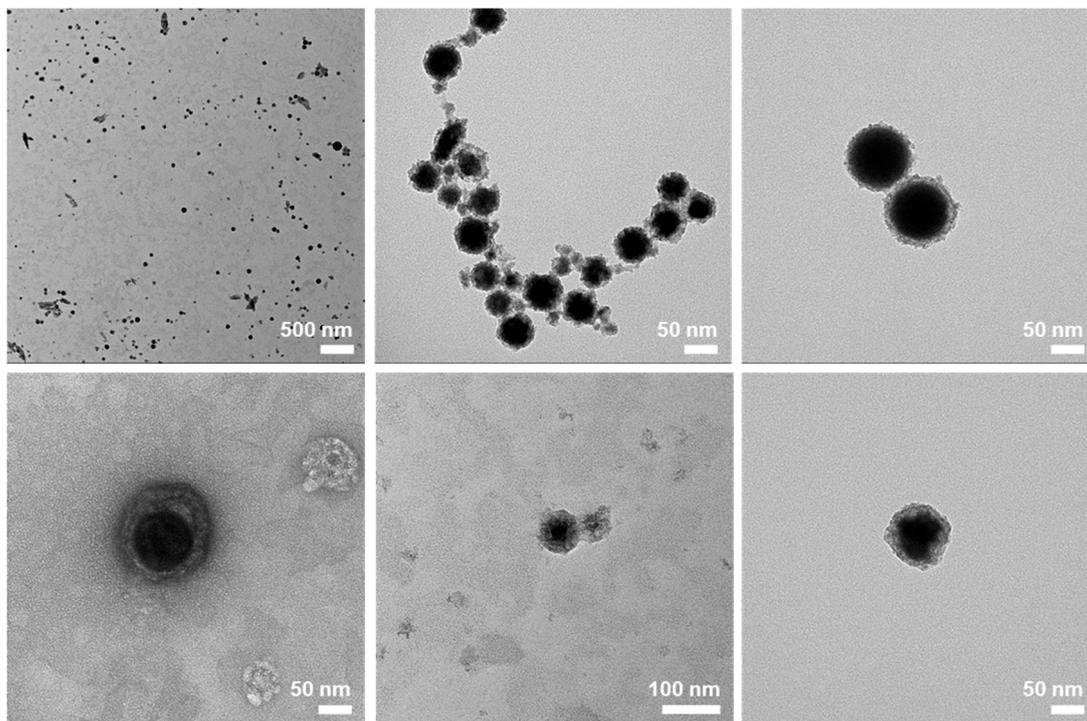


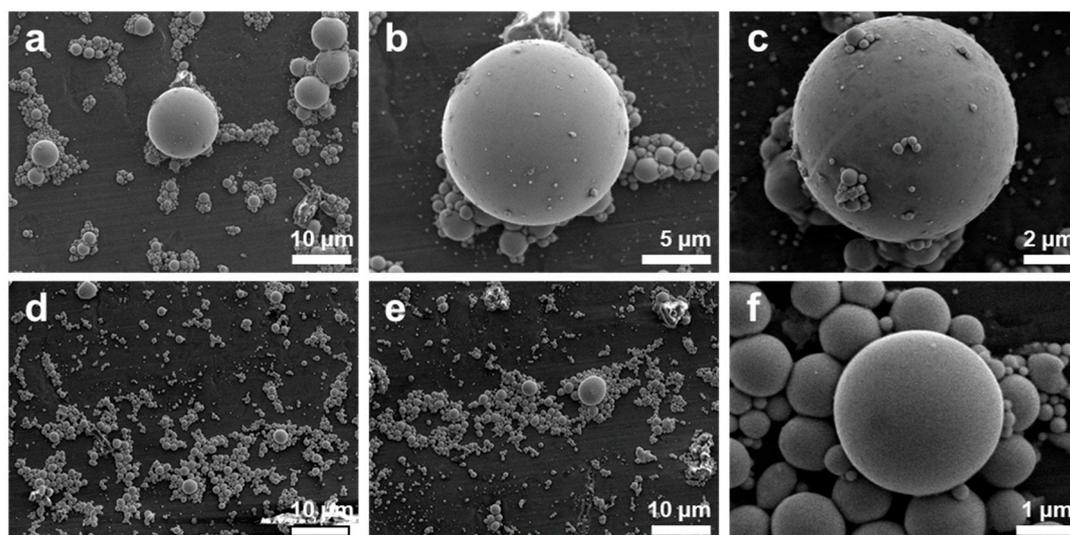
Supplemental Materials

# Effective Delivery of Anti-Cancer Drug Molecules with Shape