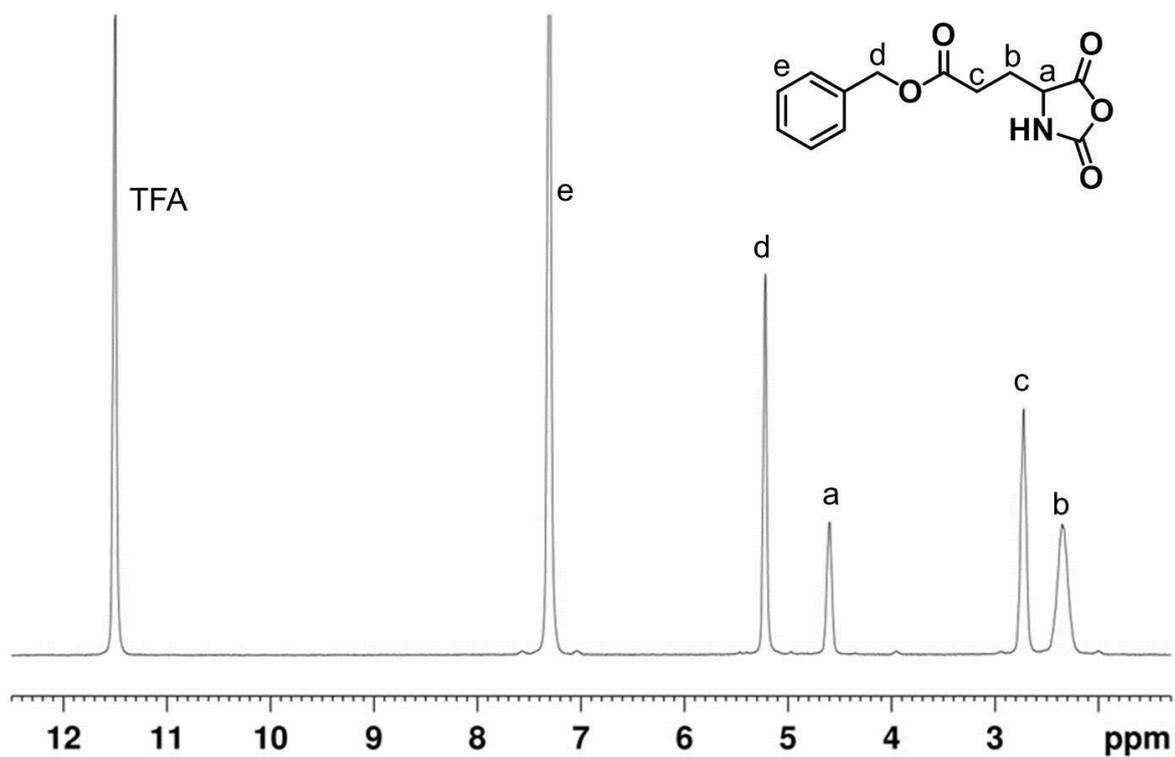
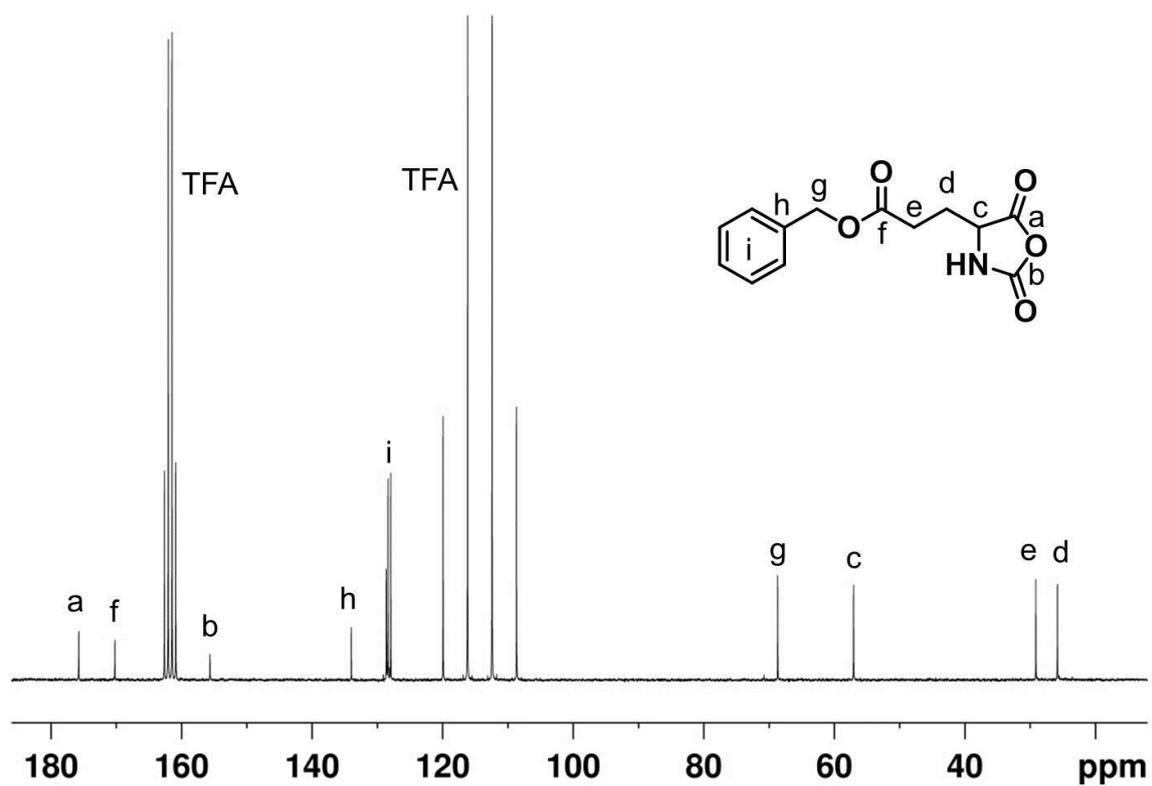


