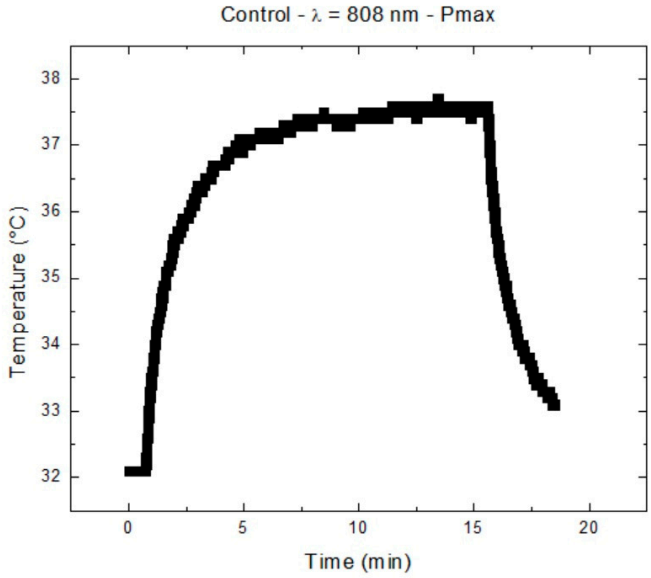

Figure S6 – Control tumor-bearing animal submitted to PTT for the determination of nonspecific heating.

Tumor Evolution and PTT treatments for animal GM-SM

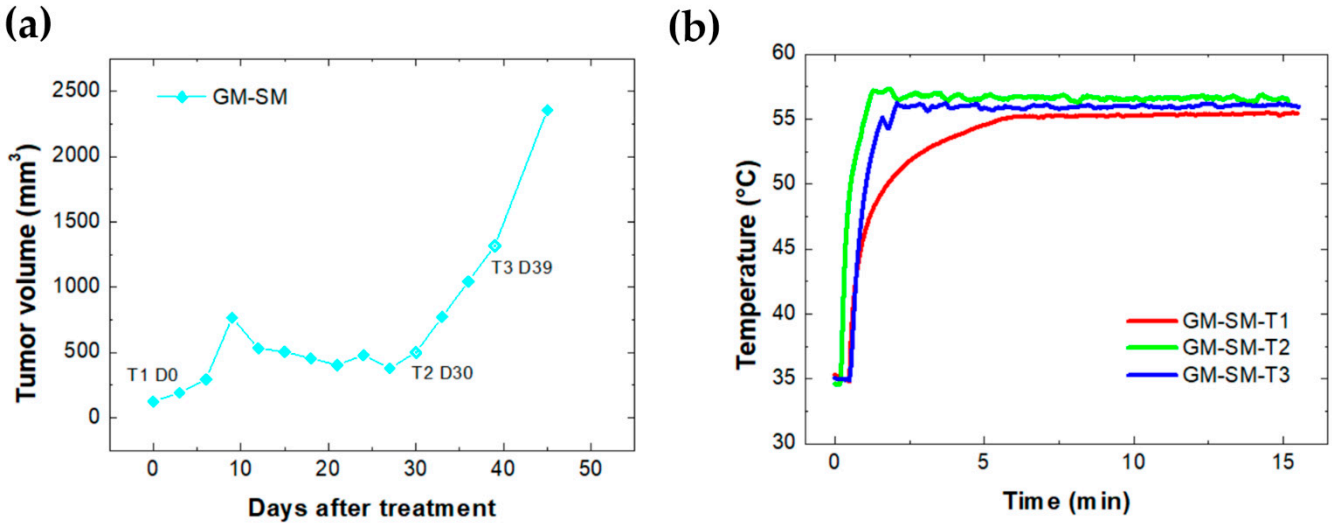

Figure S7 – (a) Tumor volume evolution and **(b)** temperature profile for PTT treatments performed for animal GM-SM

