

Supporting Information

Evaluation of PolyMPC-Dox Prodrugs in a Human Ovarian Tumor Model

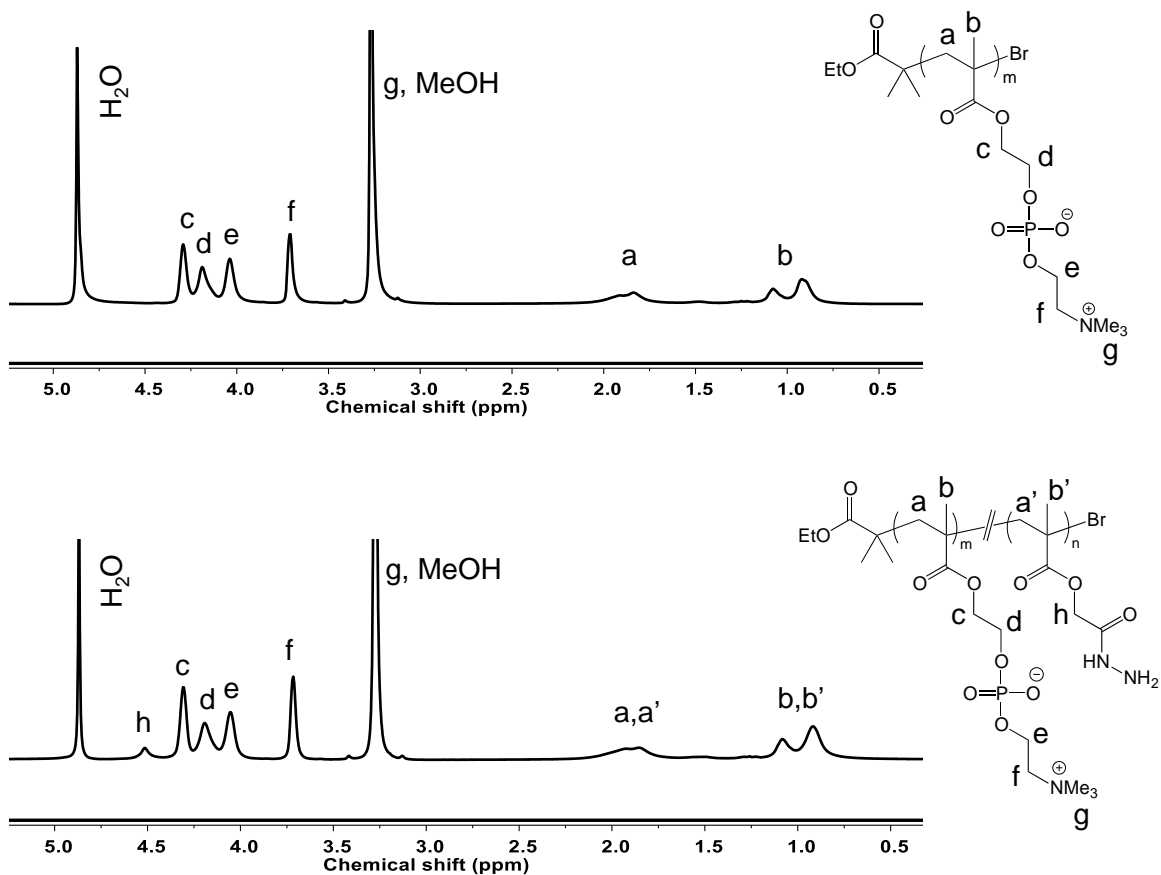


Figure S1. ^1H -NMR (500 MHz) spectra of polymer **1** (top), and polymer **2** (bottom) in MeOD-D_4 .