## Drug Induced Self-Assembly of Triblock Copolymers into Polymersomes for the Synergistic Dual-Drug Delivery of Platinum drugs and Paclitaxel

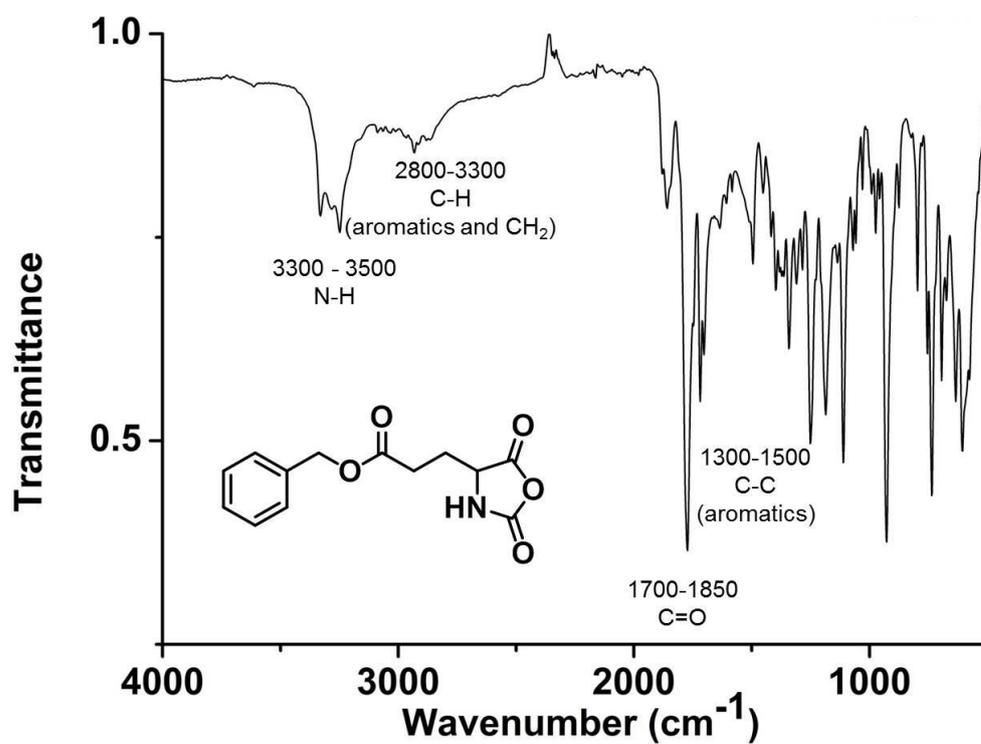
Manuela Callari, Sandy Wong, Hongxu Lu, Janice Aldrich-Wright, Paul de Souza, Martina H Stenzel



