

Supplementary Materials: Inclusion Complexes of Melphalan with Gemini-Conjugated β -Cyclodextrin: Physicochemical Properties and Chemotherapeutic Efficacy in In-Vitro Tumor Models

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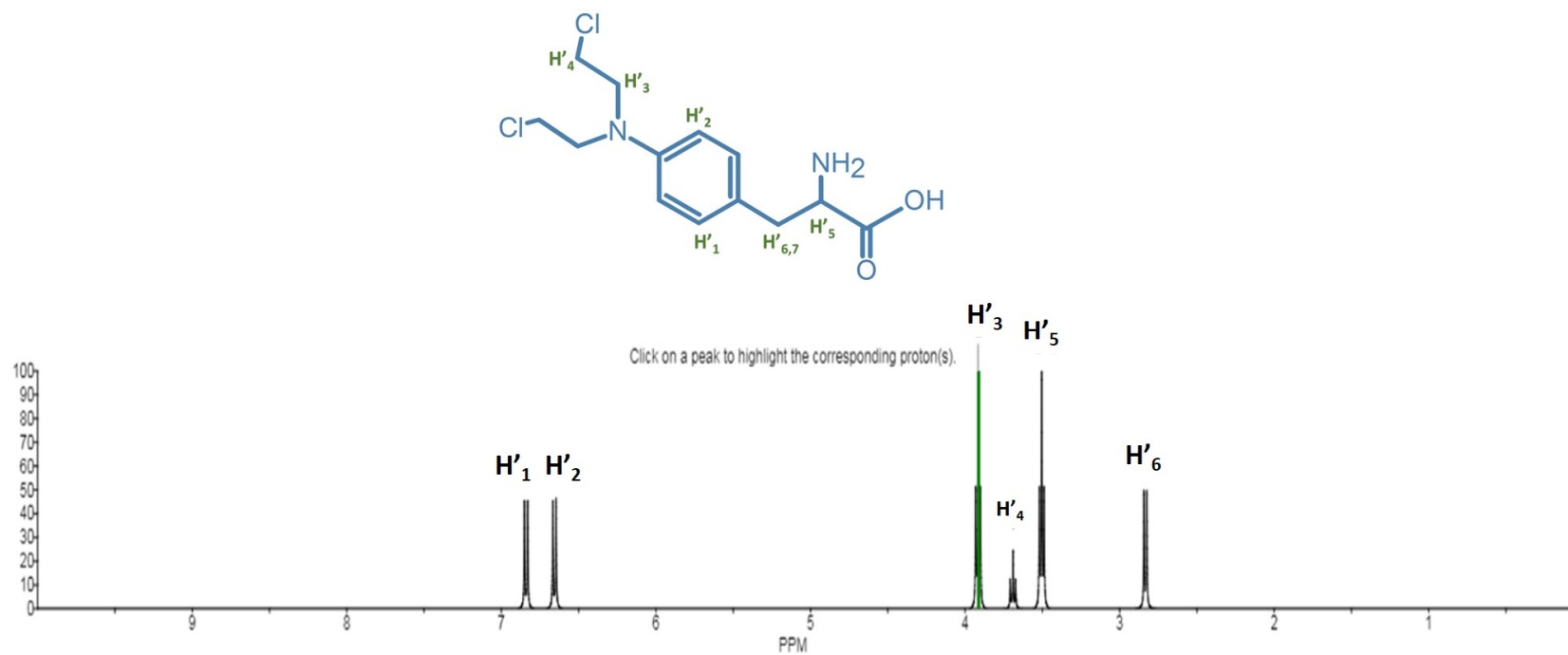


Figure S1. Predicted ^1H NMR spectra of Melphalan. Spectra created using nmrdb online tool (www.nmrdb.org)¹.