Transforming Liquid Metal Particles

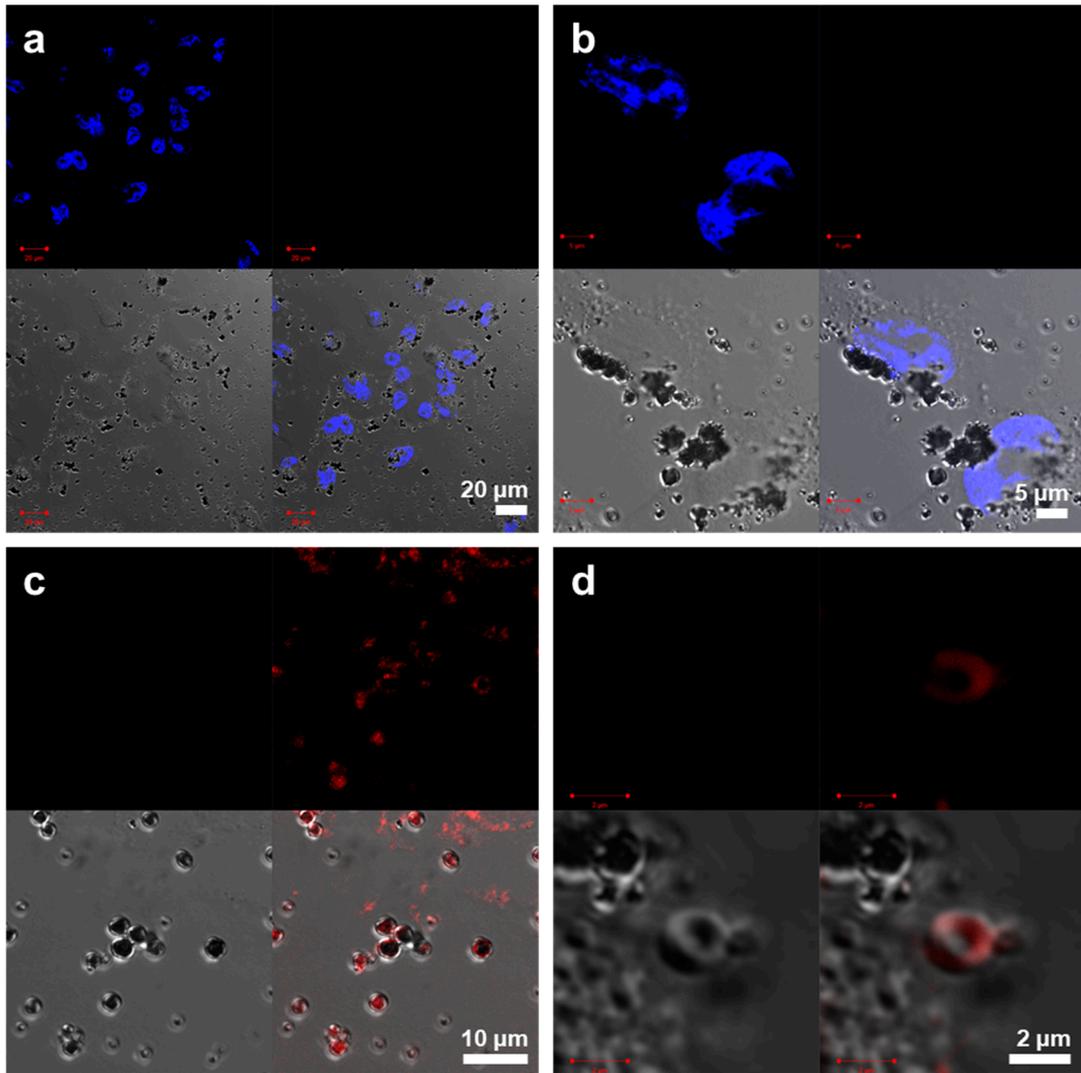
Dasom Kim, Jangsun Hwang, Yonghyun Choi, Yejin Kwon, Jaehee Jang, Semi Yoon and Jonghoon Choi



