Electronic Supporting Information

Novel tetracarboxylatoplatinum(IV) complexes as carboplatin prodrugs

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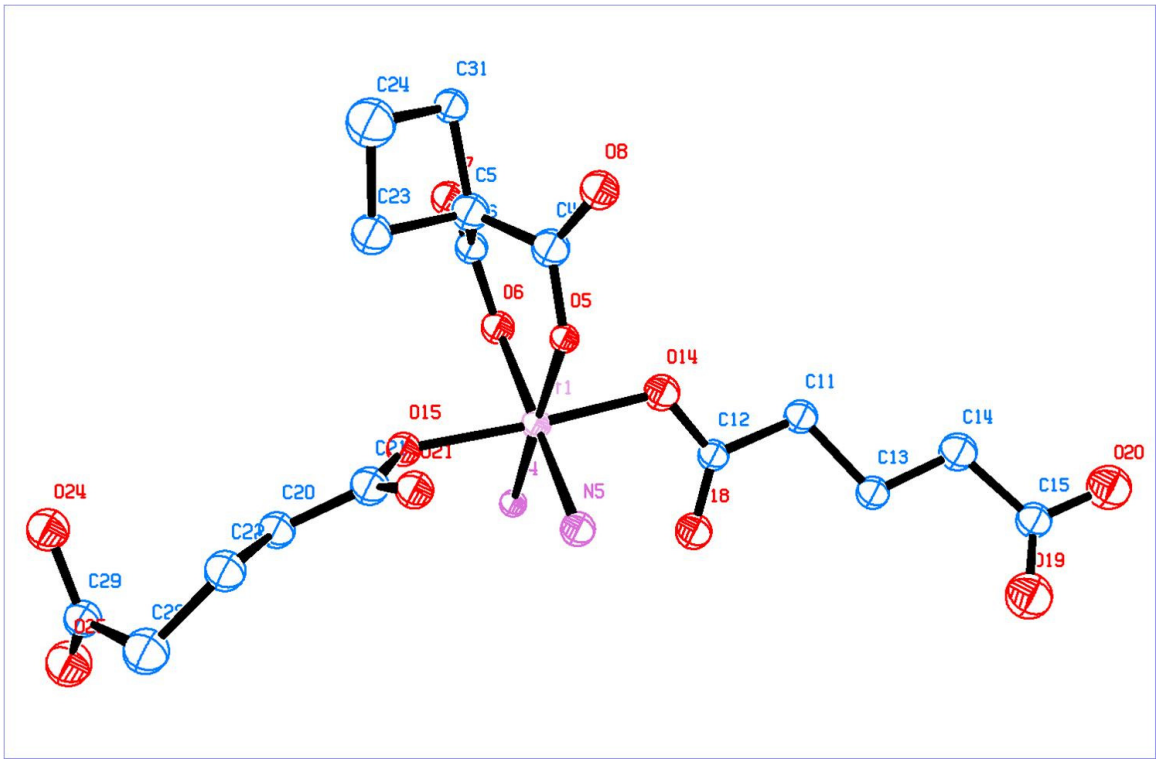

Fig. S1. ORTEP diagram of **4** displaying thermal ellipsoids at 55% probability level.

