

Supporting information

Ultrasound-controllable dexamethasone-loaded nanobubbles for highly effective rheumatoid arthritis therapy

*Hang-yi Hu^{1,4†}, Ying-jian Sun^{1†}, Xiao-feng Yuan^{1,3†}, Jiang-fan Han¹, Tian-tian Liao¹,
Fei-yue Zhang¹, Jin-dong Mao¹, Lin Zhang^{2*}, Wei-liang Ye^{1*}*

1.Department of Pharmaceutics, School of Pharmacy, Fourth Military Medical University, Xi'an, 710032, China

2.Department of outpatient service, 986th Hospital Affiliated to Air Force Medical University, Xi'an, China

3.Department of Pharmacy, Chinese People's Liberation Army Logistics Support Force No.967 Hospital, Dalian, 116021, China

4.Department of Materials Science, Shenzhen MSU-BIT University, Shenzhen, 518172, China

*Correspondence: zhanglin19870315@163.com and yaojixue@fmmu.edu.cn.

Tel.: +86-29-8477-6783 (W. Y.)

†These authors contributed equally to this work.

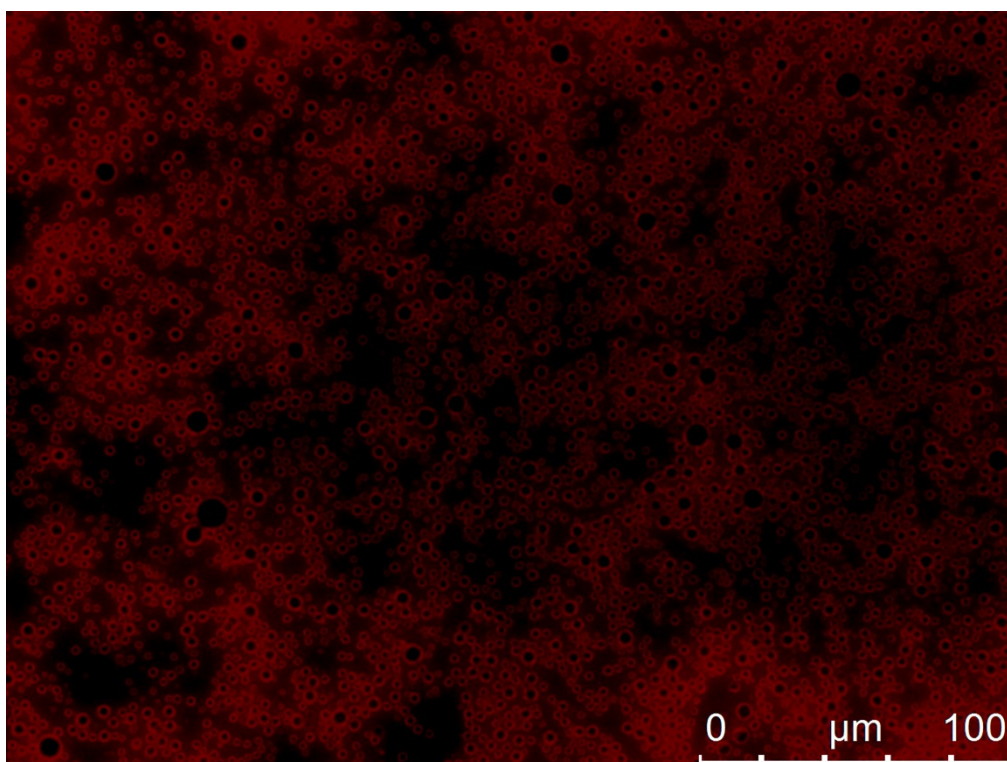


Figure S1. The morphology of the DIR-DEXsp@Liposomes/C₃F₈ was determined by LSCM.