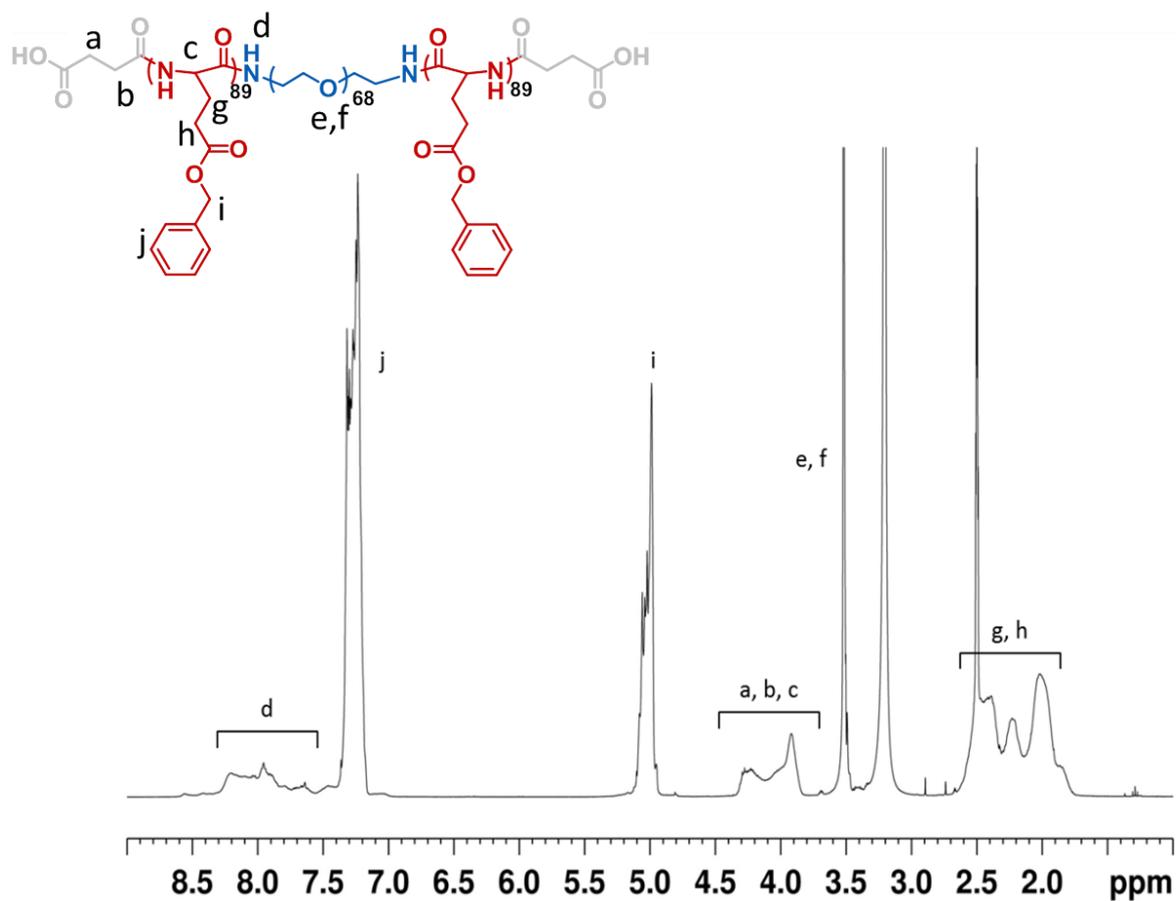
**Figure S1.** <sup>1</sup>H NMR of monomer NCA-BLG in TFA-d, 400MHz



