Supporting Information for:

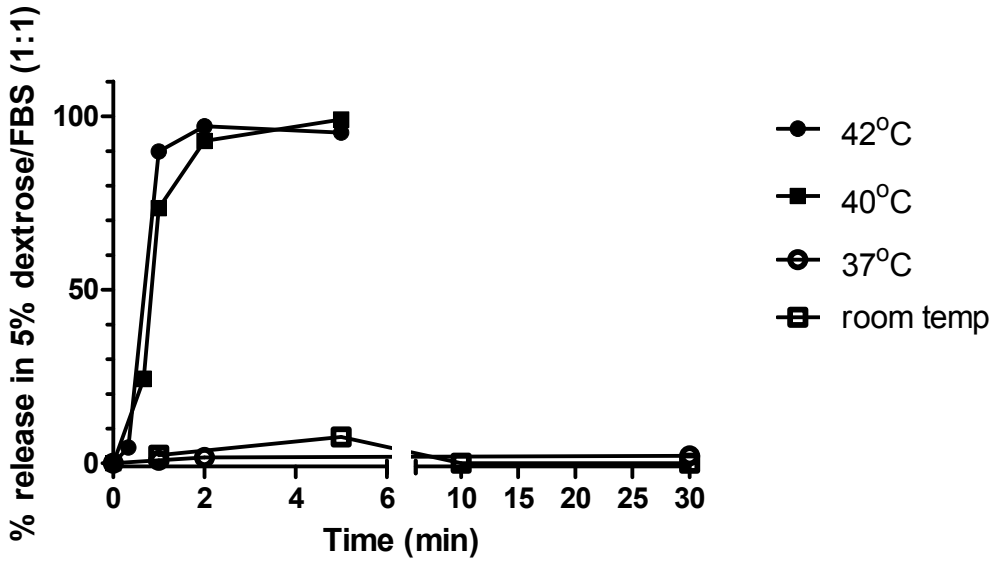
Thermosensitive liposomes enhance delivery of gemcitabine and oxaliplatin to tumors.

*Jonathan P. May[1], Mark J. Ernsting[1,2], Elijus Undzys[1] and Shyh-Dar Li[1,3,4]**

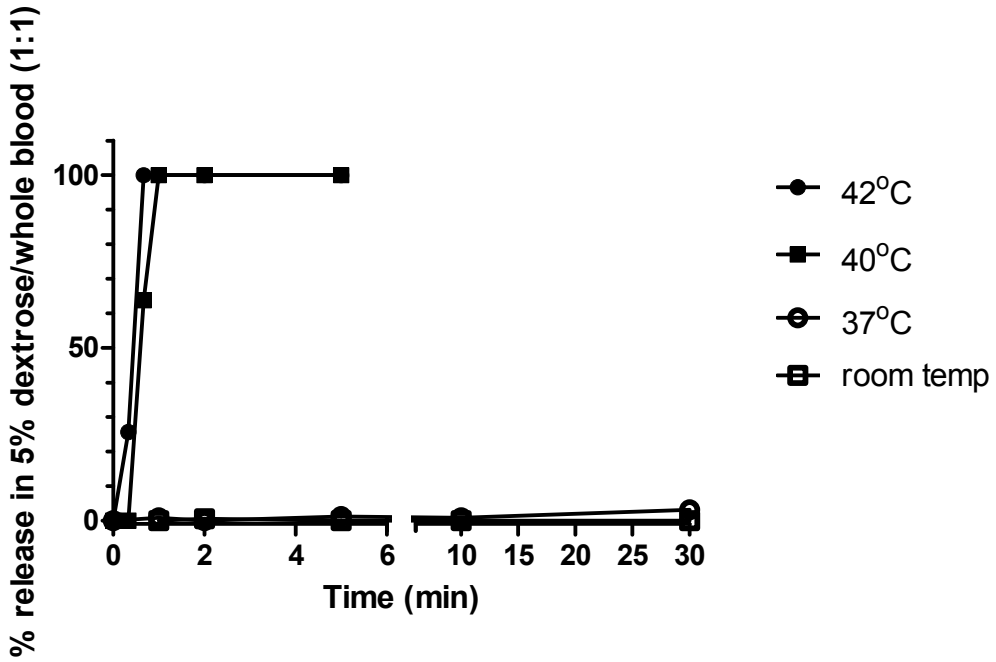
Contents: page

Supplementary Fig. 1 – Drug release profiles for HaT-OXA in different biological media. Release media containing 5% dextrose with **(A)** 50% serum and **(B)** 50% blood. Data are mean ± S.D. (n = 3). Note error bars are very small for many of these values.

