

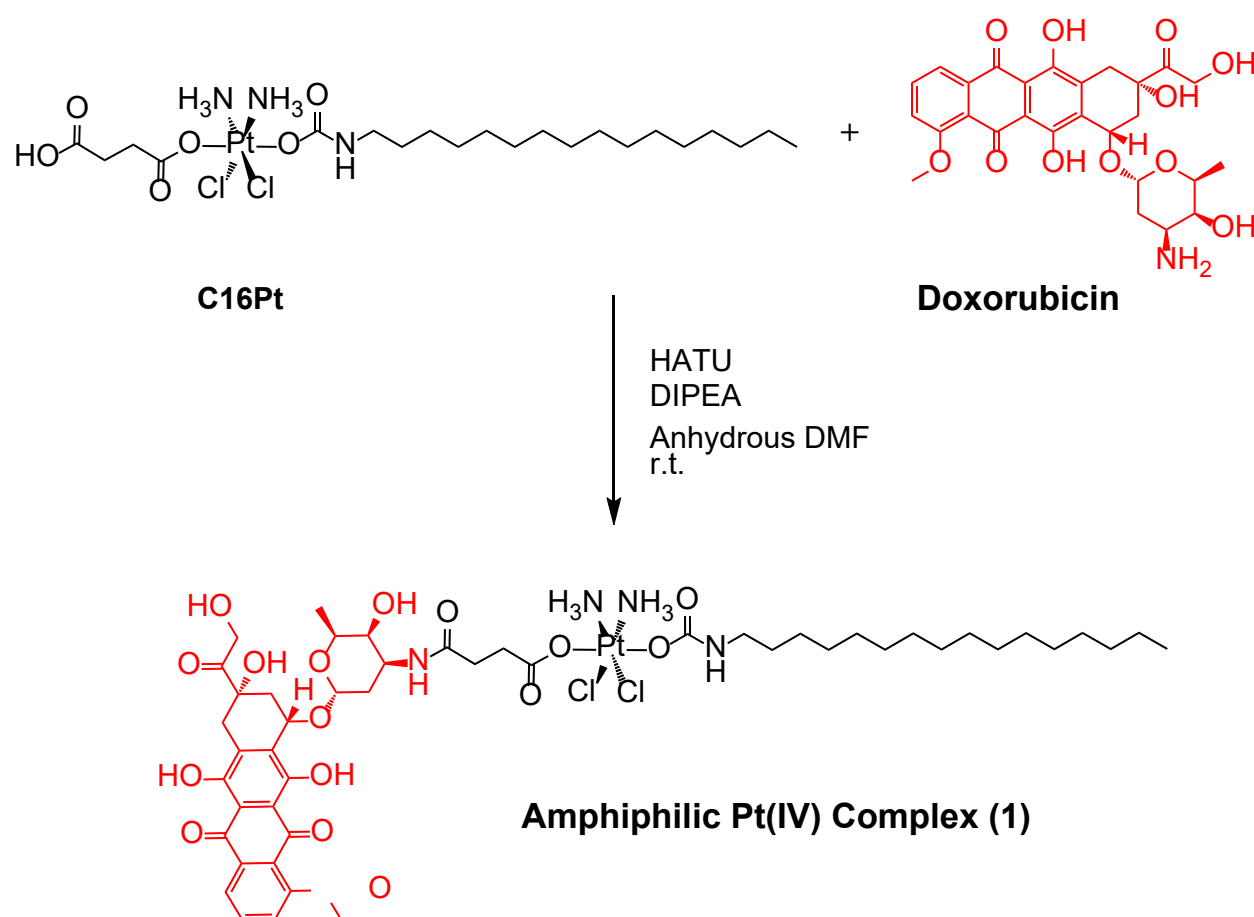
# Engineering Novel Amphiphilic Platinum(IV) Complexes to Co-Deliver Cisplatin and Doxorubicin

Wjdan Jogadi <sup>1</sup>, Man B. Kshetri <sup>1</sup>, Suha Alqarni <sup>1,2</sup>, Arpit Sharma <sup>1</sup>, May Cheline <sup>1</sup>, Md Al Amin <sup>1</sup>, Cynthia Sheets <sup>1</sup>, Angele Nsoure-Engohang <sup>1</sup>, and Yao-Rong Zheng <sup>1\*</sup>

