

## **Supporting information**

# **Systemic Administration of Polyelectrolyte Microcapsules: Where Do They Accumulate and When? In Vivo and Ex Vivo Study**

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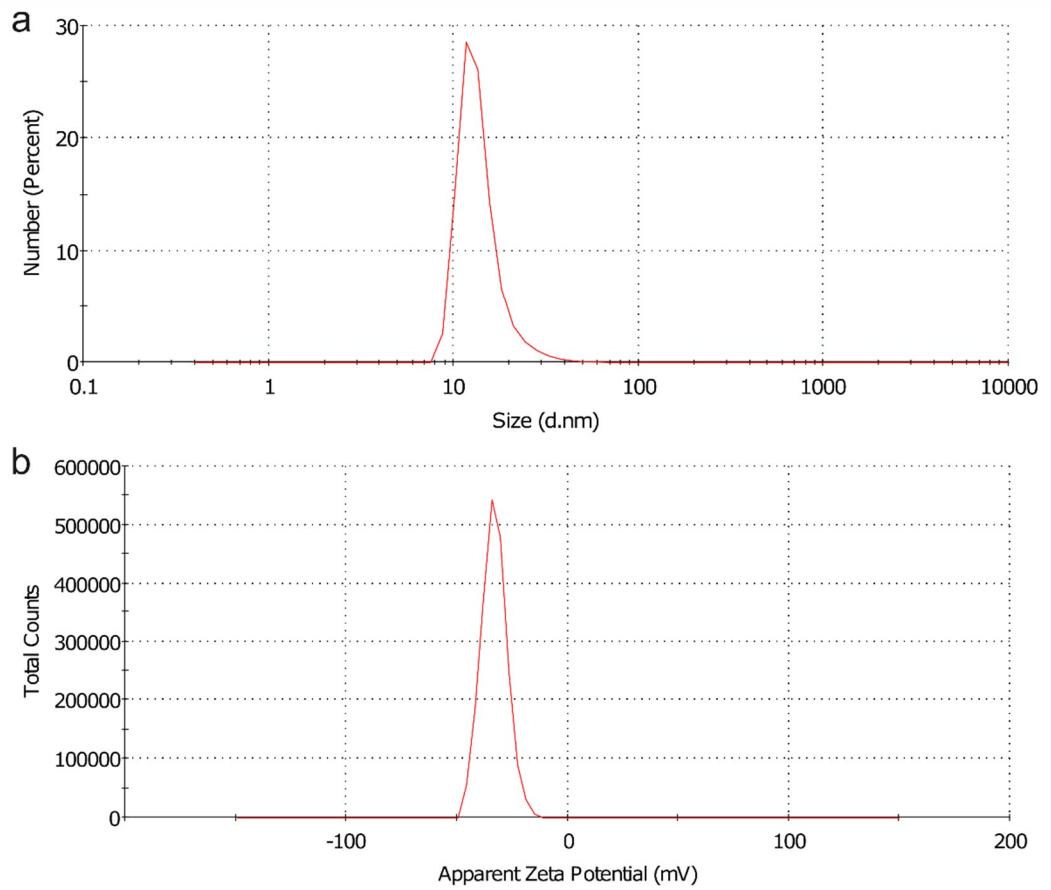


Figure. S1. a) Magnetite nanoparticle size distribution measured by dynamic light-scattering (DLS); b) Zeta potential distribution of magnetite nanoparticles measured by DLS.

