Supporting Information for

Original article

Combination therapy using microwave ablation and D-mannose-chelated iron oxide nanoparticles inhibits hepatocellular carcinoma progression

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Running title: Microwave ablation and D-mannose-chelated iron oxide nanoparticles inhibit HCC progression



Figure S1 Viability of RAW264.7 (left) and Hepa1-6 (right) cells after incubation with man-IONPs or IONPs. Data are expressed as mean \pm SD (n = 3).



Figure S2 Routine blood tests of mice at 2 weeks after injecting man-IONPs or IONPs. Data are expressed as mean \pm SD (n = 3).



Figure S3. Biochemical tests of mice at 2 weeks after injecting man-IONPs or IONPs. Data are expressed as mean \pm SD (n = 3).



Figure S4. Hematoxylin-eosin staining of histological sections of mouse organs after injection of man-IONPs or IONPs.



Figure S5 Percentages of induced M1-like and M2-like macrophage phenotypes from isolated BMDM cells *in vitro*, v*ia* PCR. Data are expressed as mean \pm SD (n = 3); ** P < 0.01 and ***P < 0.001.



Figure S6 The relative quantitative value of Man-IONPs in M1- and M2-like macrophages after various incubation periods.

Table S1 Primers used for qRT-PCR.

Genens	Primer sequence (5'-3')
CD86	Forward TTGTGTGTGTGTTCTGGAAACGGAG
	Reverse AACTTAGAGGCTGTGTGTTGCTGGG
iNOS	Forward CACCAAGCTGAACTTGAGCG
	Reverse CGTGGCTTTGGGCTCCTC
TNF-α	Forward GAGTGACAAGCCTGTAGCC
	Reverse CTCCTGGTATGAGATAGCAAA
CD206	Fwd GGATTGTGGAGCAGATGGAAG
	Rev CTTGAATGGAAATGCACAGAC
Ym1	Forward CAAGTTGAAGGCTCAGTGGCTC
	Reverse CAAATCATTGTGTAAAGCTCCTCTC
Fizz	Forward CTGCCCTGCTGGGATGACT
	Reverse CATCATATCAAAGCTGGGTTCTCC
IL-10	Forward CAAGGAGCATTTGAATTCCC
	Reverse GGCCTTGTAGACACCTTGGTC
IL-1β	Forward TGGGAAACAACAGTGGTCAGG
	Reverse CCATCAGAGGCAAGGAGGAA
IRF4	Forward CTTTGAGGAATTGGTCGAGAGG
	Reverse GAGAGCCATAAGGTGCTGTCA