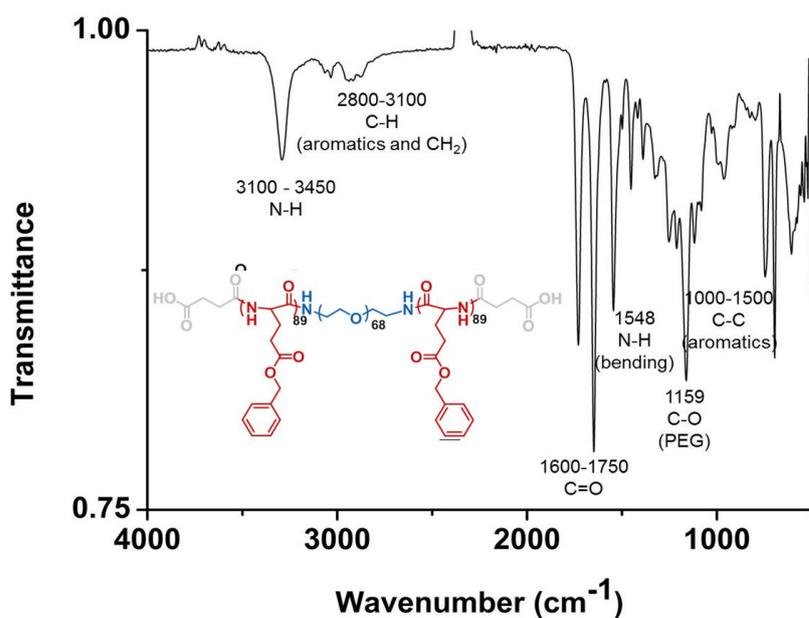
**Figure S2.**  $^{13}\text{C}$  NMR, TFA-d, 100MHz, NCA-BLG



