

Electronic Supplementary Information

Platinum(II)-chloroquine complexes are antimalarial agents against blood and liver stages by impairing mitochondrial function

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‡Footnote: Taís S. Macedo and Wilmer Villarreal share first authorship.

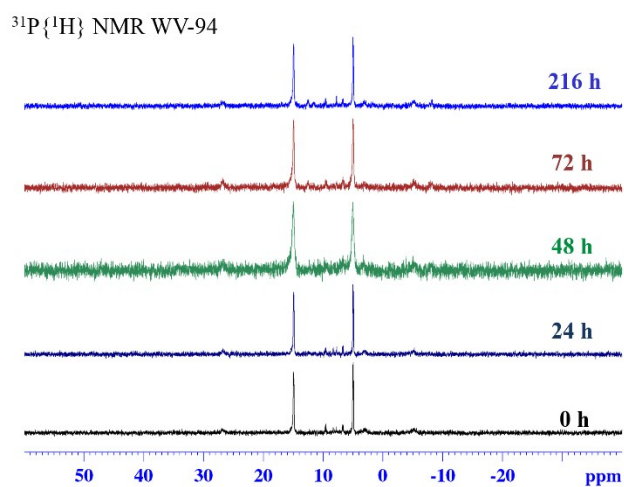
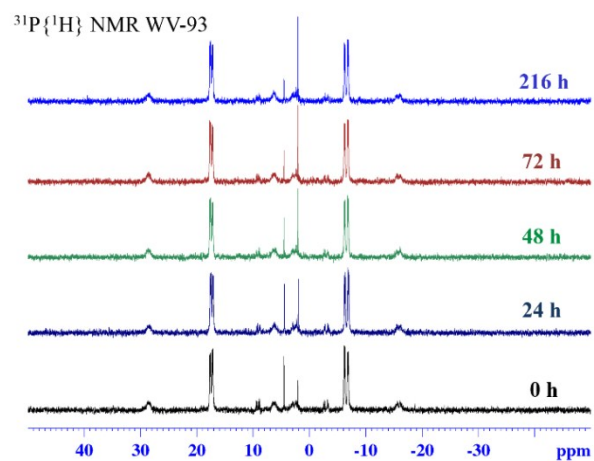
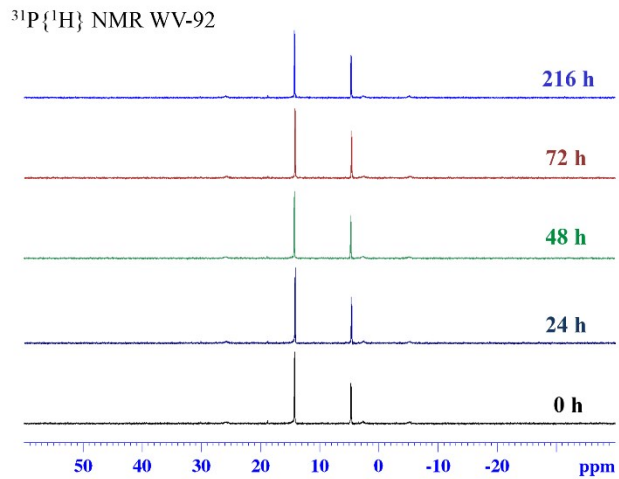
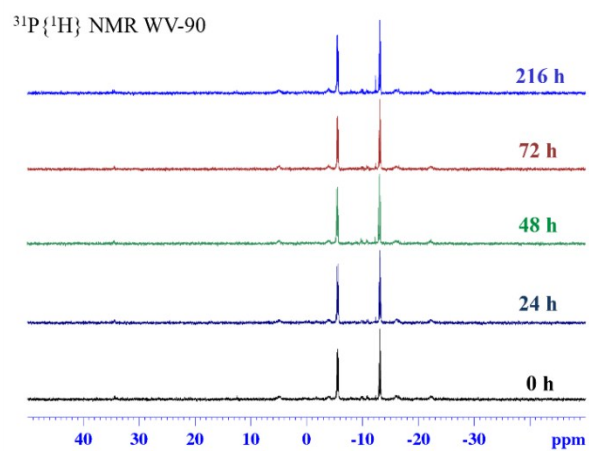


Figure S1: $^{31}\text{P}\{^1\text{H}\}$ spectra of platinum complexes in a mixture DMSO:Trizma 60:40 (D_2O). Incubation times are indicated in the right axis of each spectrum.

