Supporting information for:

Ultrasound-visualized, site-specific vascular embolization using magnetic protein microcapsules

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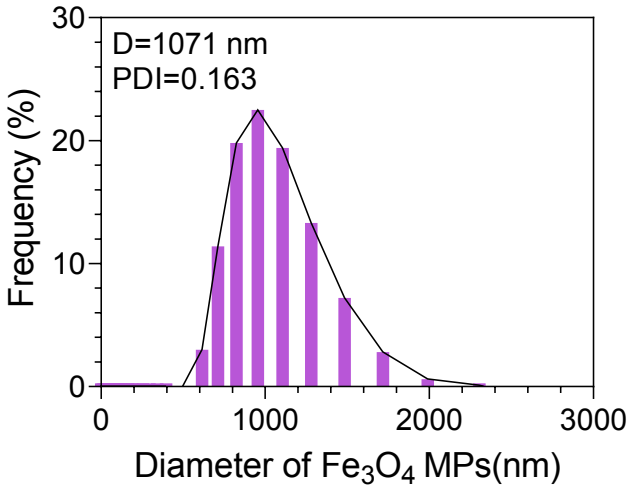

Fig. S1. Size distribution of the ferromagnetic Fe_3O_4 microparticles.

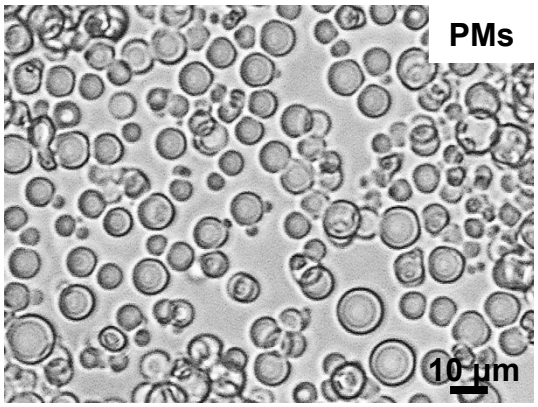

Fig. S2. Optical image of the blank protein microcapsules (PMs).

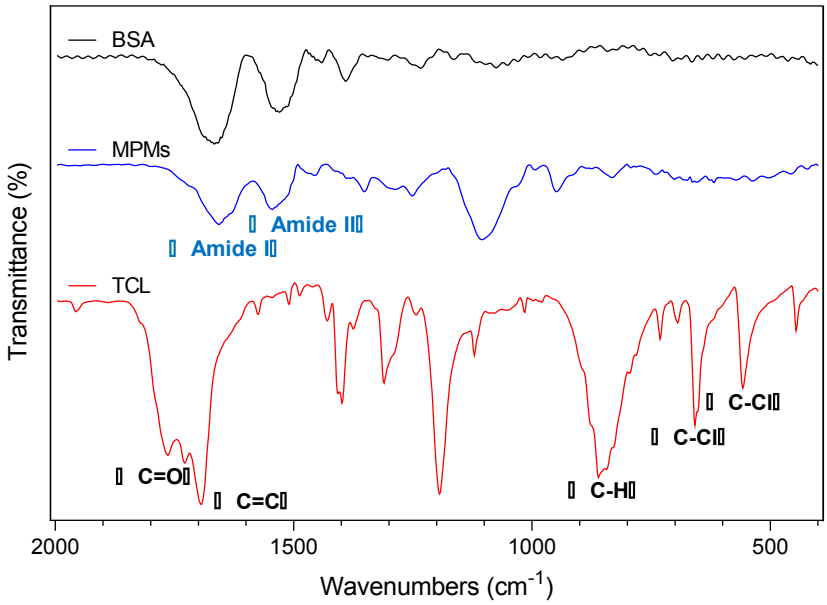

Fig. S3. FTIR spectra of BSA, TCL and the MPMs. The characteristic peaks of acyl chloride bond, amide I band and amide II band are 658 cm^{-1}, 1660 cm^{-1} and 1549 cm^{-1}, respectively.