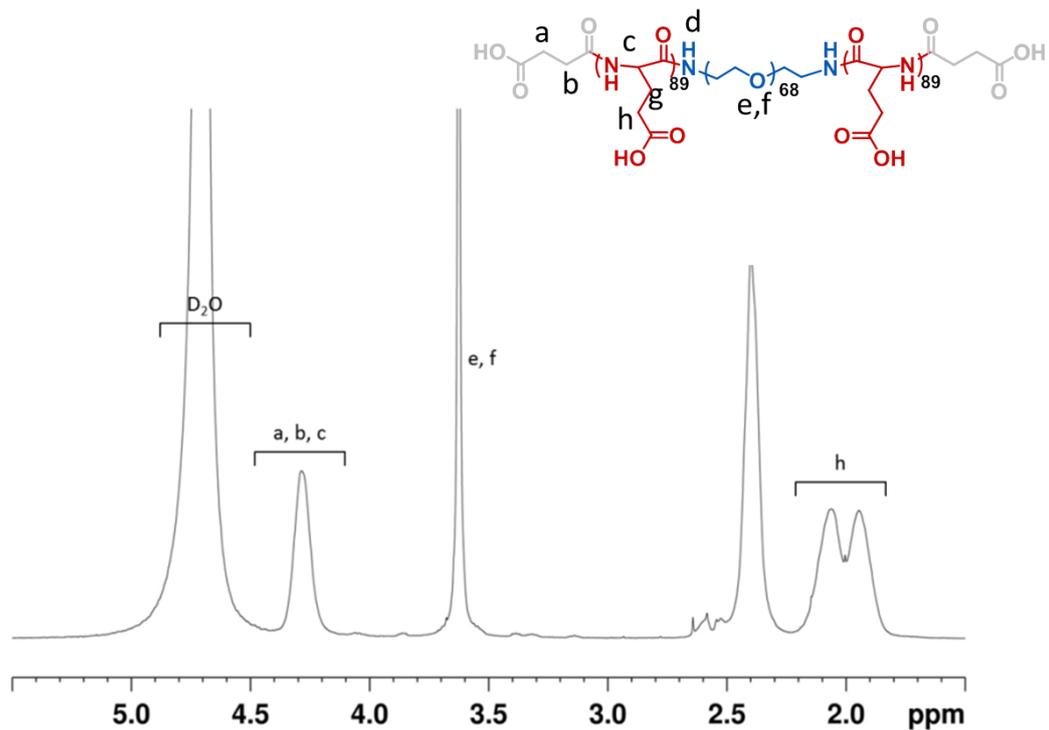
**Figure S3.** FTIR spectrum of NCA-BLG



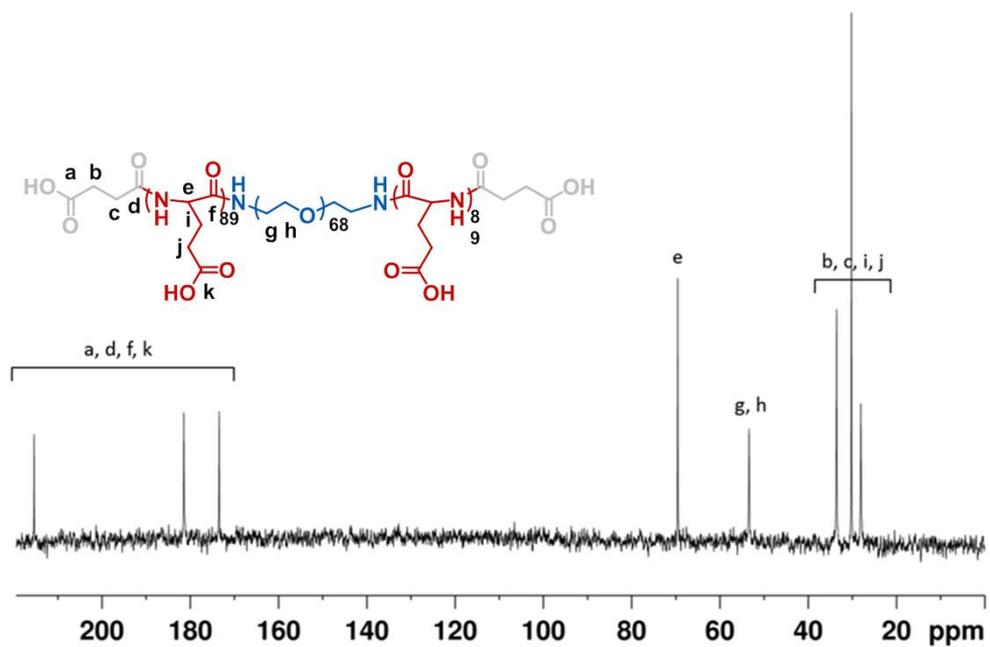
**Figure S4.** <sup>1</sup>H NMR, DMSO-d<sub>6</sub>, 400MHz, PLGA<sub>89</sub>-b-PEG<sub>68</sub>-b-PLGA<sub>89</sub>



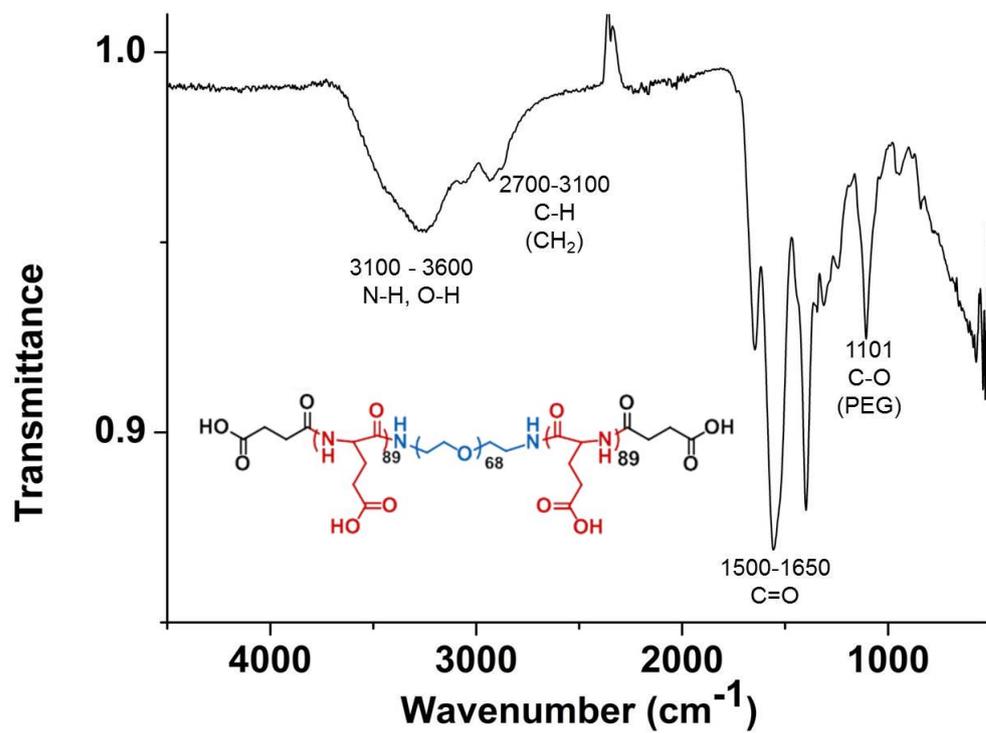
**Figure S5.** FTIR spectrum of PLGA<sub>89</sub>-b-PEG<sub>68</sub>-b-PLGA<sub>89</sub>