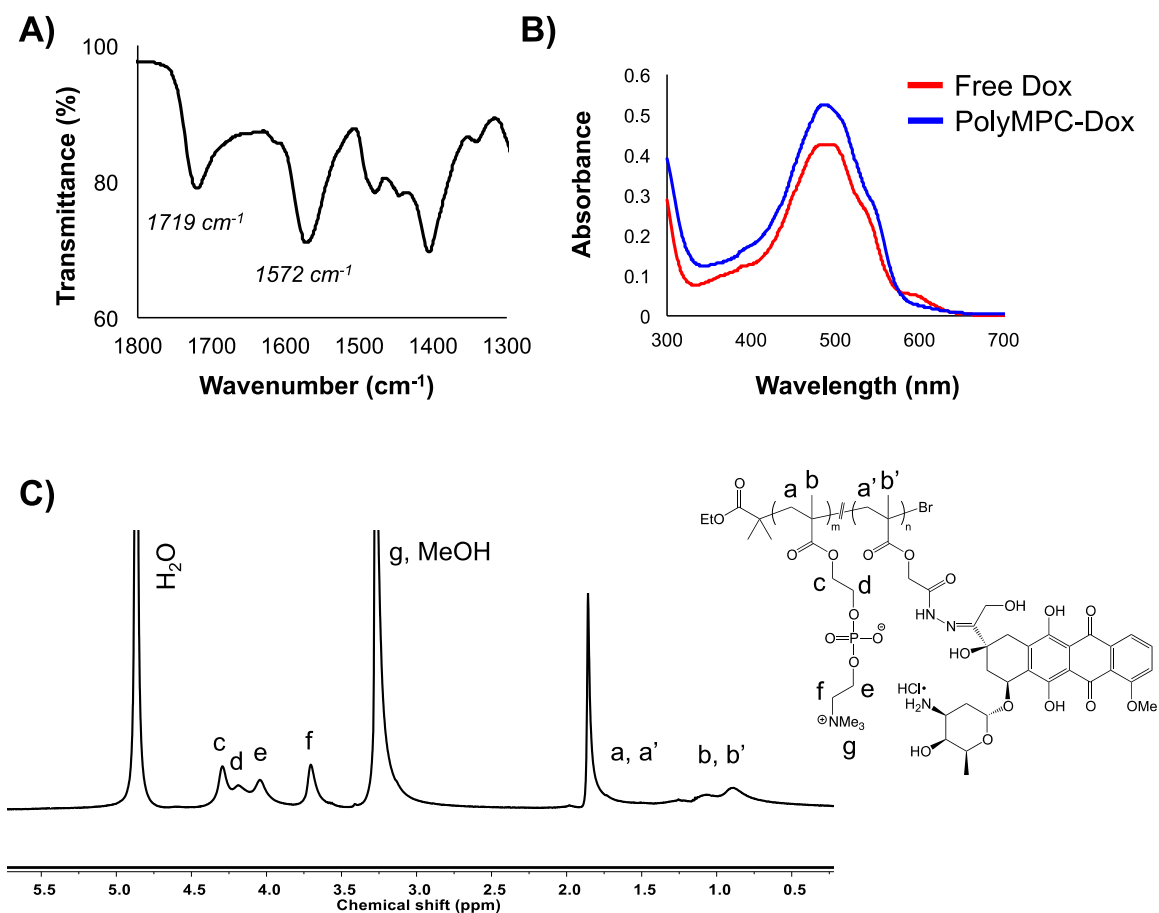


Figure S2. Spectroscopic characterization of polyMPC-Dox **3**: A) IR spectrum showing signals at 1719 and 1572 cm^{-1} for the $\text{C}=\text{O}$ and $\text{C}=\text{N}$ stretching of the methacrylate esters and hydrazones, respectively; B) UV-Vis absorbance spectra of free Dox (0.05 mg/ml) and **3** (0.25 mg/ml) in pure water; C) ^1H -NMR (500 MHz) spectrum of **3** recorded in MeOD-d_4 .