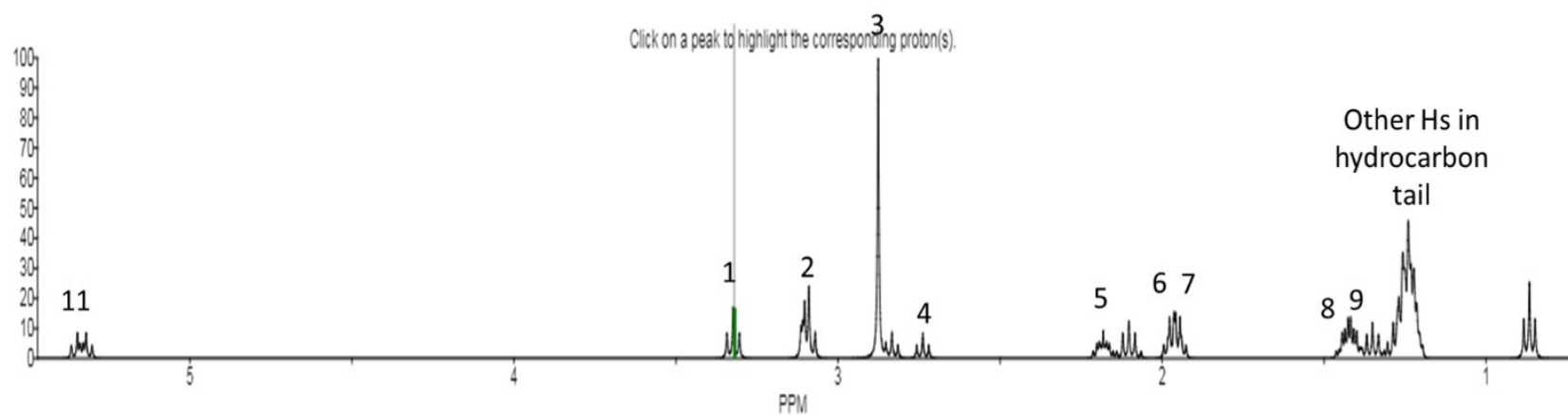
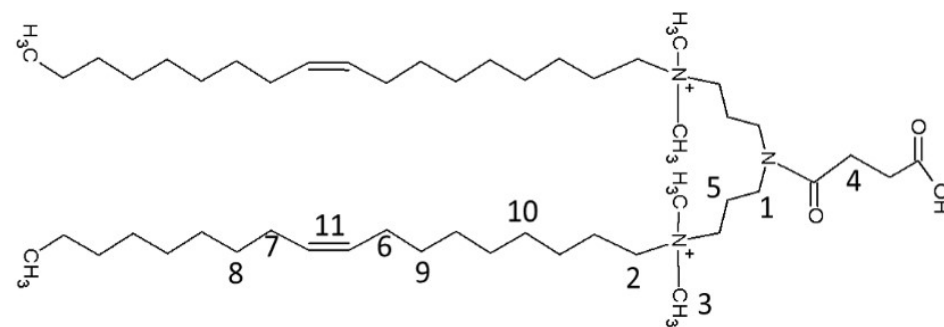


Figure S2. Predicted ^1H NMR spectra of 18:1 gemini surfactant. Spectra created using nmrdB online tool (www.nmrdB.org)¹.