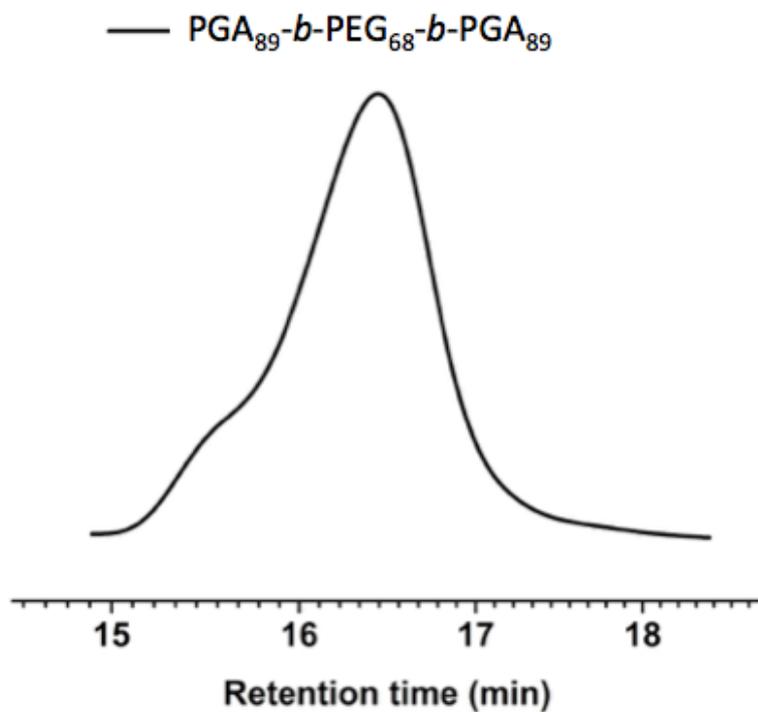
**Figure S6**  $^1\text{H}$  NMR,  $\text{D}_2\text{O}$ , 400MHz,  $\text{PGA}_{89}\text{-}b\text{-PEG}_{68}\text{-}b\text{-PGA}_{89}$



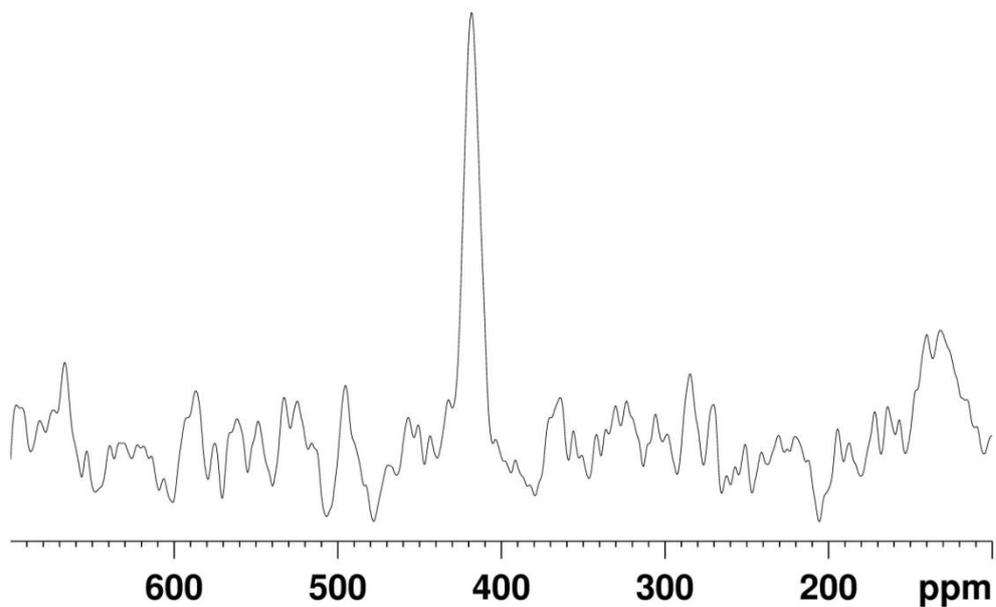
**Figure S7.**  $^{13}\text{C}$  NMR,  $\text{D}_2\text{O}$ , 100MHz,  $\text{PGA}_{89}\text{-}b\text{-PEG}_{68}\text{-}b\text{-PGA}_{89}$