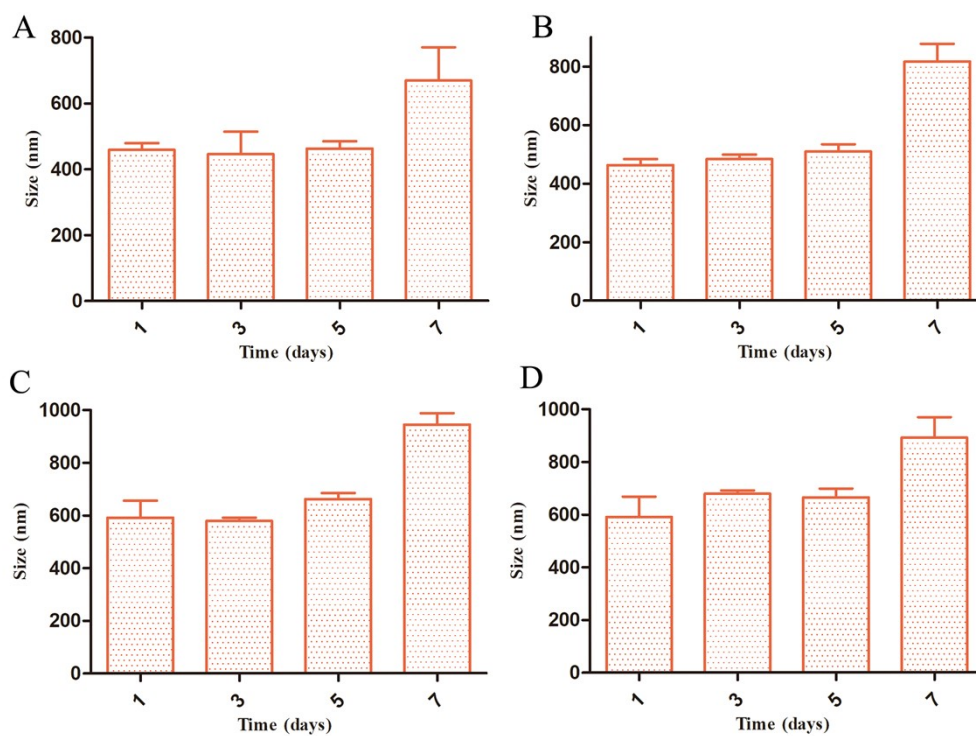


Figure S2. Stability of DEXsp@Liposomes (A, B) and DEXsp@Liposomes/C₃F₈ (C, D) at 4°C (A, C) or 37°C (B, D) were measured by using DLS.