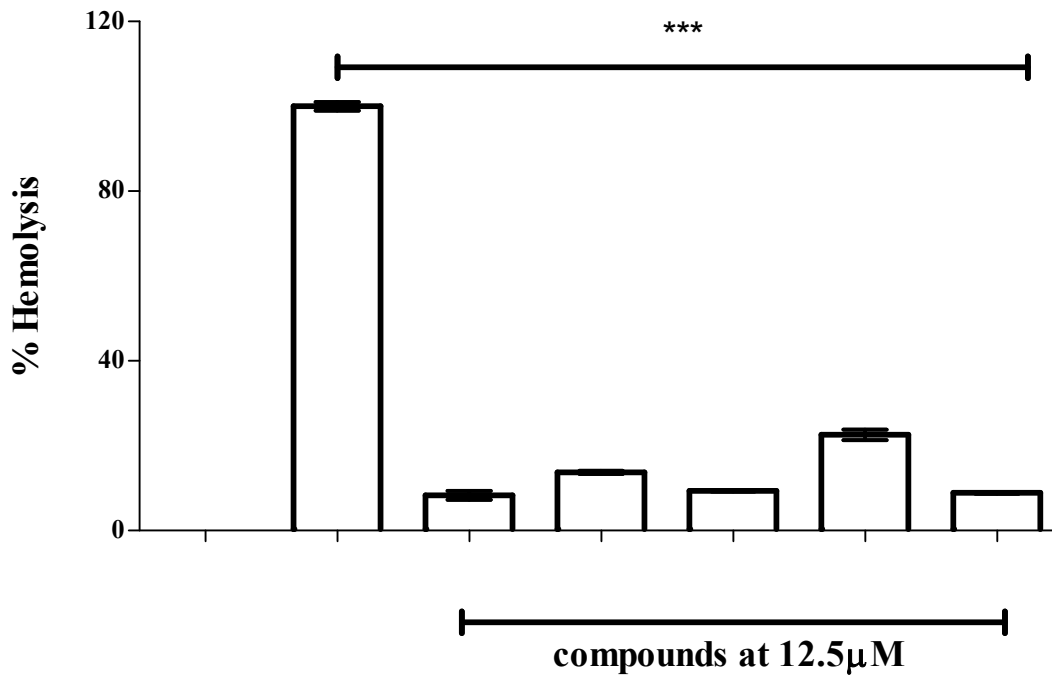
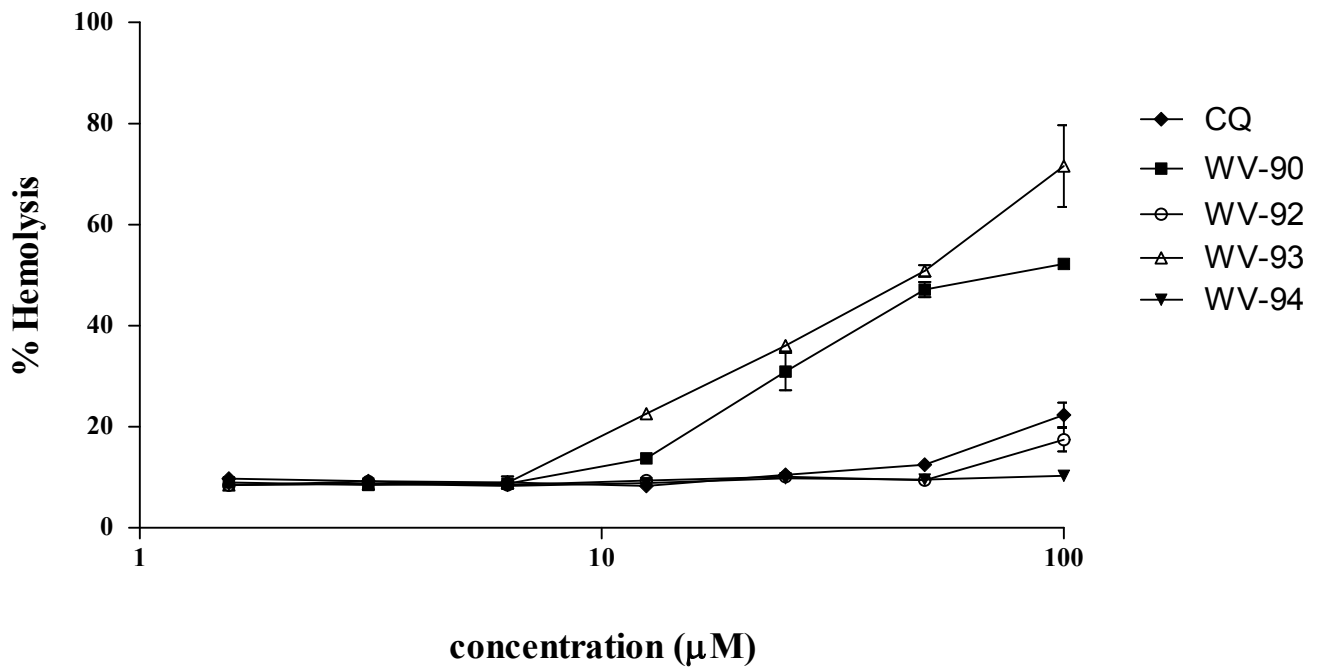