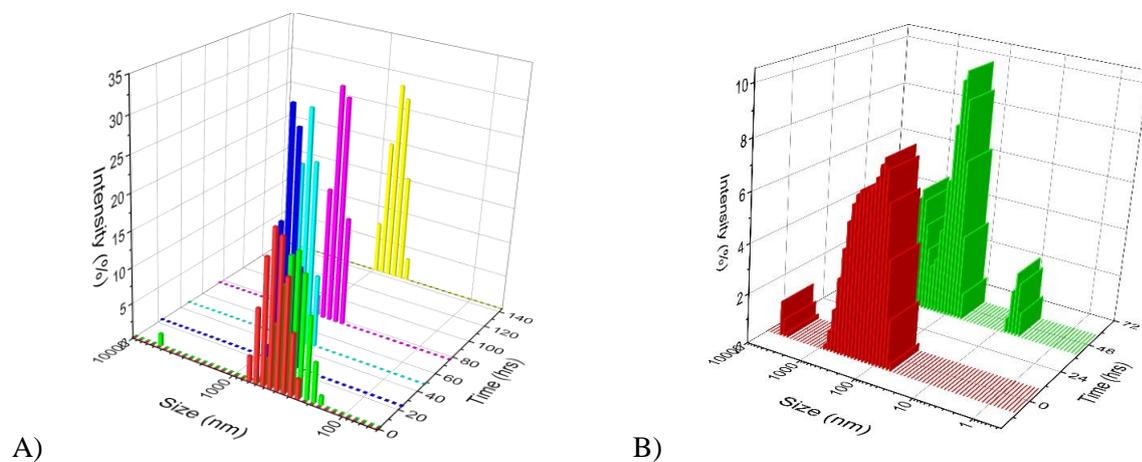
**Figure S8.** FTIR spectrum of  $\text{PGA}_{89}\text{-}b\text{-PEG}_{68}\text{-}b\text{-PGA}_{89}$



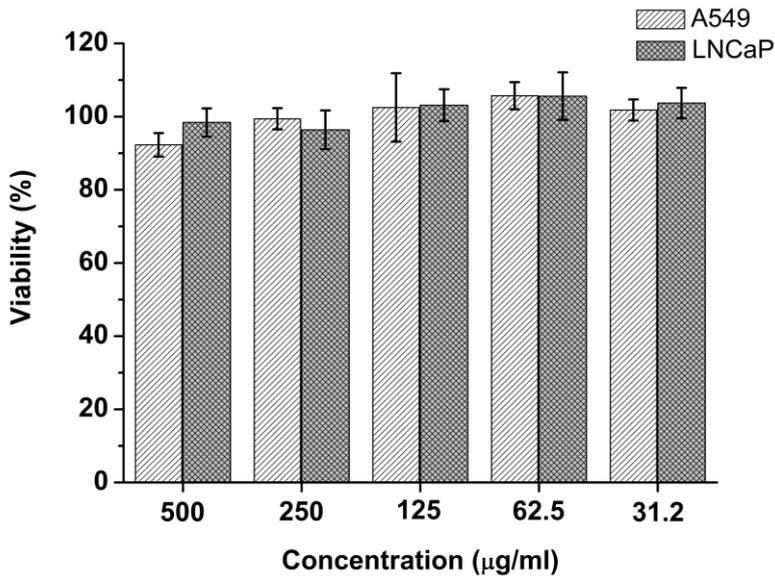
**Figure S9.** Water GPC of  $\text{PGA}_{89}\text{-}b\text{-PEG}_{68}\text{-}b\text{-PGA}_{89}$