<sup>1</sup> Department of Chemistry and Biochemistry, Kent State University, 236 Integrated Sciences Building, Kent, OH 44242, USA

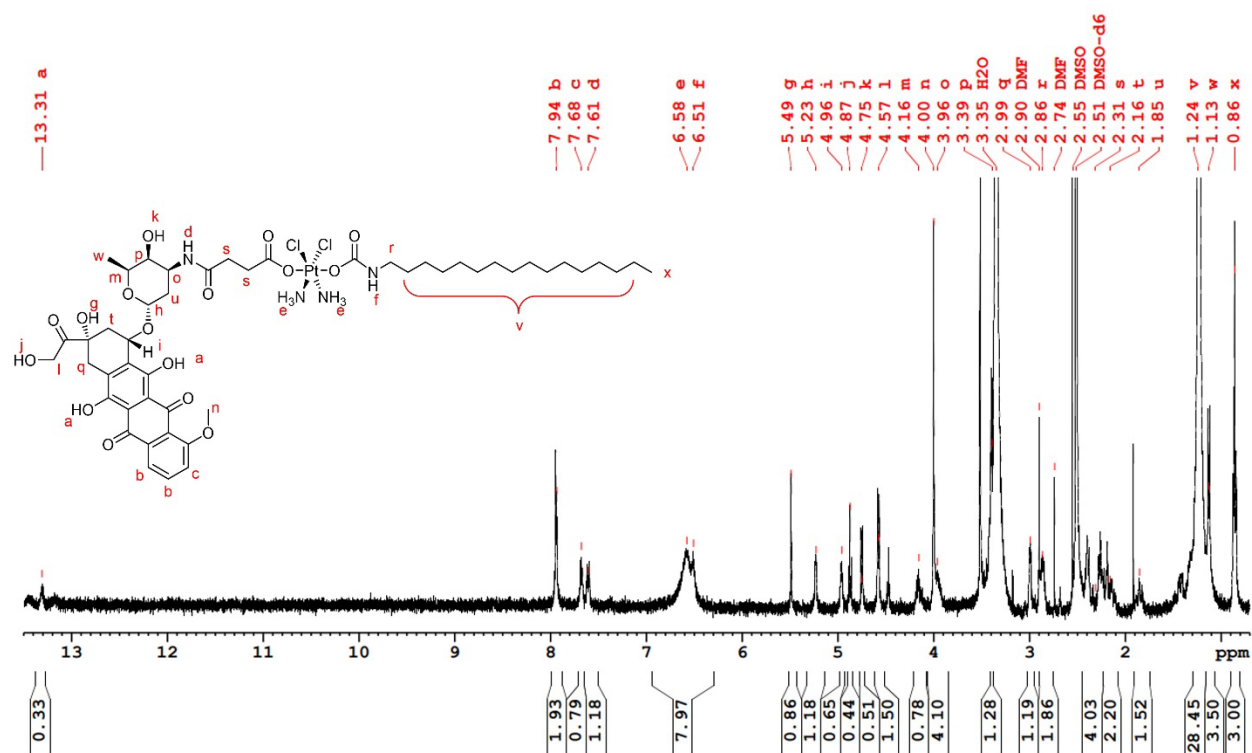
<sup>2</sup> Department of Chemistry, University of Bisha, Bisha 67714, Saudi Arabia