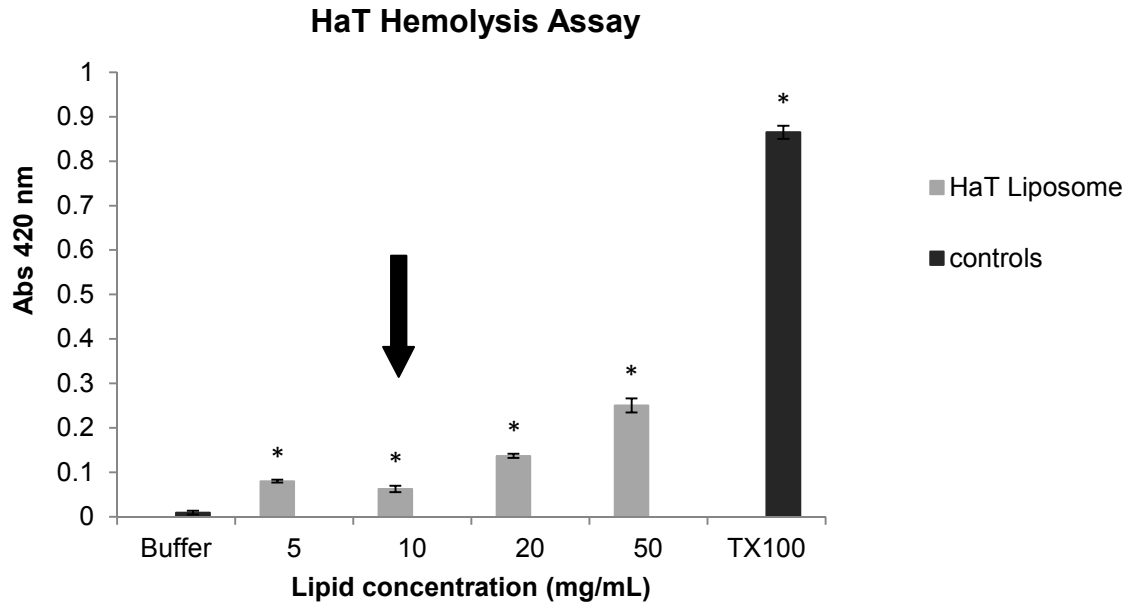
(A)



B)



Supplementary Fig. 2 – HaT liposome hemolysis assay. Arrow indicates dose used for in vivo studies. All data are mean ± S.D. (n=3). * denotes values that are significantly higher than buffer control ($p < 0.05$).

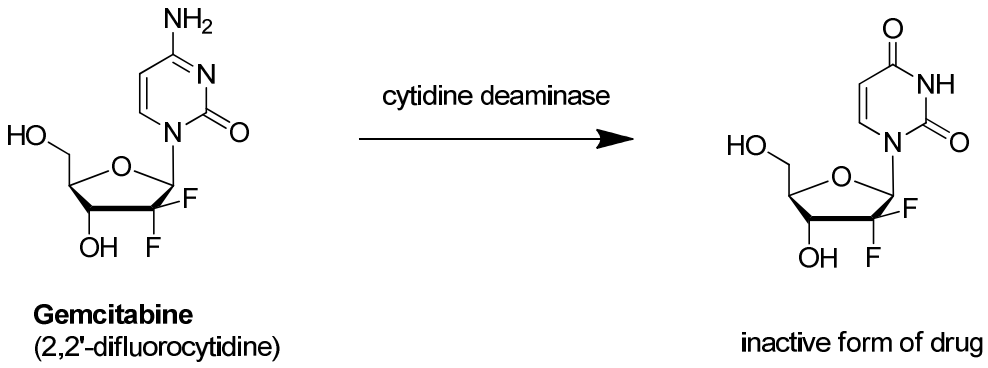


HaT-OXA dosed @ 10 mg/kg
Prep – 1 mg/mL OXA in 100 mg lipid
Typically we inject 200 µL (for 20 g mouse) of a 1 mg OXA/mL solution ≡ 20 mg lipid
Therefore [lipid] in mouse is ~ 20 mg in 2 mL blood compartment ≡ 10 mg/mL

HaT-GEM dosed @ 20 mg/kg
Prep – 2 mg/mL GEM in 100 mg lipid
Typically we inject 200 µL (for 20 g mouse) of a 2 mg OXA/mL solution ≡ 20 mg lipid
Therefore [lipid] in mouse is ~ 20 mg in 2 mL blood compartment ≡ 10 mg/mL

Supplementary Fig. 3: **(A)** Deamination of gemcitabine; **(B)** Oxaliplatin substitution of malonate moiety with chloride ions, to yield a less soluble derivative (a yellow precipitate forms in the solution).

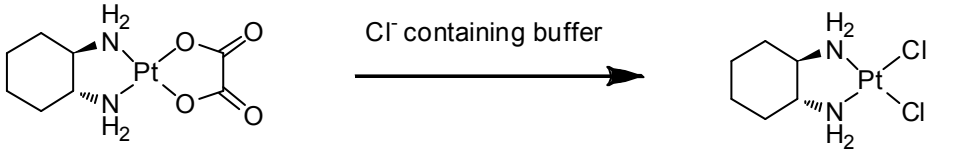
(A)



Gemcitabine
(2,2'-difluorocytidine)

inactive form of drug

(B)



Oxaliplatin

solubility ~ 8 mg/mL
in 5% dextrose

decreased solubility