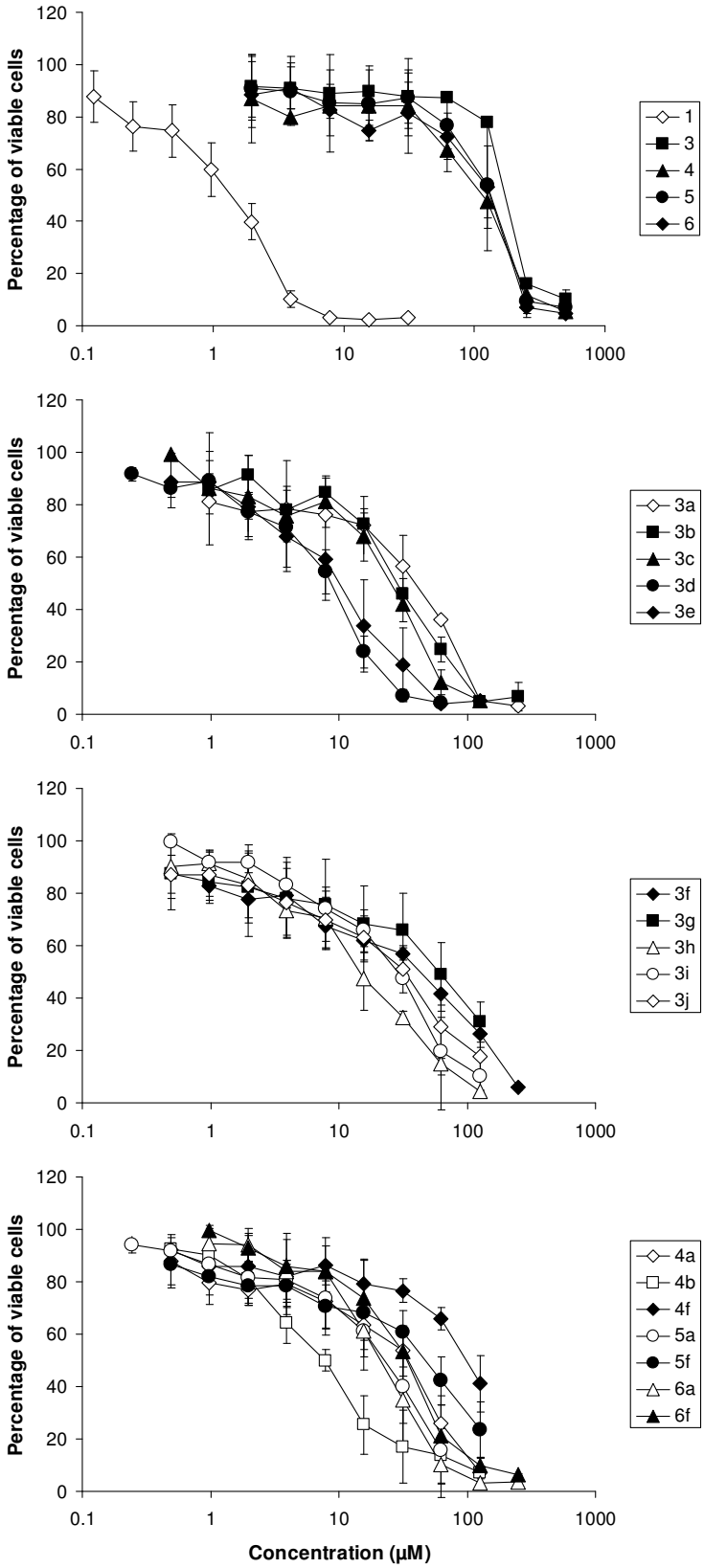

Fig. S2. Concentration–effect curves (means ± standard deviations) of investigated compounds in CH1 cells (MTT assay, exposure time 96 h).

