## Supporting Information

## Magnetic Coagulometry: Towards a New Nanotechnological Tool for ex vivo

## Monitoring Coagulation in Human Whole Blood

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Figure S1. Nanoparticle Tracking Analysis diagram of IONPs.

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Figure S2. Preliminary out-of-phase component from AC magnetic susceptibility recorded at 400 Hz show no significant difference in samples pre-treated with combined anti-platelet drugs. (A) Average traces of out-of-phase component from AC magnetic susceptibility measurements of 0.066 mg<sub>Fe</sub>/mL IONPs dissolved in freshly donated whole human blood, pre-treated with 60  $\mu$ M Ticagrelor + 25  $\mu$ M MRS2179, 60  $\mu$ M Ticagrelor + 250  $\mu$ M Aspirin or the carrier, recalcified with 20 mM CaCl<sub>2</sub> and activated with 125  $\mu$ M ADP. (B) Area enclosed below AC susceptibility traces measured in (B). n = 3, 1 donor. Error bars: SEM



**Figure S3.** Frequency spectral mode AC susceptibility measurements of 0.066 mgFe/mL IONPs dissolved freshly donated whole human blood recalcified with 20 mM CaCl<sub>2</sub> and treated with (A) saline solution or (B) 125  $\mu$ M ADP, recorded at time 0 and after 45 minutes. n = 2