\* Correspondence: yzheng7@kent.edu; Tel.: +1-330-672-2267

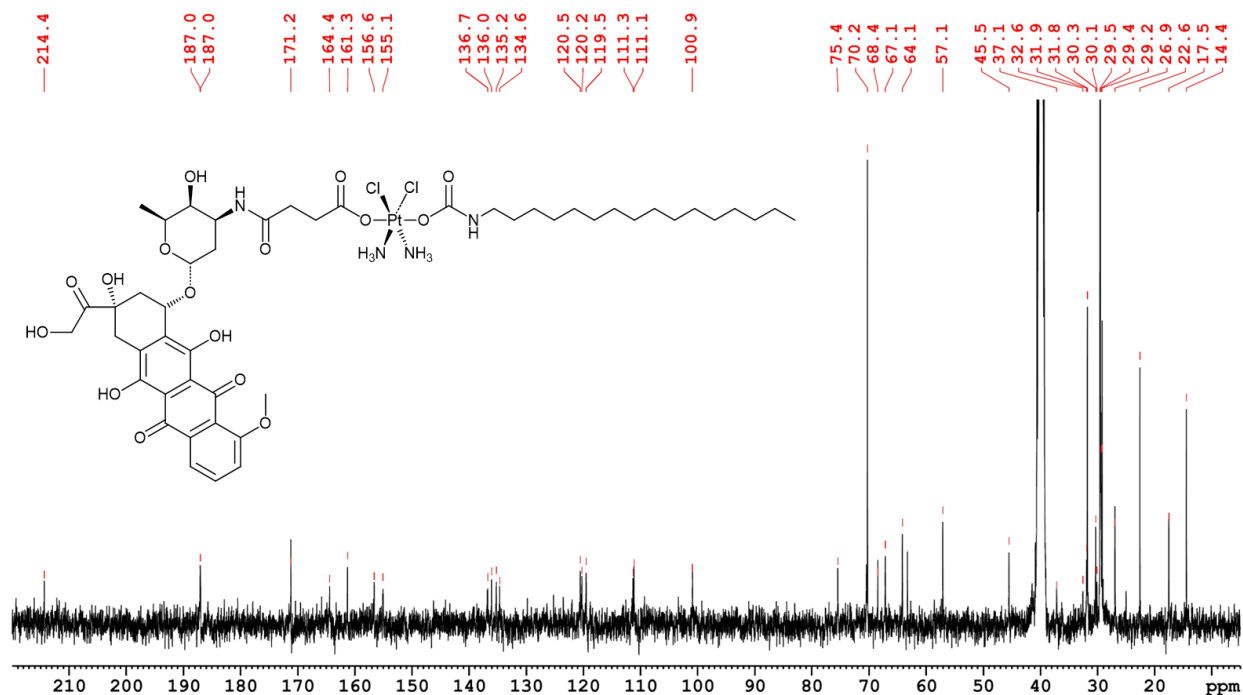


**Figure S1.** Synthesis of Amphiphilic Pt(IV)

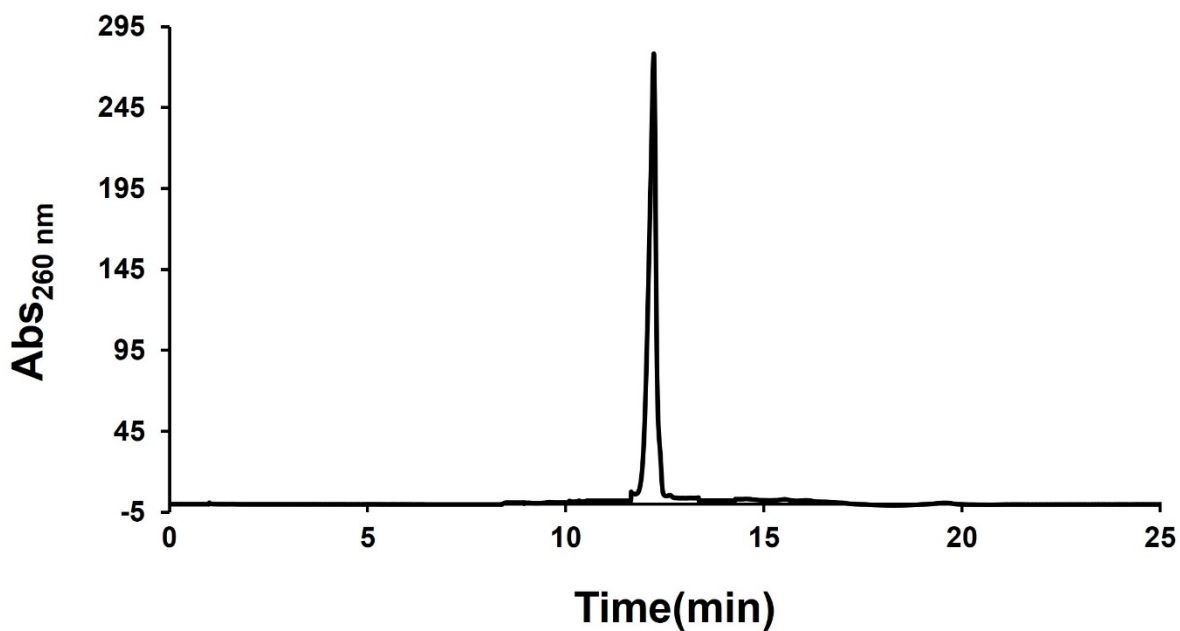
Complex (1).