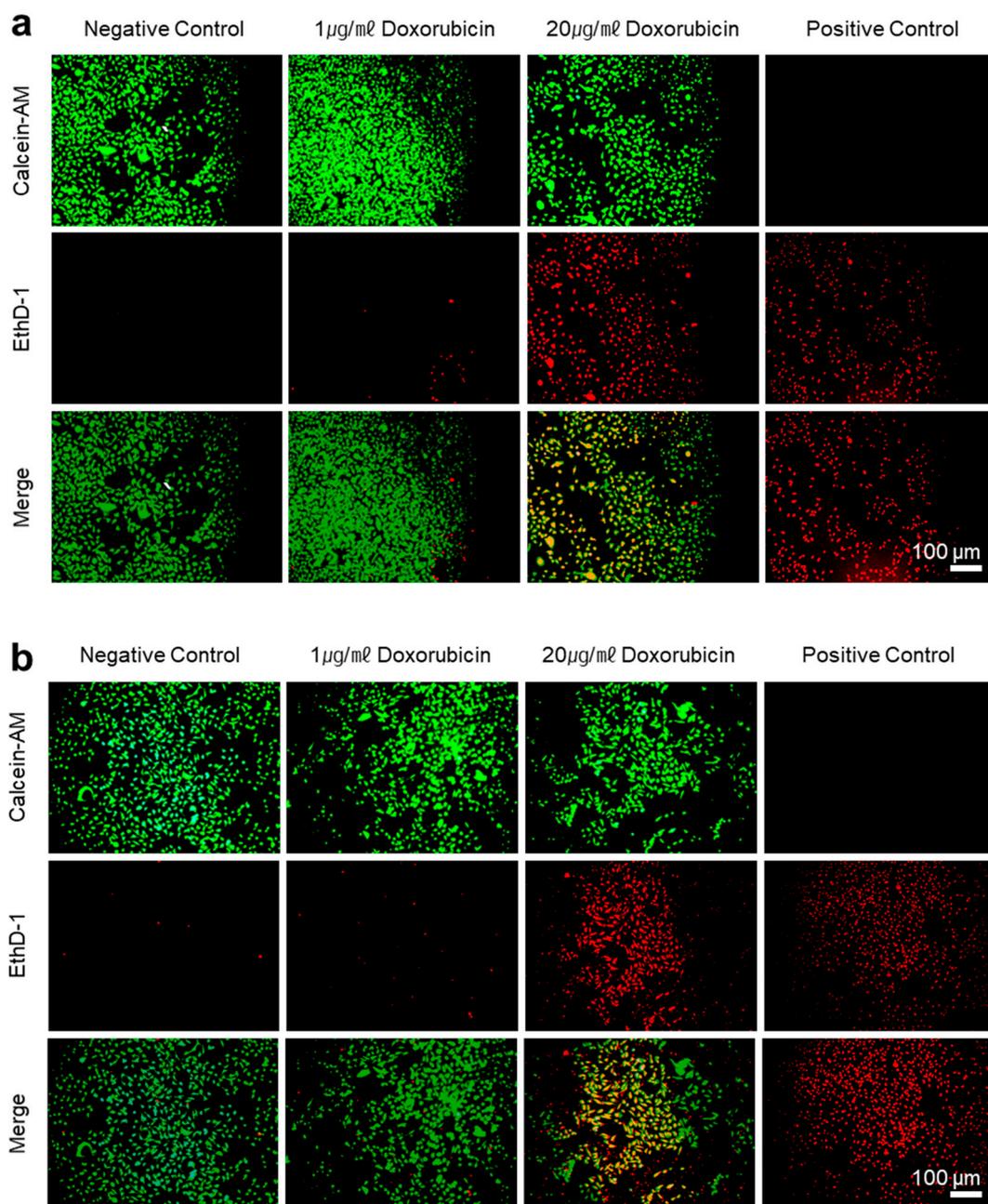
**Figure S1.** Transmission electron microscopy (TEM) images of LM/DSPC.