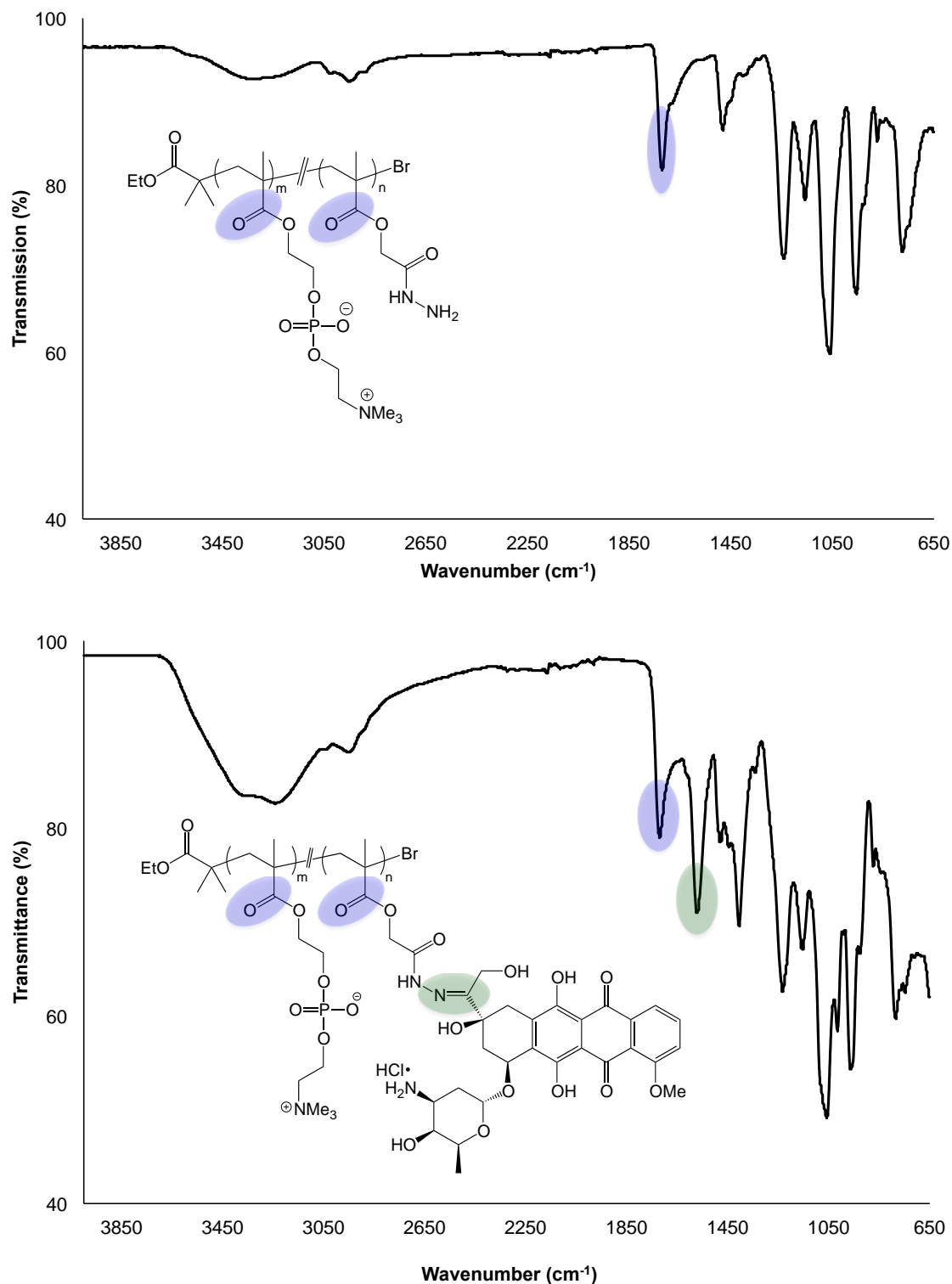


Figure S3. IR spectra of polymer **2** (top), and polyMPC-Dox **3** (bottom). Following Dox conjugation, a new peak in the IR spectrum of **3** at 1572 cm⁻¹ is observed that is attributed to the C=N stretching of hydrazone linkages.