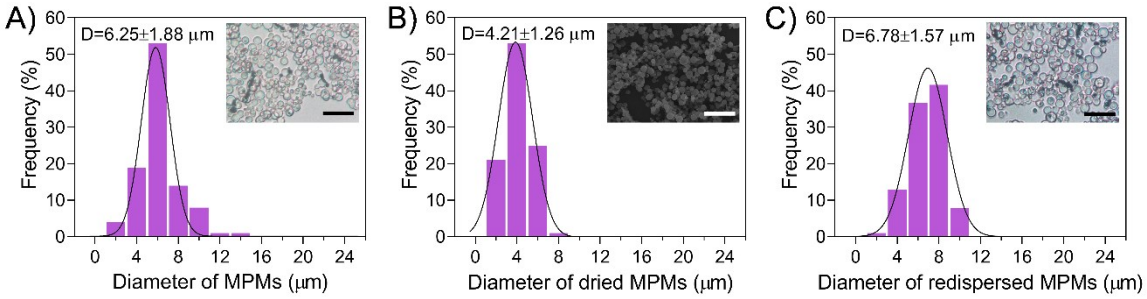

Fig. S4. Size distribution of the MPMs after (A) preparation, (B) lyophilization and (C) redispersion. (insets: images of the MPMs at different states, scale bar: 30 μm)

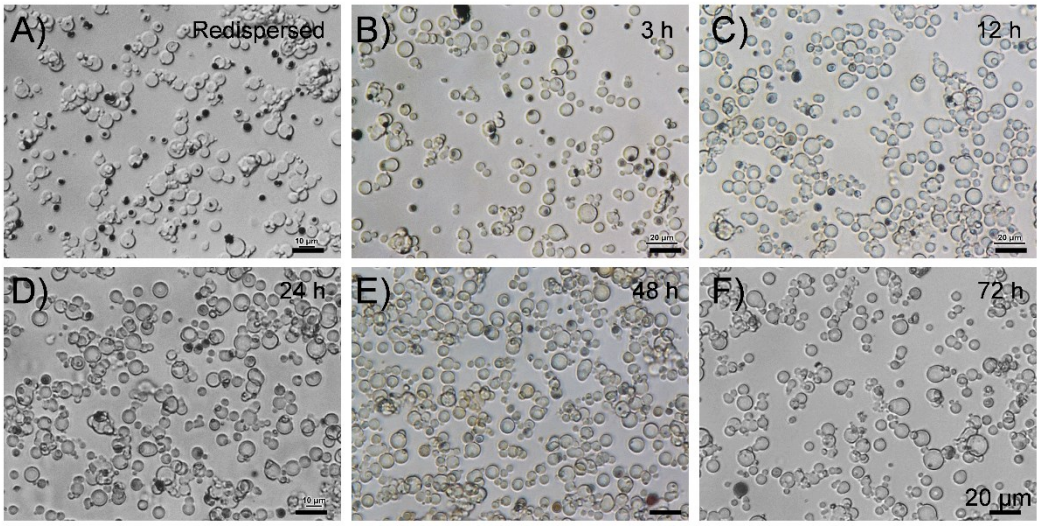

Fig. S5. Optical images of MPMs at 3, 12, 24, 48 and 72 h after immersion in saline at 37℃.

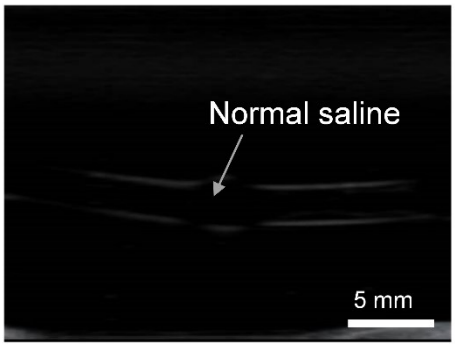

Fig. S6. Ultrasound image of normal saline in the hydrogel channel.

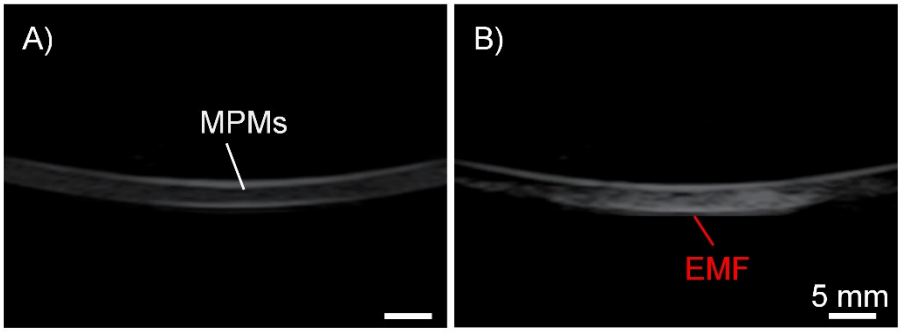

Fig. S7. Ultrasound images of the MPMs in the target channel before (A) and after (B) the application of an external magnetic field