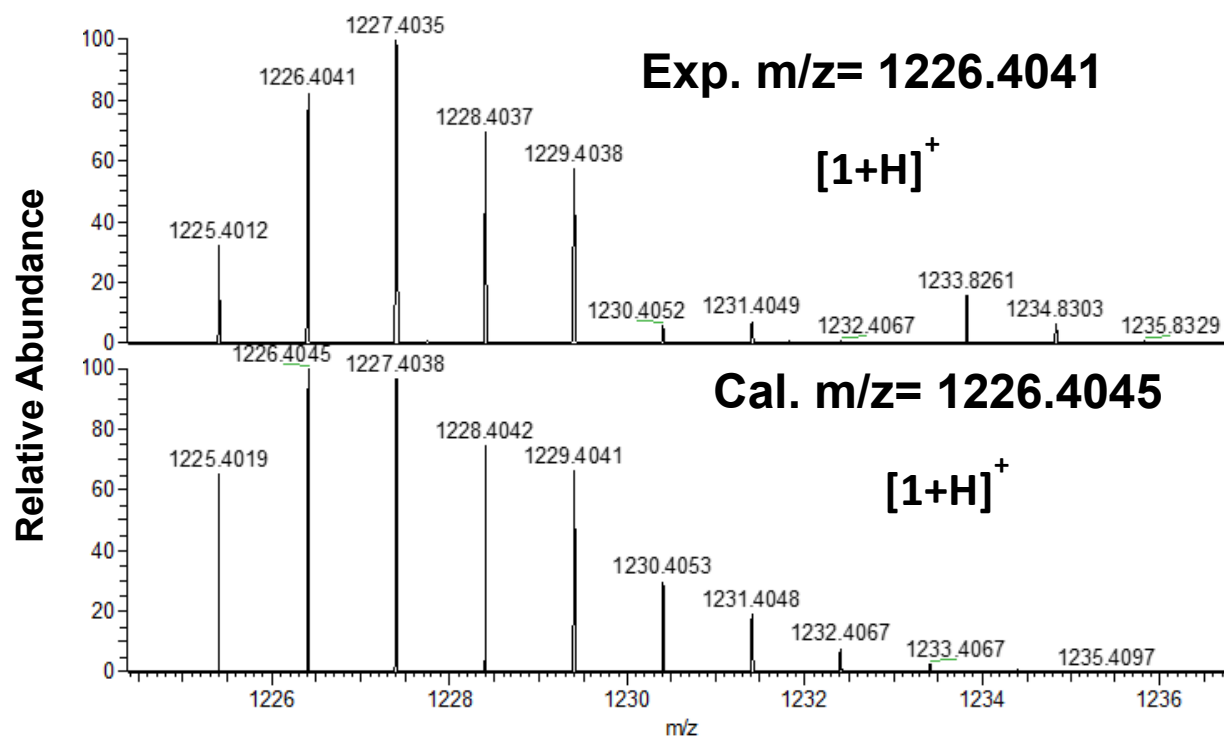
**Figure S2.**  $^1\text{H}$  NMR spectrum of the amphiphilic Pt(IV)-doxorubicin conjugate (**1**) in DMSO- $d_6$ .