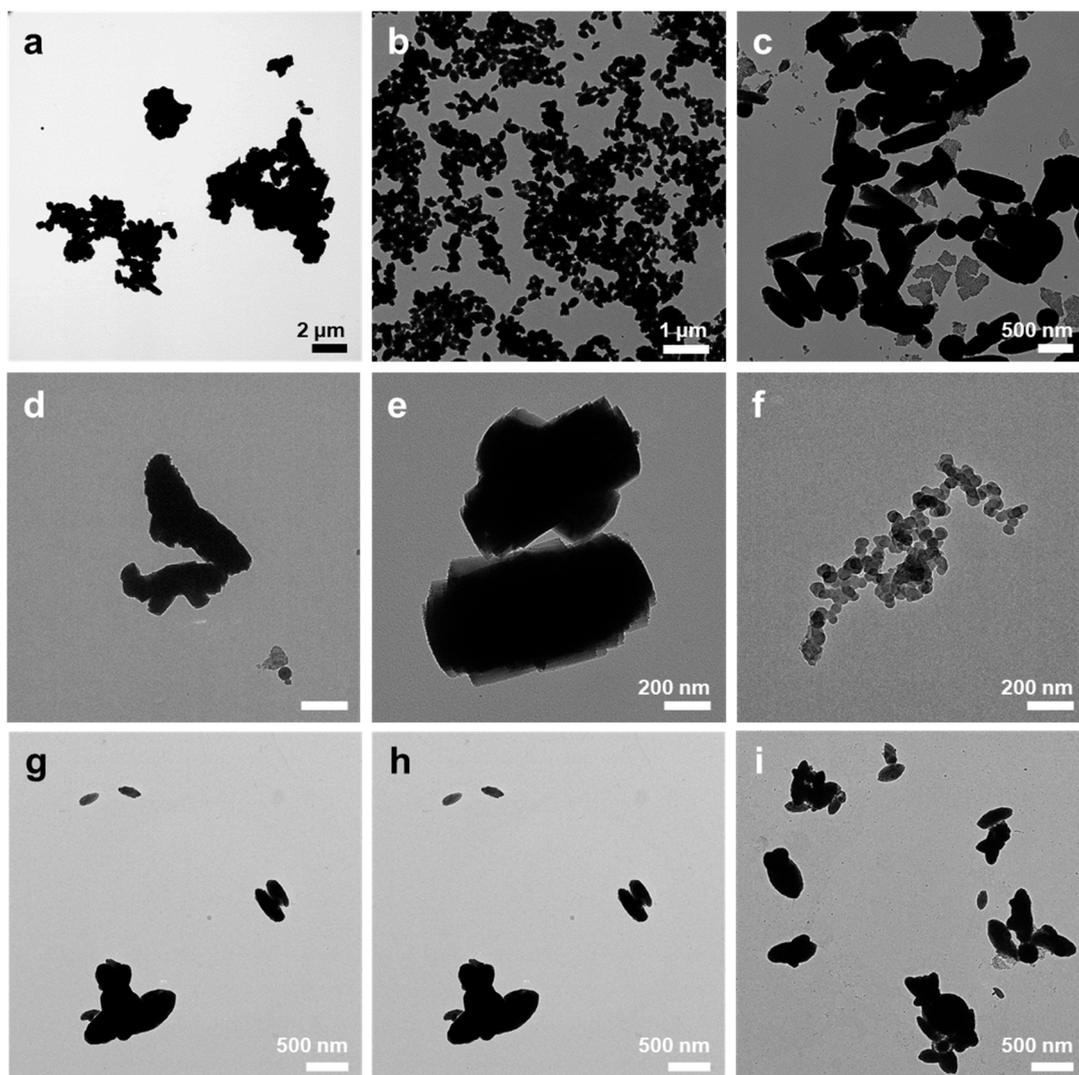
**Figure S2.** Field Emission Scanning Electron Microscope (FE-SEM) images of (a–c) LM/DSPC and (d–f) LM/DSPC/DOX.