In vivo **preclinical PTT study – Average profiles**

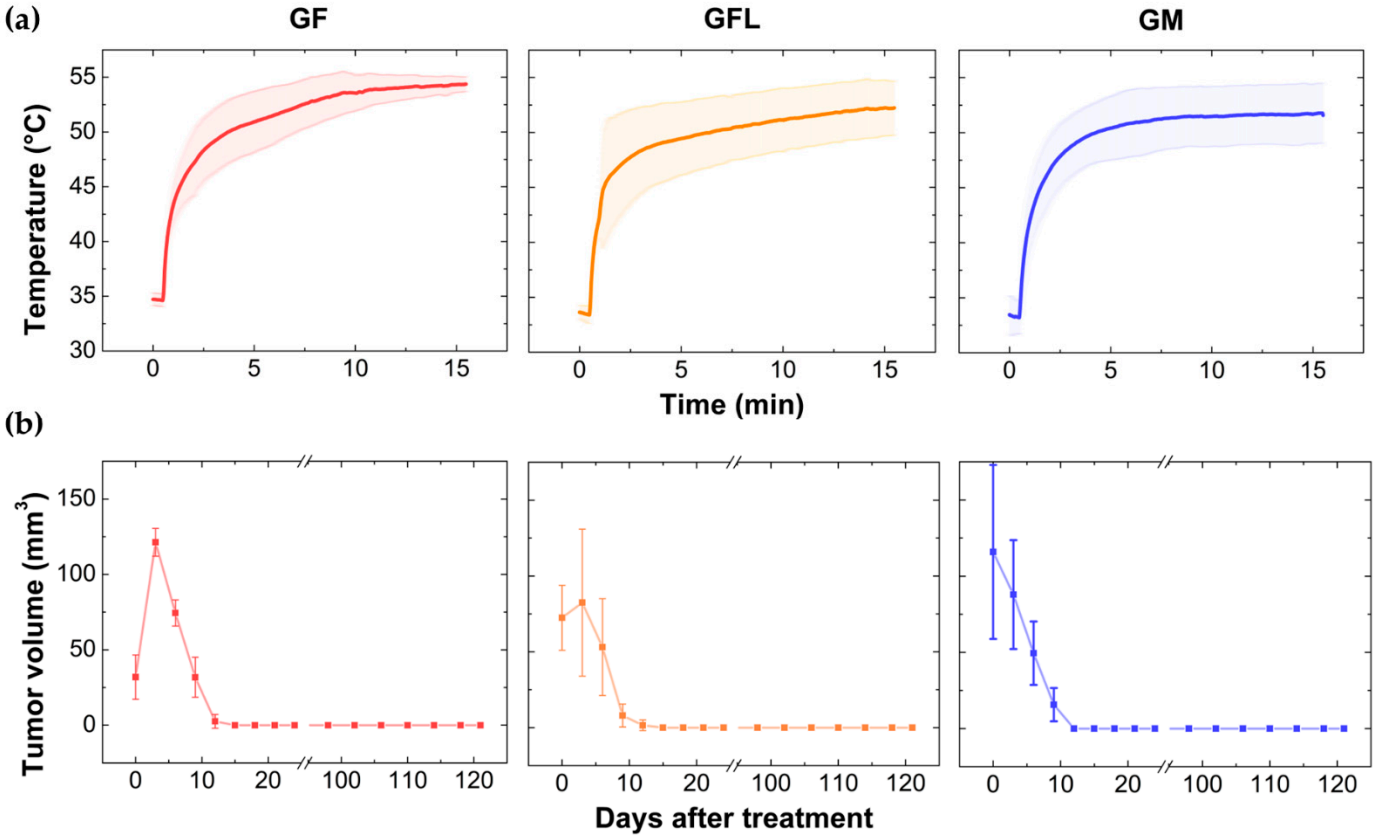

Figure S8 – (a) Mean PTT temperature profiles and **(b)** Mean tumor volume evolution for animals in groups GF ($n = 4$), GFL ($n = 5$), and GM ($n = 4$). Datapoints are expressed as mean ± SD.