Figure S2: Hemolysis in uninfected erythrocytes after 1 h incubation of compounds at indicated concentration. DMSO at 0.5 % (v/v) in PBS, Saponin at 1 % v/v in PBS. Two independent experiments were performed. Error bars represent S.D. from pooling triplicate values of one experiment. *** $p < 0.01$ (one-way ANOVA and Newman-Keuls test).

Table S1: Cytostatic activity of platinum complexes against intraerythrocytic *P. falciparum*.

Comp.	<i>P. falciparum</i> , IC ₅₀ ±S.D.(μM) ^a	
	CQ-sensitive 3D7	CQ-resistant W2
WV-48	> 5.0	3.6±0.3
WV-31	> 5.0	N.D.
WV-51	>5.0	N.D.
WV-50	3.9±0.5	2.4±0.3

^aDetermined 72 h after incubation with compounds.

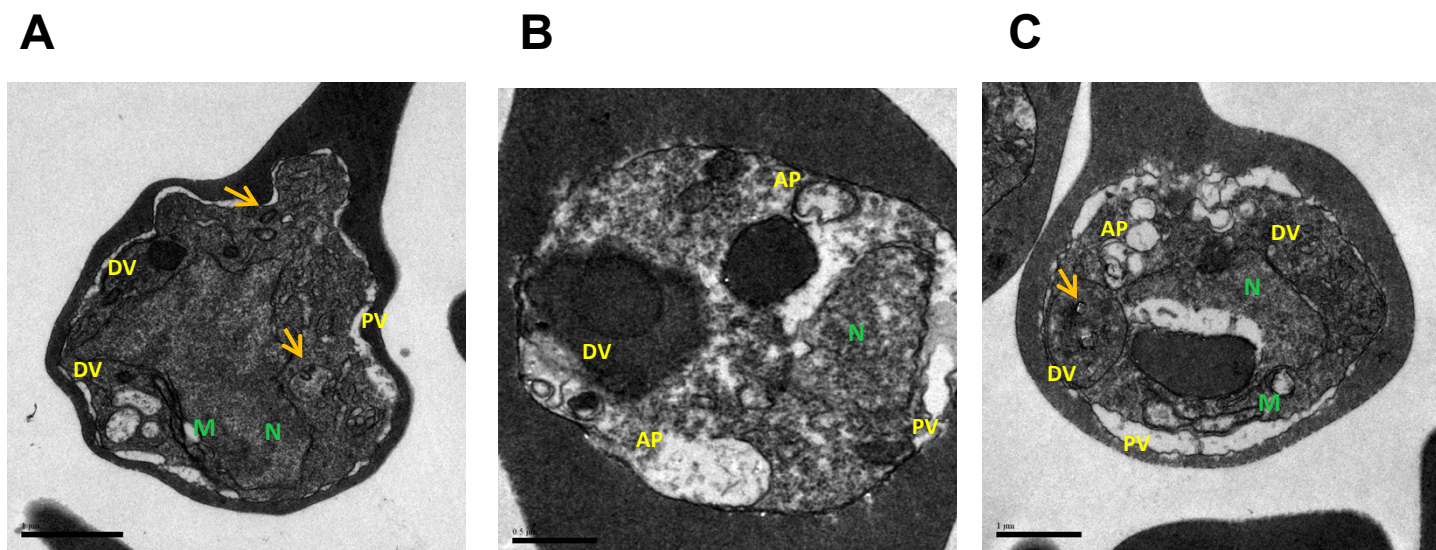


Figure S3: Ultrastructural effects of platinum complex and chloroquine in *P. berghei*-infected mice. Representative transmission electron micrographs of untreated (panel A), chloroquine at 66 $\mu\text{mol/kg}$ (panel B) and WV-90 at 66 $\mu\text{mol/kg}$ (panel C) after 6 h treatment. *Abbreviation:* N, nucleus, M, mitochondria; DV, digestive vacuole, AP, autophagosome; MP, parasitophorous vacuole. Arrows indicate hemozoin.