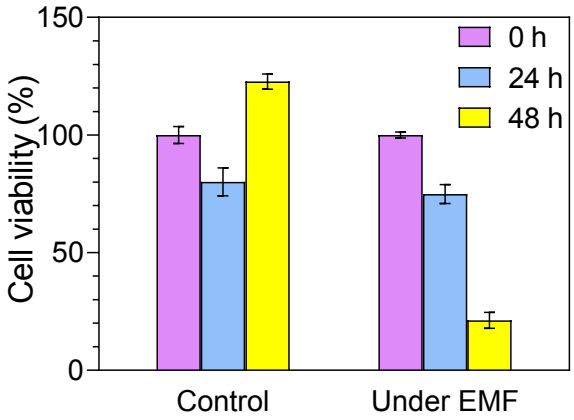

Fig. S8. Viabilities of HepG2 cells at different culture conditions (data= mean ± SD; n=6).

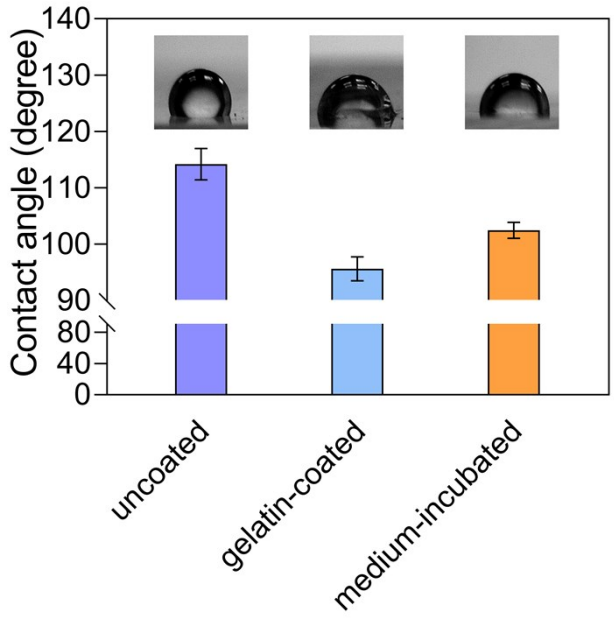

Fig. S9. Water contact angle measurement of PDMS substrate surfaces in different states (medium-incubated: PDMS substrates after coated with gelatin and then further incubated in medium for 24 h at 37°C). (data=mean ± SD; n=6)

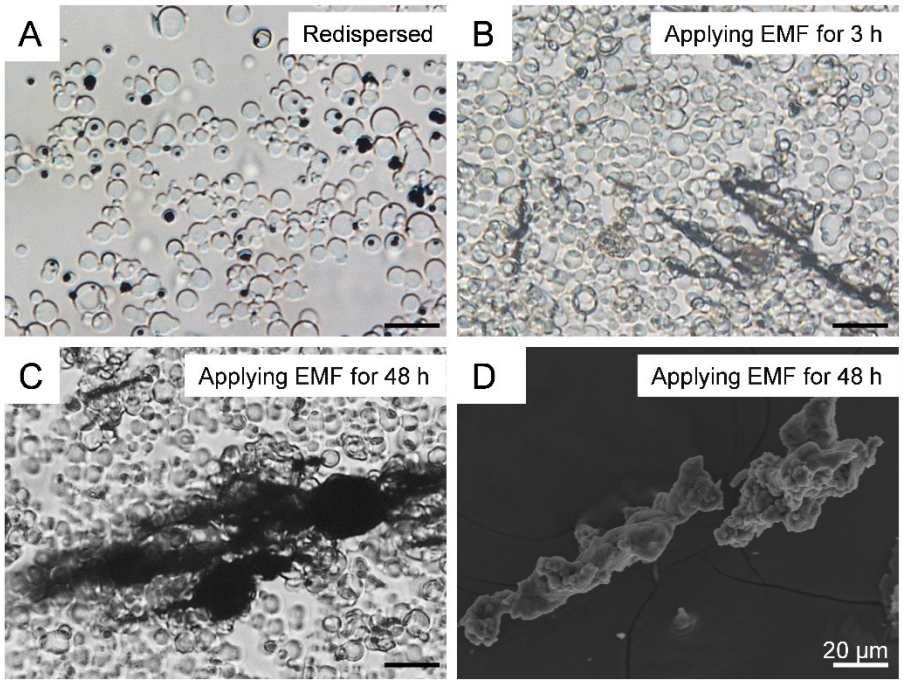

Fig. S10. Optical images of MPMs (A) when redispersed in saline, at (B) 3 h and (C) 48 h after applying an EMF. (D) SEM images of MPMs after applying an EMF for 48 h.