Supporting Information for

Hydroxychloroquine Platinum(IV) Conjugate Displaying Potent Antimetastatic Activities by Suppressing Autophagy to Improve the Tumor Microenvironment

Linming Li,a# Yan Chen,a# Ming Zhang,a Suying Li,a Shuaiqi Feng,a Yan-Qin He,a Ning Zhang,a Zhifang Liu,*# Meifeng Liu,b* and Qingpeng Wang*#

a. Institute of Biopharmaceutical Research, Liaocheng University, Liaocheng 252059, P. R. China
b. Key Laboratory of Functional Molecular Engineering of Guangdong Province, School of Chemistry and Chemical Engineering, South China University of Technology, Guangzhou 510640, China.

E-mail: lywqp@126.com

# These authors contributed equally to this work.

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Supplementary Information (SI) for Dalton Transactions.
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1. Supporting information for induction of mitochondria-mediated apoptosis

**Figure S1.** Mitochondrial membrane potential analyzed by flow cytometry. 4T1 cells were treated with and without platinum complexes (10 μM) for 24 h at 37 °C and stained with JC-1. (a) Blank. (b) CDDP. (c) OXP. (d) HCQPt(IV).

<table>
<thead>
<tr>
<th>ROS production (%)</th>
<th>Blank</th>
<th>HCQPt(IV)</th>
<th>CDDP</th>
<th>OLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>500</td>
<td>1000</td>
<td>1500</td>
<td>100</td>
</tr>
</tbody>
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**Figure S2.** ROS production in 4T1 cells after treatment with and without CDDP, OXP and complex HCQPt(IV) (10 μM) for 24 h at 37 °C. Cells were stained by DCFH-DA and analyzed by flow cytometry. ***P < 0.001.

2. Supporting information for antitumor activities *in vivo*

**Figure S3.** The organ index (Heart, Liver, Lung, Kidney) of BALB/c mice from compound HCQPt(IV), CDDP and OXP treated groups in comparison with blank group (n = 6). The tumor tissues were obtained from the antitumor experiments *in vivo*. Organ index = weight of organ/body weight × 100%. ***P < 0.001.
Figure S4. Platinum accumulation in liver and spleen of the mice treated by complex HCQPt(IV), CDDP and OXP. ***$p < 0.001$.

Figure S5. The H&E staining of liver, spleen and kidney tissues from mice treated by complex HCQPt(IV), CDDP and OXP. The tissues were obtained from the antitumor experiments in vivo.

3. Supporting information for metastasis inhibition in vitro

Figure S6. Migration inhibition of complex HCQPt(IV), CDDP and OXP (5 μM) to 4T1 cells in vitro. The extent of wound healing was observed at 0 h, 12 h, and 24 h. (a) Representative images. (b) Analysis of wound closure. ***$p < 0.001$. 
4. $^1$H-NMR, $^{13}$C-NMR and MS spectra of platinum(IV) complexes HCQPt(IV)
Figure S9. MS spectrum of HCQPt(IV)

Figure S10. HPLC spectrum of HCQPt(IV).