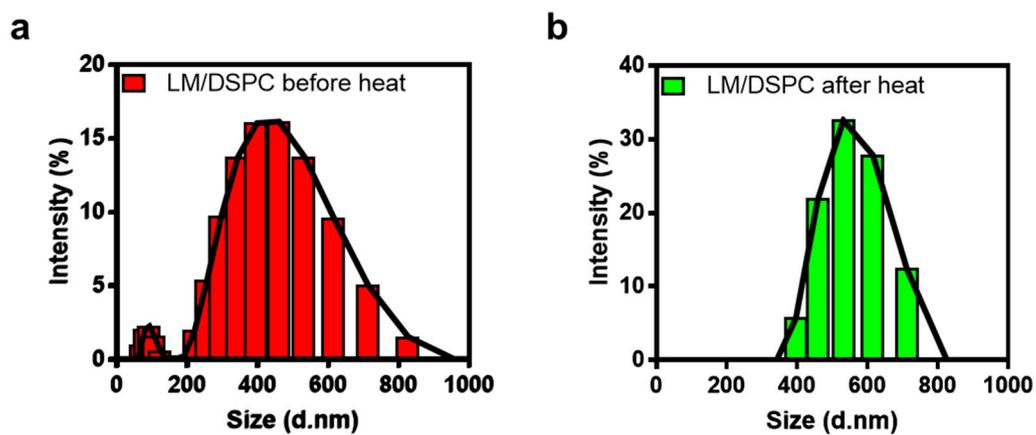
**Figure S3.** (a, b) Confocal microscopy of MDA-MB-231 breast cancer cell after incubation for 8 h with LM/DSPC and nuclei (blue). (c, d) Confocal laser scanning microscopy (CLSM) images of LM/DSPC/DOX and doxorubicin (red).



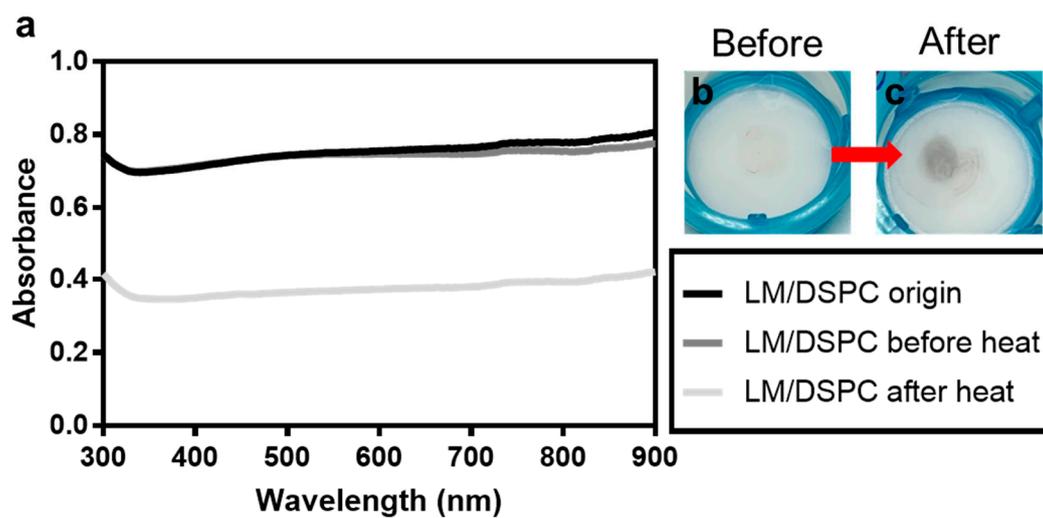
**Figure S4.** Live/Dead cell viability assay. Cells were treated with (a) doxorubicin and (b) LM/DSPC/DOX.