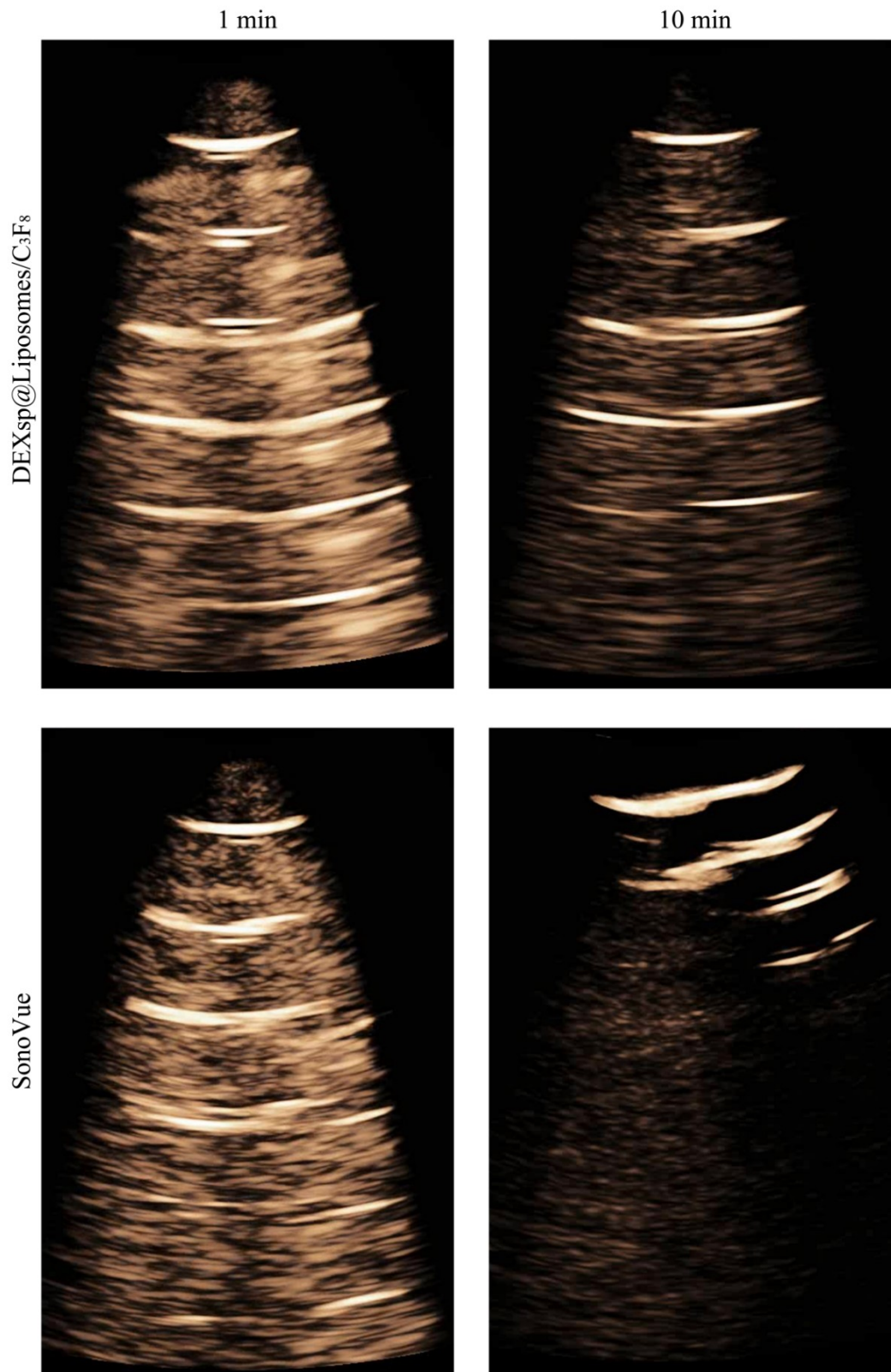


Figure S3. The echo stability of DEXsp@Liposomes/C₃F₈ and Sono Vue were monitored by agar-gel phantom tests.

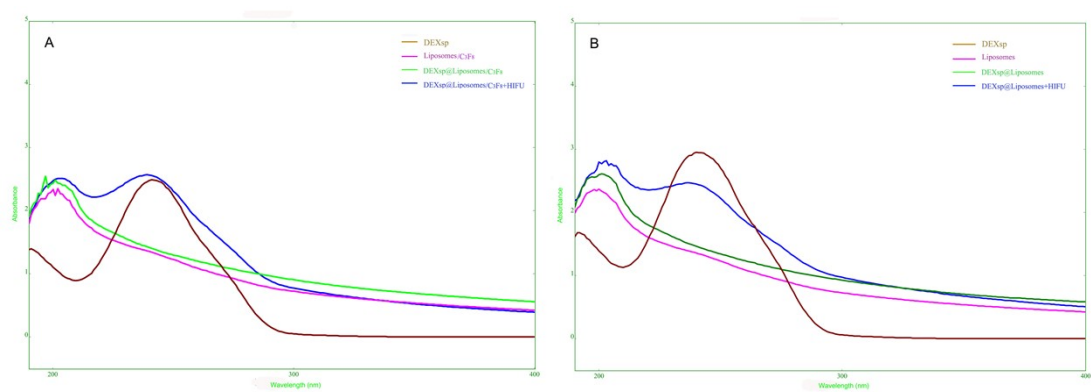


Figure S4. UV-vis absorption spectra of DEXsp@Liposomes/C₃F₈ (A) and DEXsp@Liposomes (B) irradiated with or without HIFU.