Modulation of Hypoxia-Induced Chemoresistance to Polymeric Micellar Cisplatin: The Effect of Ligand Modification of Micellar Carrier Versus Inhibition of the Mediators of Drug Resistance

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## **Supporting material**

$$\begin{array}{c} \text{(a)} \\ \text{Ho} \\ \text{NH}_2 \\ \text{NH} \\ \text{NH} \\ \text{NH} \\ \text{OH} \\ \text{OH$$

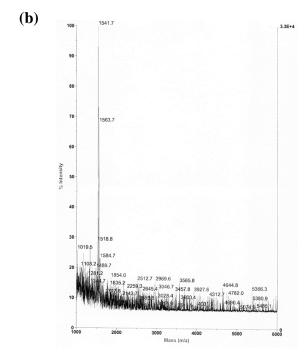
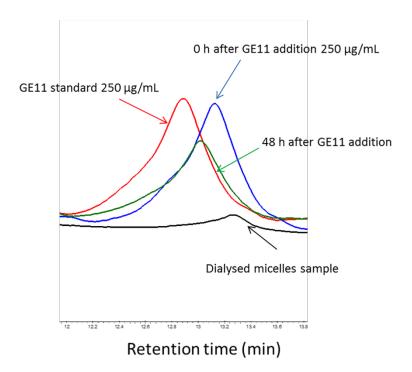
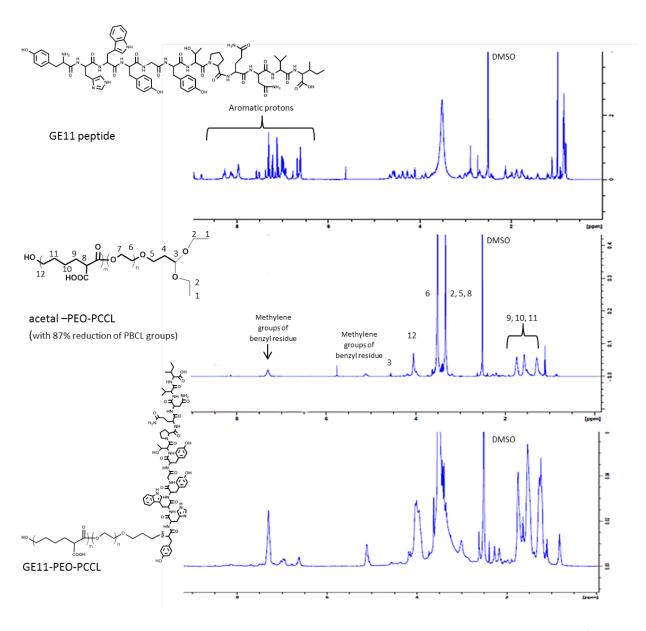


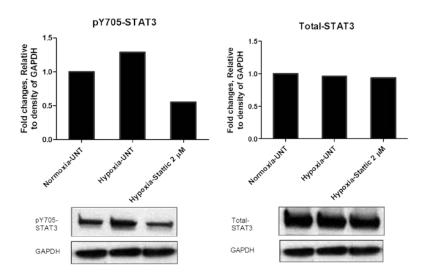
Figure S1. (a) GE11 peptide structure and (b) MALDI-MS spectrum of GE11 peptide.



**Figure S2.** Monitoring GE11 peptide conjugation to acetal-PEO-PCCL polymers using HPLC with UV detection at 214 nm.

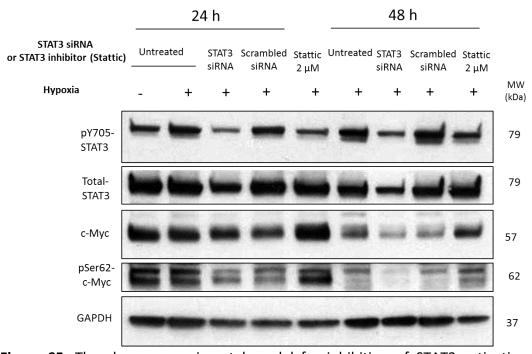


**Figure S3.** The conjugation of GE11 peptide onto acetal-PEO-PCCL was confirmed by <sup>1</sup>H-NMR spectra of block copolymer before and after peptide conjugation. Samples (3-5 mg/mL) of acetal-PEO-PCCL and GE11-PEO-PCC were prepared in DMSO for <sup>1</sup>H NMR analysis.



**Figure S4**. Bar graph illustrating quantification of the Western blot densitometry analysis for Figure 5A. Densitometry data are expressed as fold changes compared to untreated normoxic group, normalized to GAPDH band intensity.





**Figure S5.** The chosen experimental model for inhibition of STAT3 activation, STAT3 siRNA transfection versus pharmacological inhibition by Stattic, may result in different levels of expression of STAT3 and/or its downstream targets such as c-Myc protein. The differential levels of protein expression in MDA-MB-231 cells after transfection with STAT3 siRNA or treatment with Stattic ( $2\mu$ M) for 24 to 48 hours under hypoxia is depicted by Western blot.