## 1 Biodistribution of gadolinium- and near infrared-

- 2 labeled human umbilical cord mesenchymal stromal
- 3 cell-derived exosomes in tumor bearing mice
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## **5 SUPPLEMENTARY INFORMATION**

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Figure S1: A) Hydrodynamic size of PEGylated NPs made up of poly (lactic-co-glycolic acid) and 1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-[succinyl(polyethylene glycol)-2000] (ammonium salt) (DSPE-PEG) measured by DLS. B) Zeta potential of PEGylated NPs.

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33 34 Figure S2: Exosomes do not increase apoptosis of osteosarcoma cells. Murine K7M2 osteosarcoma cells were exposed to 30 ng/cm<sup>2</sup> (1X) of unlabeled human 35 mesenchymal stromal cell derived exosomes (Naïve Exo) or 3000 ng/ cm<sup>2</sup> (100X) or 36 30,000 ng/cm<sup>2</sup> (1000X) gadolinium-labeled exosomes (Exo-GdL) suspended in 37 38 Dulbecco's modified eagle medium (DMEM) supplemented with 10% pooled human 39 platelet lysate depleted of exosomes (dpHPL). K7M2 cells were incubated for 24 h and 40 observed under confocal microscopy (the calibration bar is 20 µm). DMEM with 10% 41 dpHPL media was used as negative control and DMEM with 10% dpHPL with 500 µM of 42  $H_2O_2$  was the positive control. K7M2 cells were stained with Annexin-V FITC (green) and propidium iodide (PI, red). Double-negative (no staining) were healthy cells, 43 44 Annexin V-positive stained cells were in early apoptosis (green), cells Annexin V-45 positive and PI-positive were dead or necrotic cells (green/red). 46