Supporting information

Liposomes Loading Sodium Chloride as Effective Thermo-seeds for Microwave Ablation of Hepatocellular Carcinoma

Qunfang Zhou ^{1, 2*}, Songsong Wu^{1*}, Gong, Ningqiang³, Xin Li¹, Jianping Dou¹, Mengjuan Mu¹,

Xiaoling Yu¹, Jie Yu¹, Ping Liang¹

*These authors contributed equally to the manuscript.

Authors names:

1. Department of Interventional Ultrasound, Chinese PLA General Hospital, 28 Fuxing Road, Beijing 100853, China.

2. Nankai University School of Medicine, 94 Weijin Road, Tianjin 300071, China

3. CAS Key Laboratory for Biological Effects of Nanomaterials & Nanosafety, National Center for Nanoscience and Technology, No.11 Beivitiao, Zhongguancun, Beijing 100190, China

Figure.S1. Characterization of the DW-LPs. (A) TEM of the DW-LPs. (B) Particle number distribution of DW-LPs.

Figure. S2. (A)The temperature increase of 0.25 M NaCl-LPs, 0.5 M NaCl-LPs, degassed water was measured for 4 min. (D) Infrared mapping of 0.25 M NaCl-LPs, 0.5 M NaCl-LPs, degassed water.

Figure. S3. Cytotoxicity of NaCl-LPs on human liver cell Lo2.

Figure. S4. TTC staining of sublethal MWA+ NaCl on subcutaneous HCC

Figure. S5. US imaging of the tumor before and after MWA treatment. Tumors were marked with

white circles and red curve region represented residual tumor. (scale bar = 10 mm)

Figure.S6. TTC staining of sublethal MWA+ NaCl on orthotopic HCC

Figure. S7. HE staining images of major organs collected from control and NaCl-LPs. (scale bar = $100 \ \mu m$)



















Fig. S5







Fig. S7