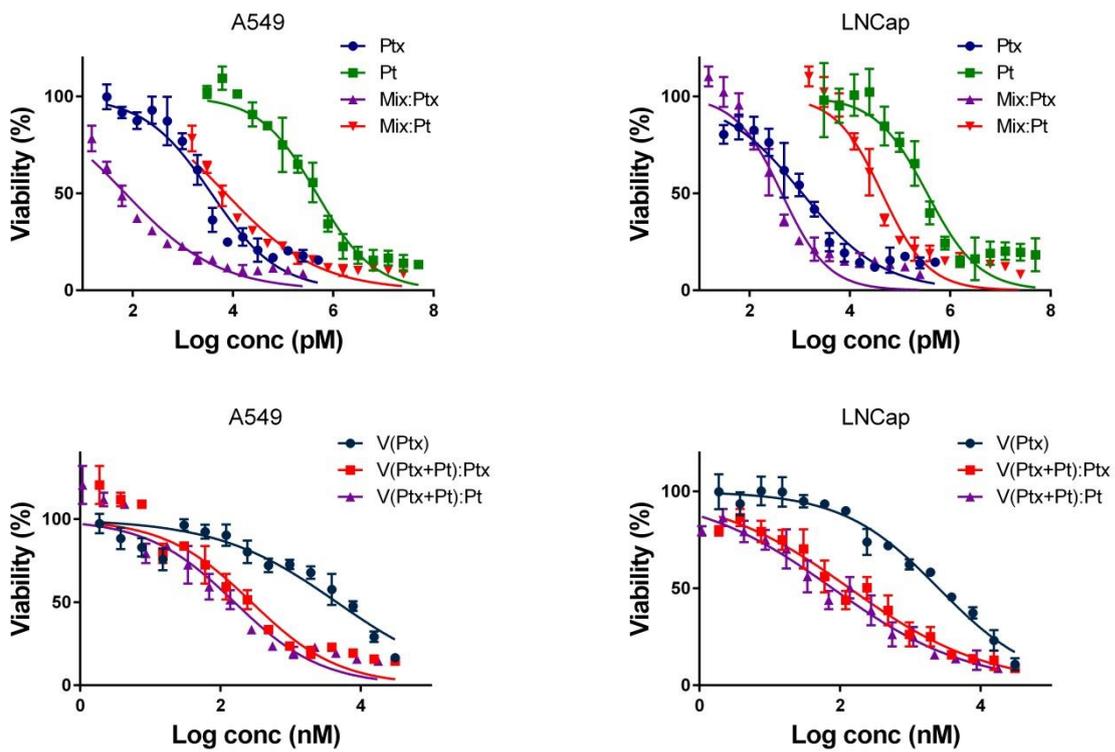
**Figure S10.**  $^{195}\text{Pt}$  NMR, 86 MHz,  $\text{D}_2\text{O}$ , of  $[\text{Pt}(\text{phen})(S,S\text{-dach})(\text{OH})_2\text{Cl}_2]$



**Figure S11.** DLS measurement (laser, 4 mW,  $\lambda = 632$  nm; measurement angle  $12.8^\circ$  and  $175^\circ$ ) on thermolysin enzymatic degradation (30-175 units/mg protein) of  $(\text{PGA}_{78}\text{-b-PEG}_{68}\text{-b-PGA}_{78})\text{-14PTX-8Pt}$  vesicular solution in water (1 mg/mL) over time at A)  $37^\circ\text{C}$  B)  $60^\circ\text{C}$  over time.



**Figure S12.** Cytotoxicity of unconjugated triblock copolymer on A549 and LNCaP cell lines.



**Figure S13.** Cell viability against drug concentration after 72 hours of incubation with A549 and LNCaP with free and nanoparticle bound drugs