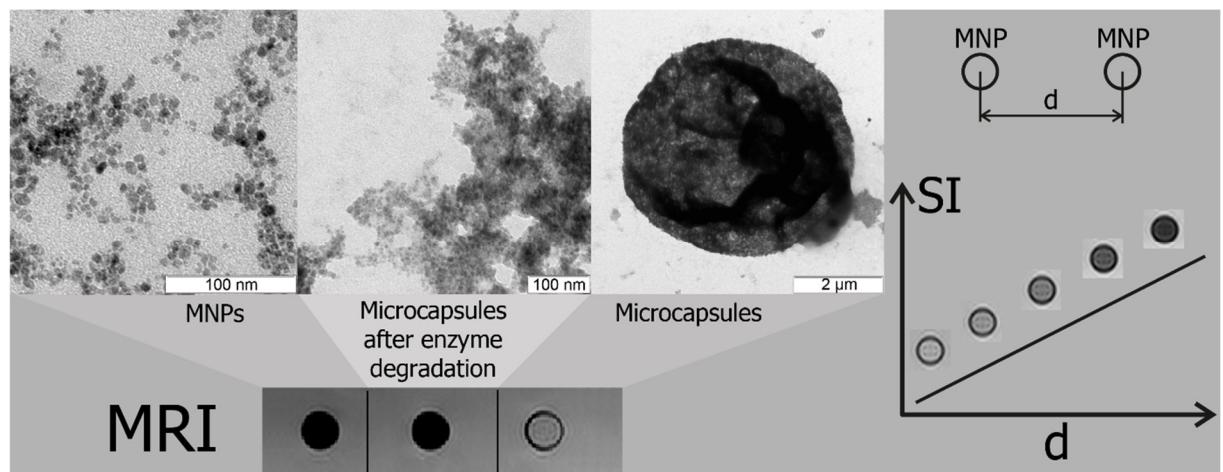


Figure. S2. Dependence of magnetic resonance imaging (MRI) contrast on interparticle distance  $d$ , illustrated by transmission electron microscopy (TEM) images of magnetite nanoparticles (MNPs), microcapsules after enzyme degradation and initial microcapsules.

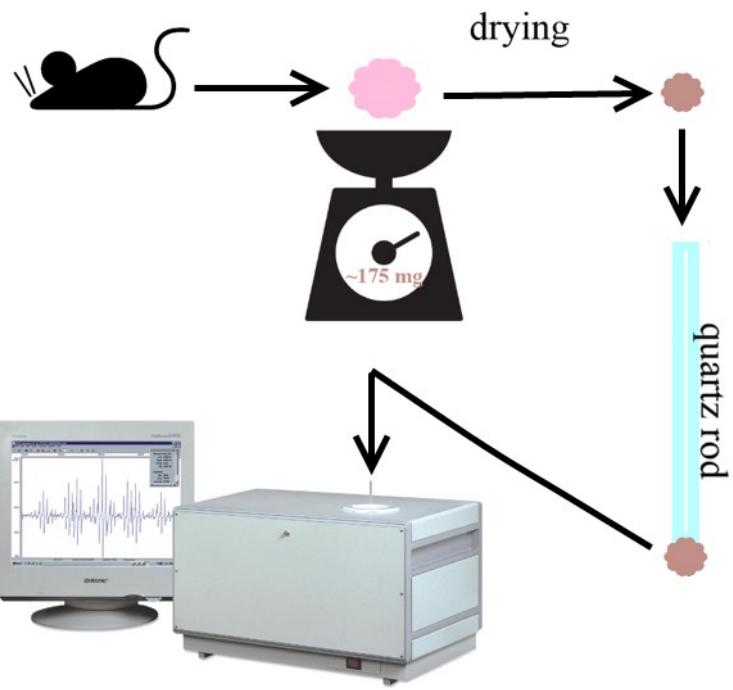


Figure. S3. The sample preparation process for electron spin resonance (ESR) spectroscopy

