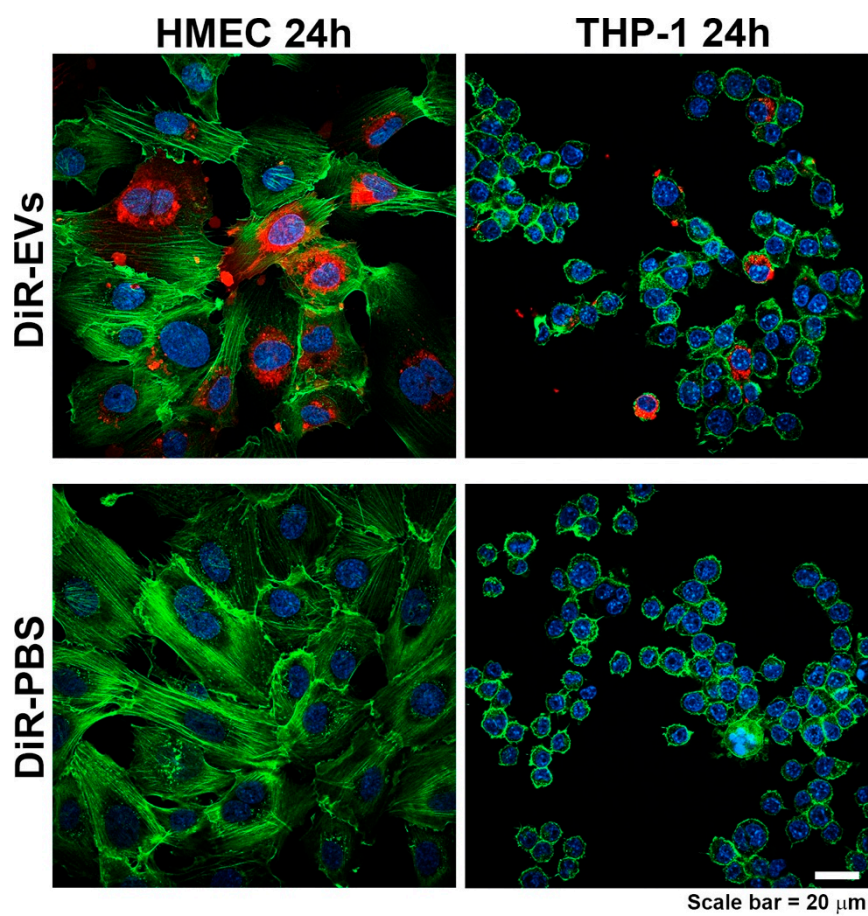
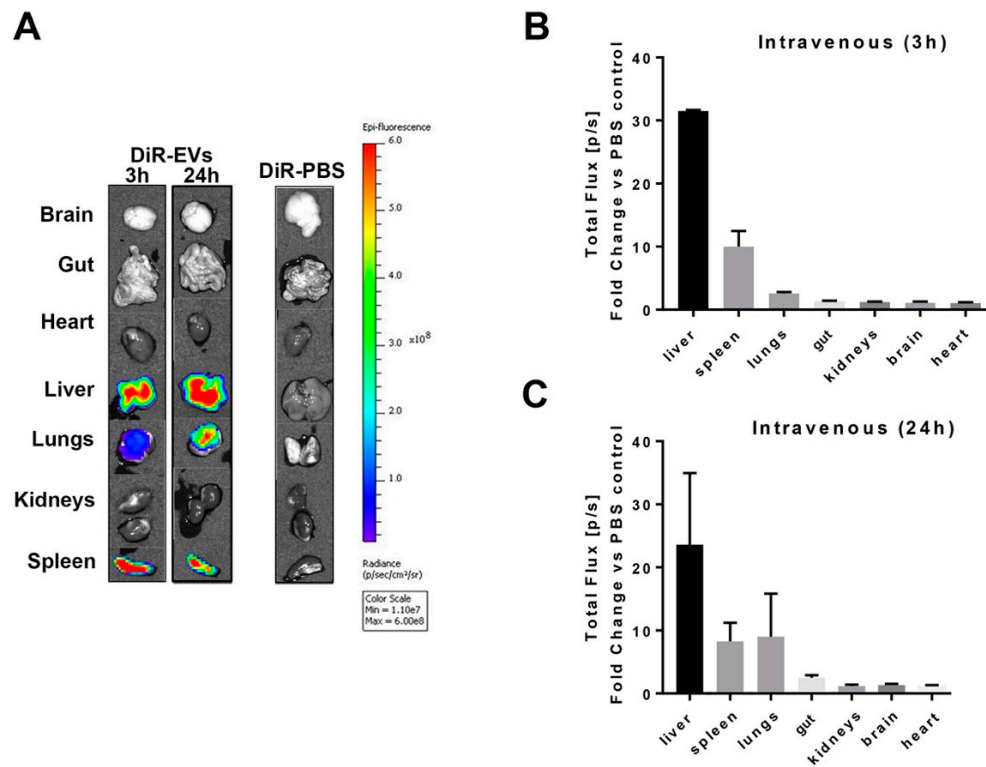


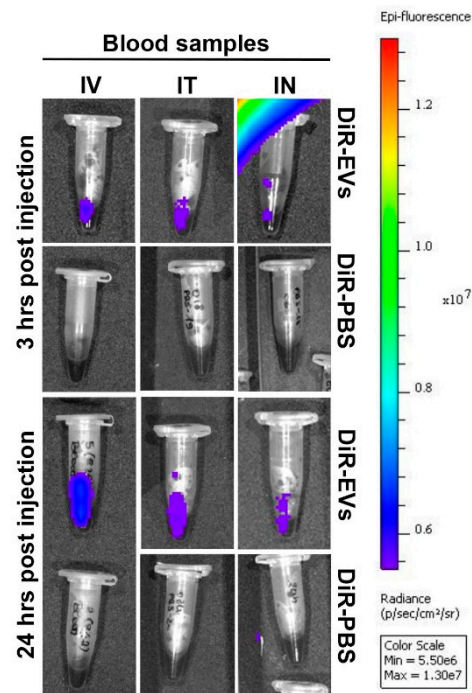
## SUPPLEMENTARY FIGURES



**Figure S1: In-vitro uptake experiments.** HMEC and THP-1 were incubated in the presence of DiR-labeled PBS (DiR-PBS) or of DiR-labeled EVs (DiR-EVs) for 24 hours (in red). Cells are labeled in FITC-phalloidin (green) for cytoskeleton staining and DAPI (blue) for the nuclear staining.



**Figure S2: Analysis of DiR-labeled MSC-EV organ biodistribution.** Representative image of ex vivo organ imaging using IVIS® (A). Quantification of the fluorescence intensity as total flux (photons/s) is represented in (B) after 3 h, or (C) 24 h from IV injection. Data are expressed as fold change (DiR-EVs/DiR-PBS) (n=3/each).



**Figure S3: MSC-EV biodistribution in biofluids.** Blood derived from Balb/c mice, IV, IT and IN injected with DiR-labeled MSC-EVs (DiR-EVs) or PBS (DiR-PBS). Representative analysis of the fluorescence intensity detected in blood after 3 and 24 h and measured using an IVIS® Imaging System.