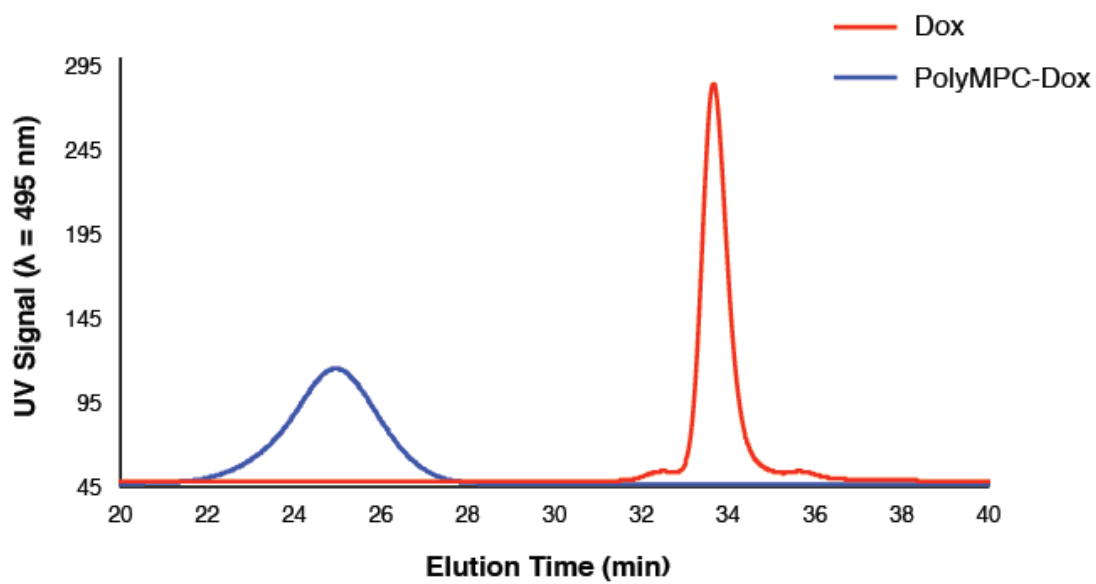
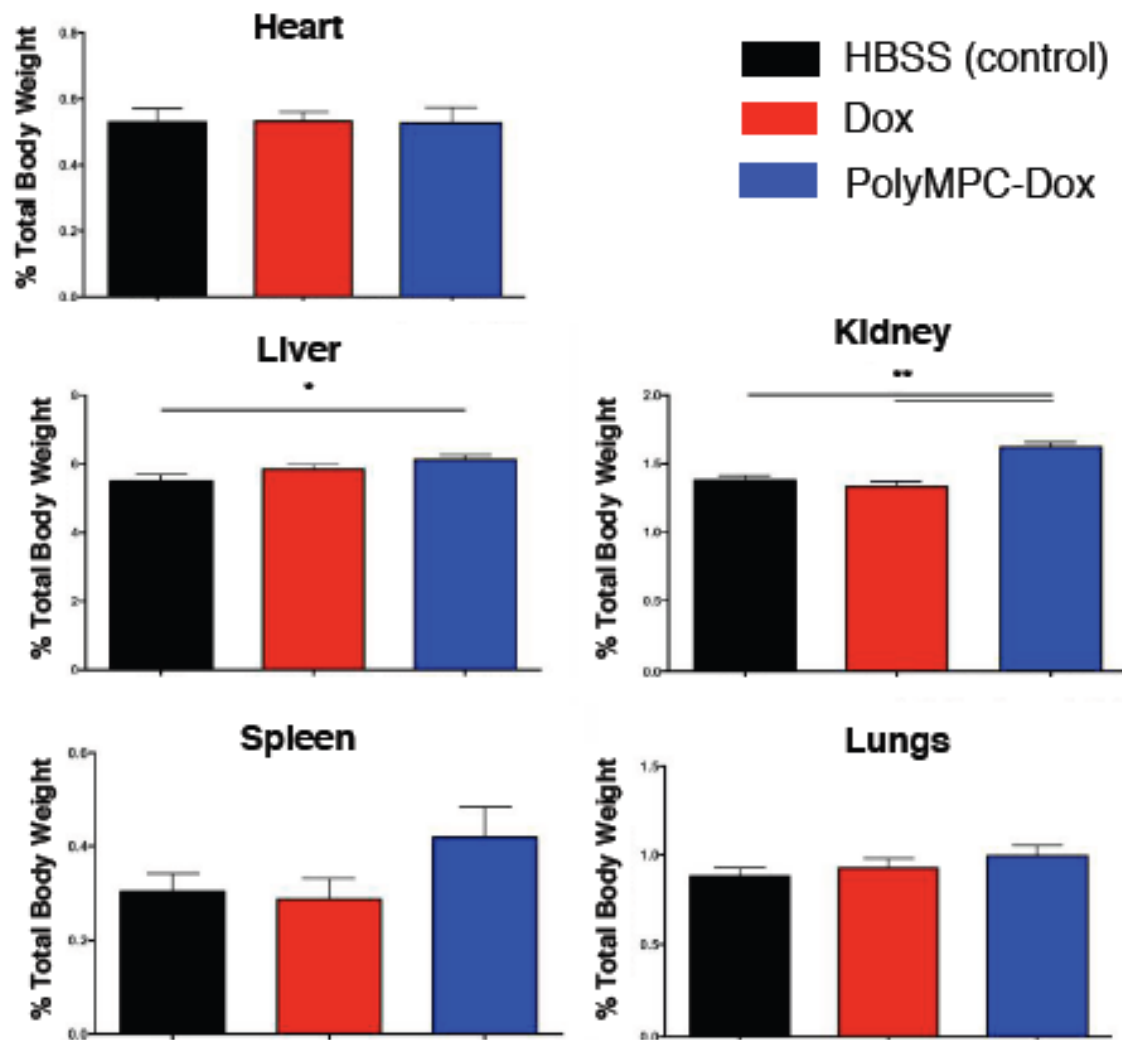


Figure S4. GPC chromatograms (eluting in trifluoroethanol) of Dox and polyMPC-Dox prodrug **3**. For prodrug **3**, a single polymer fraction was observed (24.8 minutes), with a notable absence of any residual Dox (33.6 minutes).



Figures S5. Proportional organ weights at time of euthanasia for NOD SCID mice, bearing subcutaneous SKOV-3 human ovarian tumors, treated with multiple administrations of HBSS (control), Dox (2 mg/kg), or polyMPC-Dox **3** (5 mg/kg Dox equivalent dose). * and ** represent statistically significant differences at $\alpha=0.05$ and $\alpha=0.01$, respectively. Error bars represent \pm SEM.