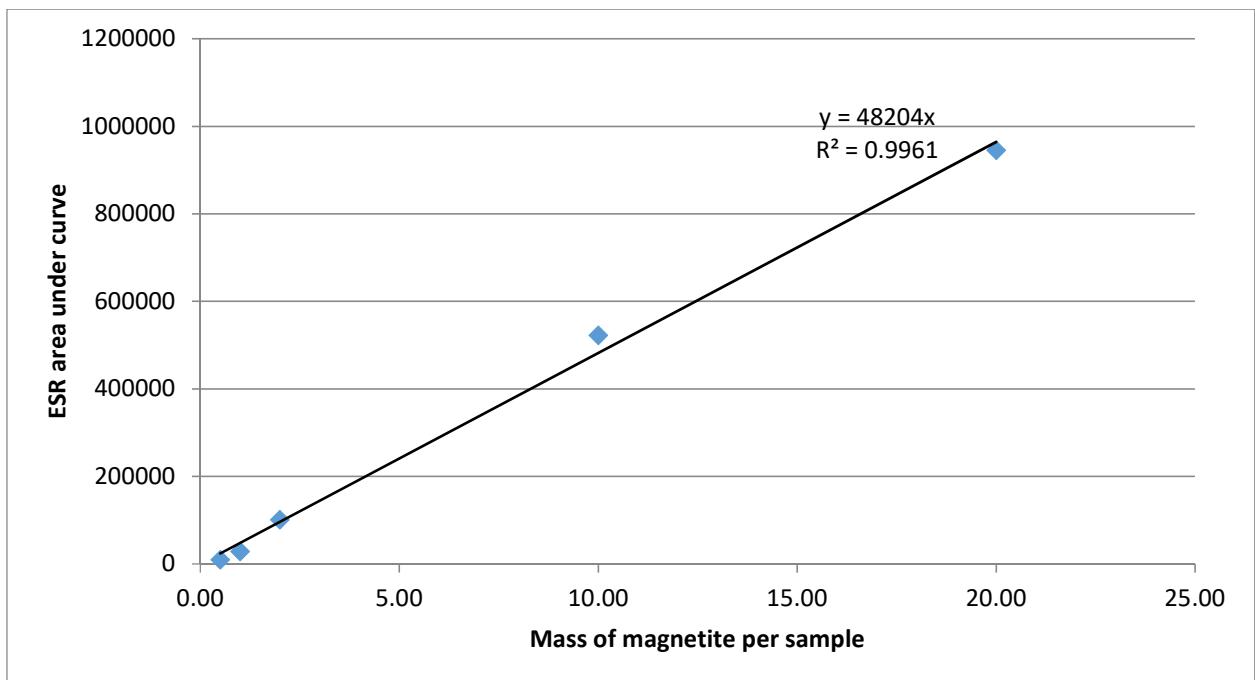


Figure. S4. Chart for mass of magnetite – ESR area under curve dependence

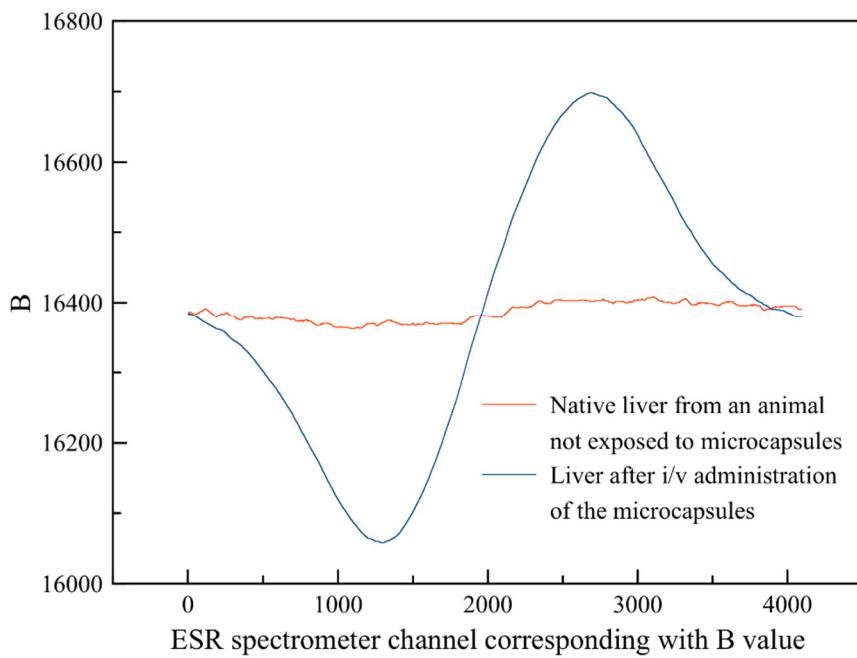


Figure. S5. Comparison of ESR spectra of liver from animals exposed and not exposed to microcapsules

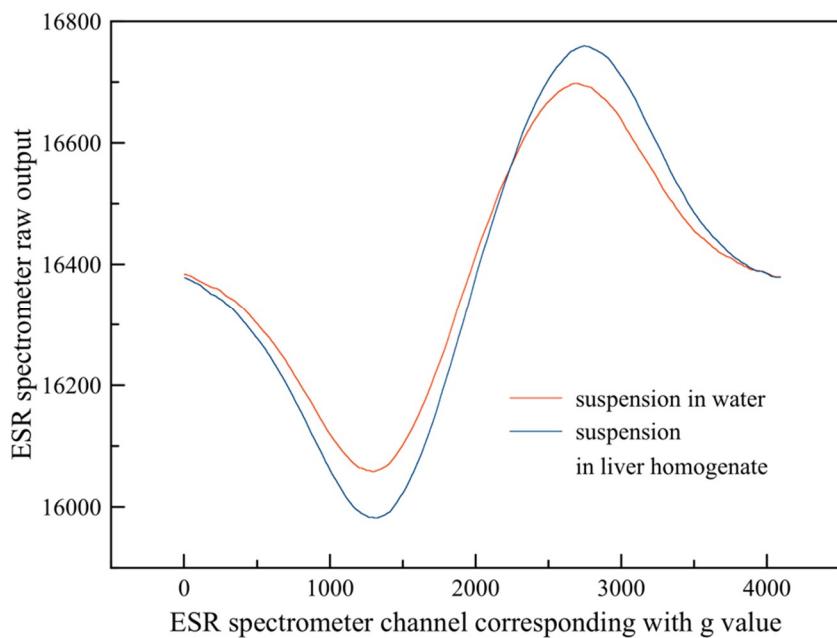


Figure. S6. Comparison of ESR spectra of microcapsules suspension in the water and liver homogenate