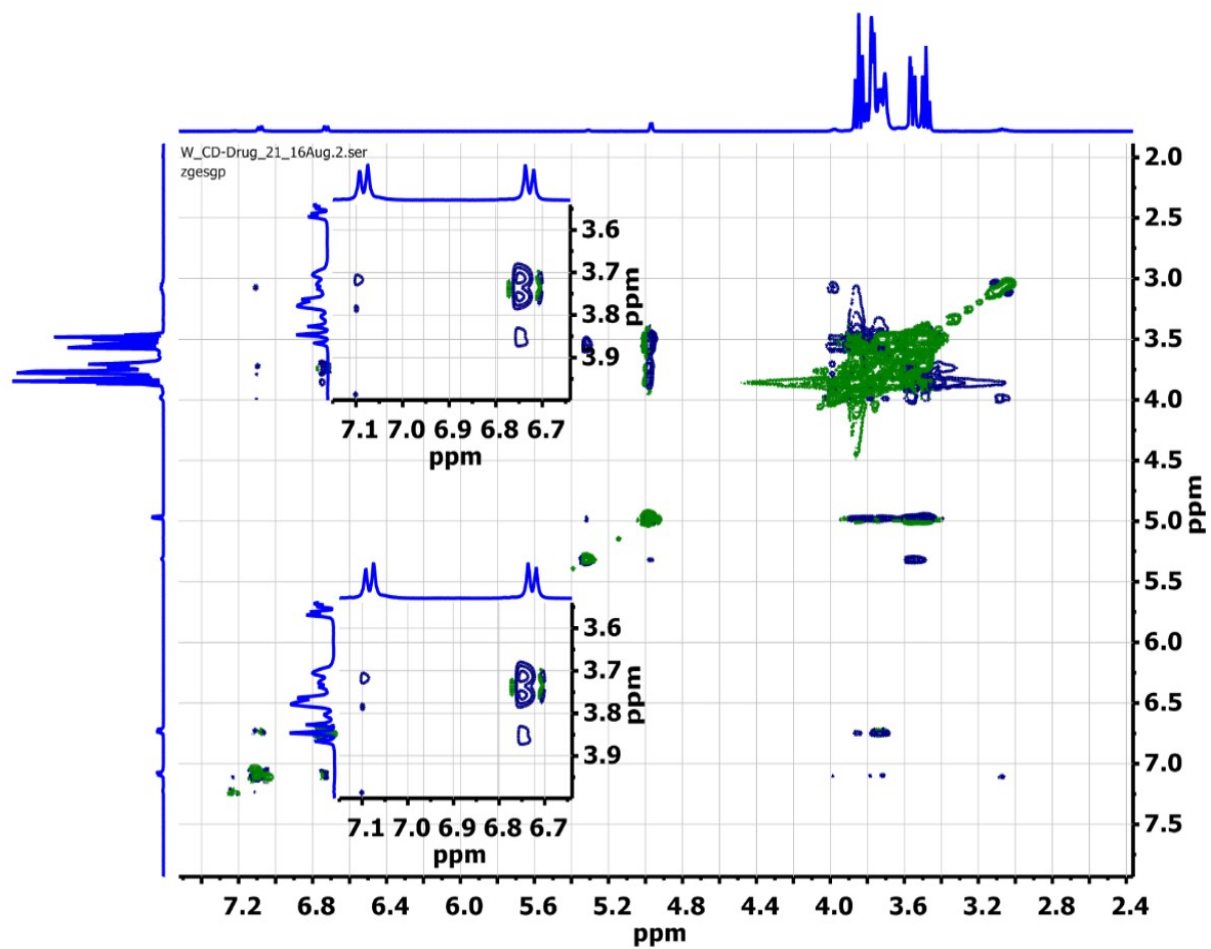


Figure S3. 2D ROESY spectrum of β CD-Mel at a 2:1 host-guest mole ratio, showing cross-peaks between β CD internal ^1H cavity and Mel nuclei.