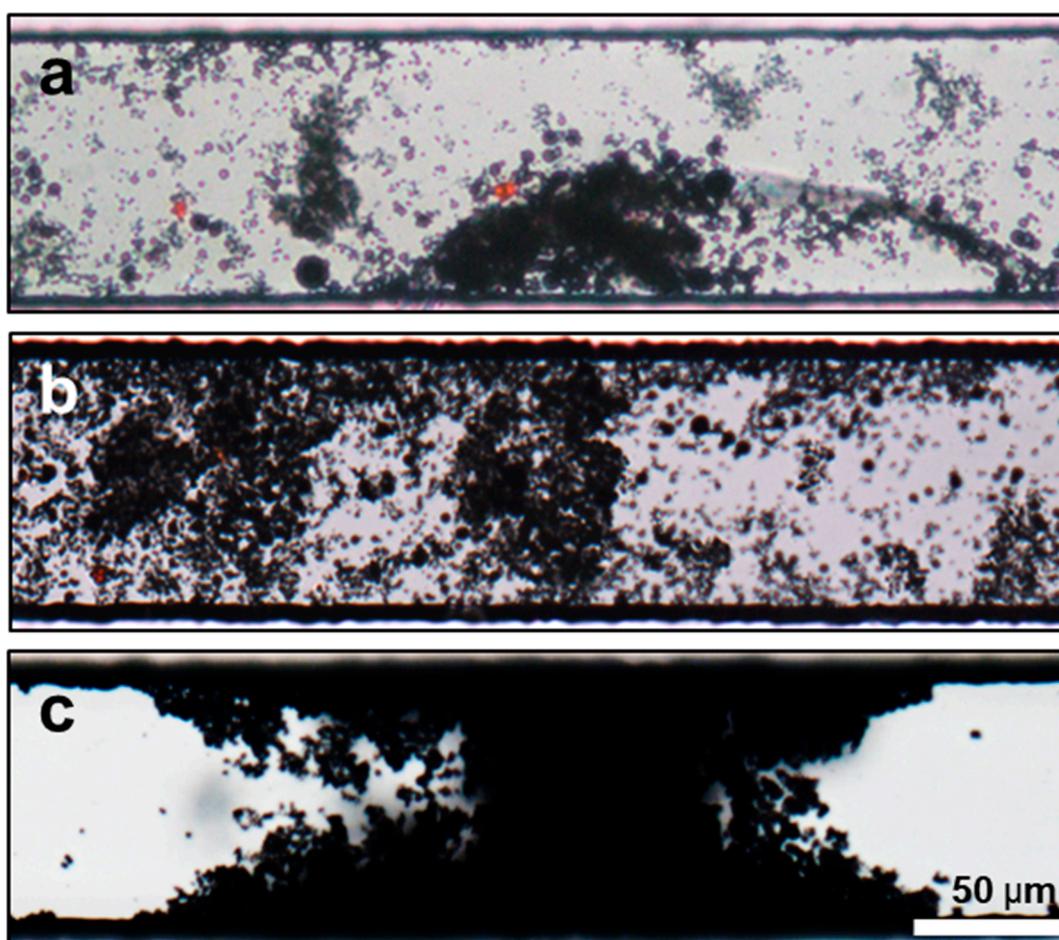
**Figure S5.** TEM images of morphological transformation of LM/DSPC after heating at (a–g) 70°C, (h) 60°C and (i) 50°C.



**Figure S6.** Dynamic light scattering (DLS) analysis. Size distribution of (a) LM/DSPC/DOX before heating and (b) after heating.



**Figure S7.** Changes in absorbance of LM/DSPC, when LM/DSPC particles passed through the membrane. (a) UV spectroscopy of LM/DSPCs. (b) Membrane passed through the LM/DSPC particles before heating (c) after heating.



**Figure S8.** Blocking of microfluidics channels with LM (channel width 100  $\mu\text{m}$ ) (a) Fluid of LM/DSPC/DOX micro/nano particles. (b) Dry the solvent at room temperature. (c) Induce the clogging of channel by heating LM/DSPC/DOX particles.