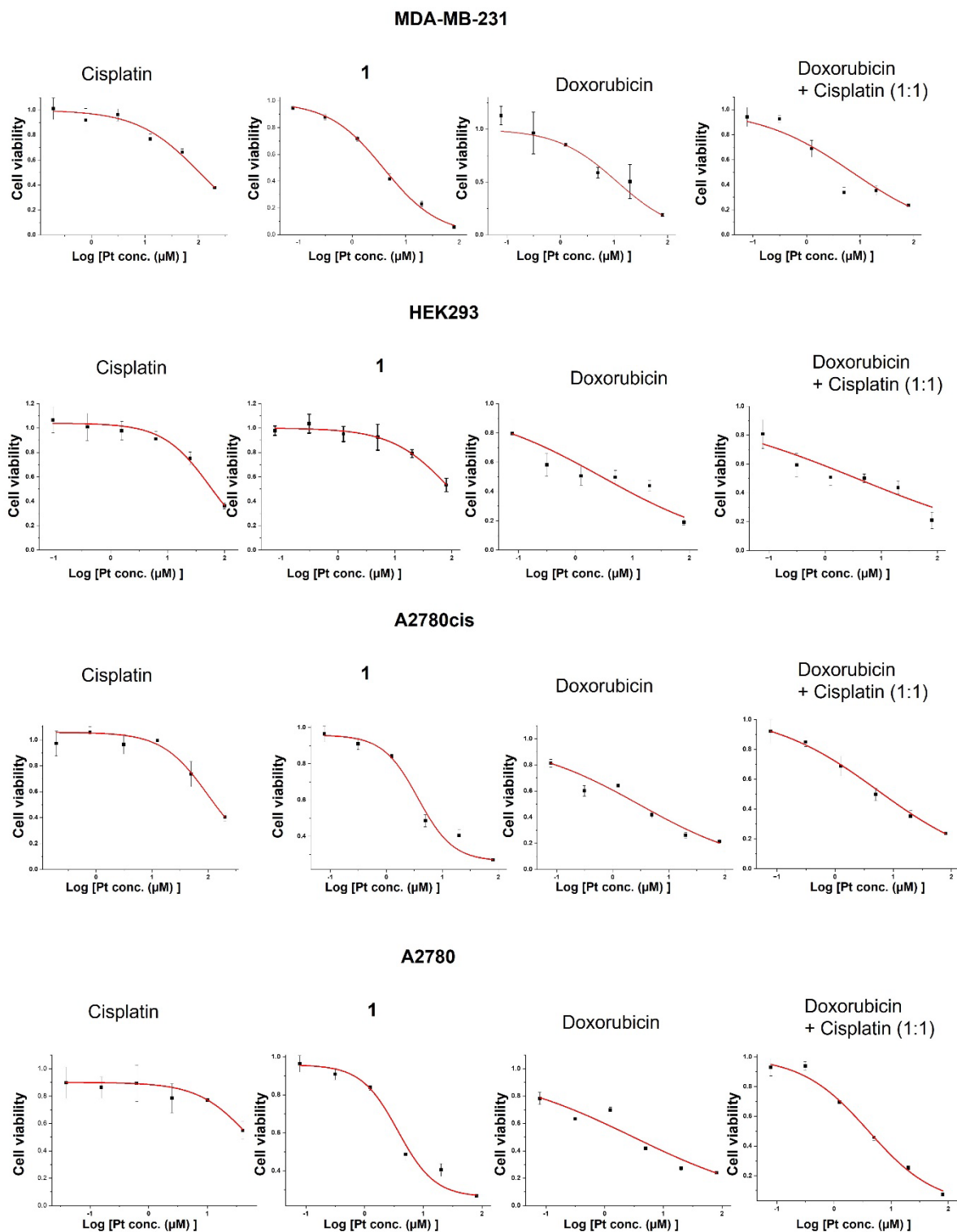
**Figure S3.** <sup>13</sup>C{<sup>1</sup>H} NMR spectrum of the amphiphilic Pt(IV)-doxorubicin conjugate (1) in DMSO-d<sub>6</sub>.



**Figure S4.** HPLC trace of the amphiphilic Pt(IV)-doxorubicin conjugate (1). Gradient: 0 min 5% B, 5 min 5% B, 10 min 85% B, 15 min 90% B, 20 min 98% B, 30 min 5% B (Solvent A is 0.1% TFA aqueous solution and B is acetonitrile).



**Figure S5.** High resolution mass spectra of the amphiphilic Pt(IV)-doxorubicin conjugate (**1**).



**Figure S6.** Representative killing curves from MTT assays.