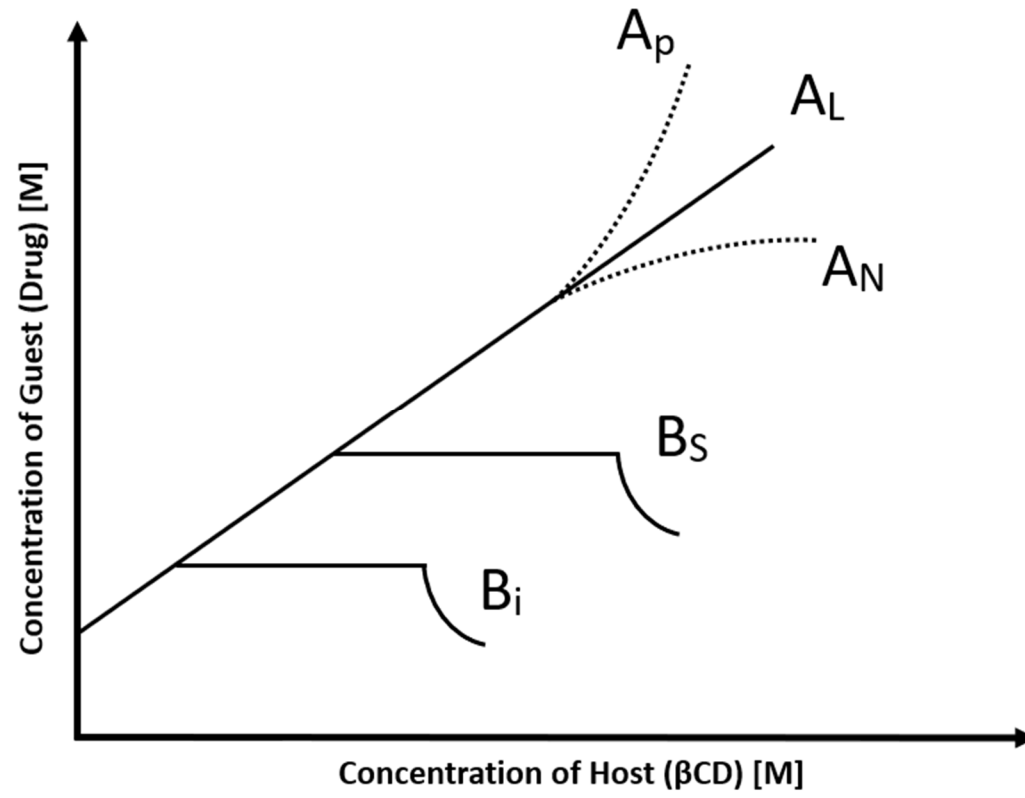


Figure S4. Phase solubility diagram².

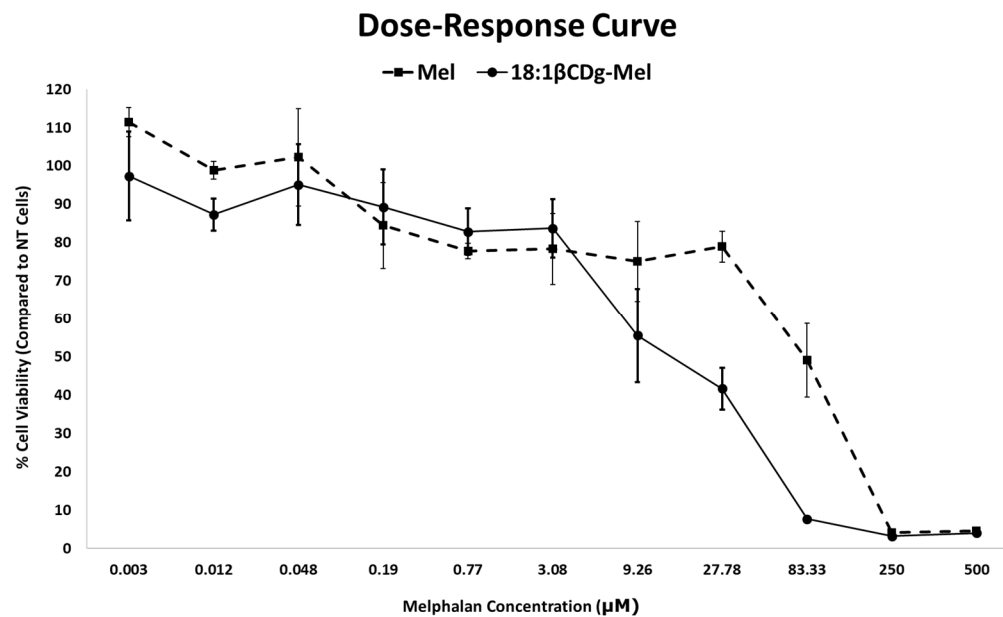


Figure S5. Cytotoxic efficiency of Melphalan in human malignant melanoma (A375) cell line). A375 cells were seeded at 1×10^4 cells/well in 96-well plate. Toxicity was reported using MTT Assay in comparison with non-treated cells (100% viability). $N = 3 \pm SD$.

Reference

1. Banfi, D., Patiny, L. www.nmrdb.org: Resurrecting and Processing NMR Spectra On-line. *Chimia Int. J. Chem.* **2008**, *62*, 280–281.
2. Higuchi, T., Connors, A. Phase-solubility techniques. *Adv. Anal. Chem. Instrum.* **1965**, *4*, 117–210.