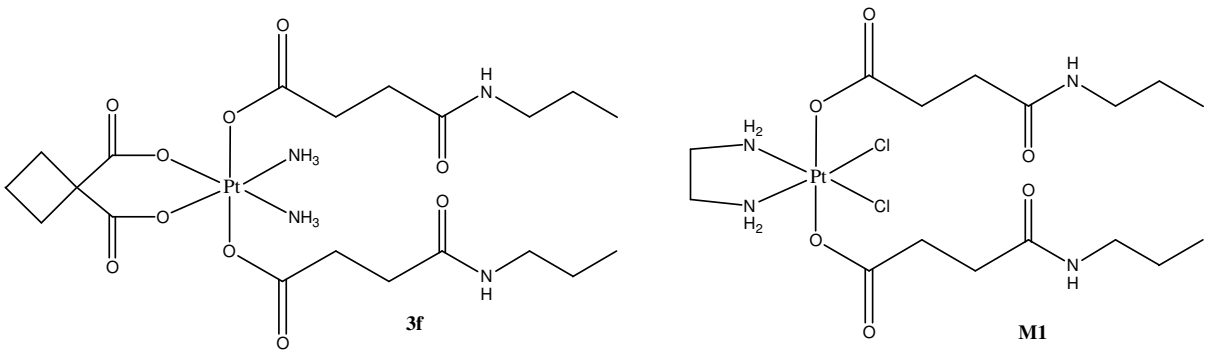

Fig. S3. Chemical structures of complexes **3f** and **M1**

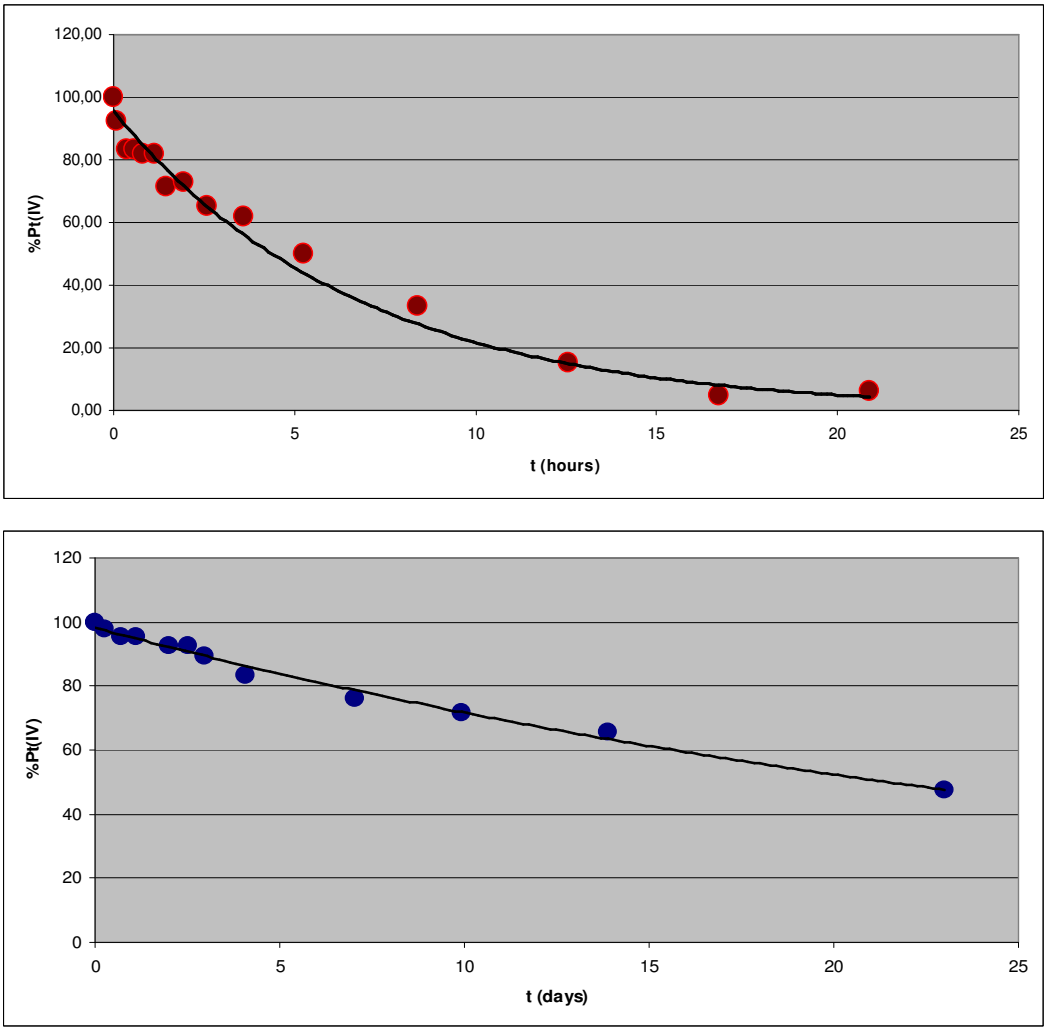

Fig. S4. Time dependent reduction of **M1** (top) and **3f** (bottom) in the presence of ascorbic acid; ambient temperature, pD =7.4, 1 mM complex, 50 mM phosphate buffer, 25 mM ascorbic acid.

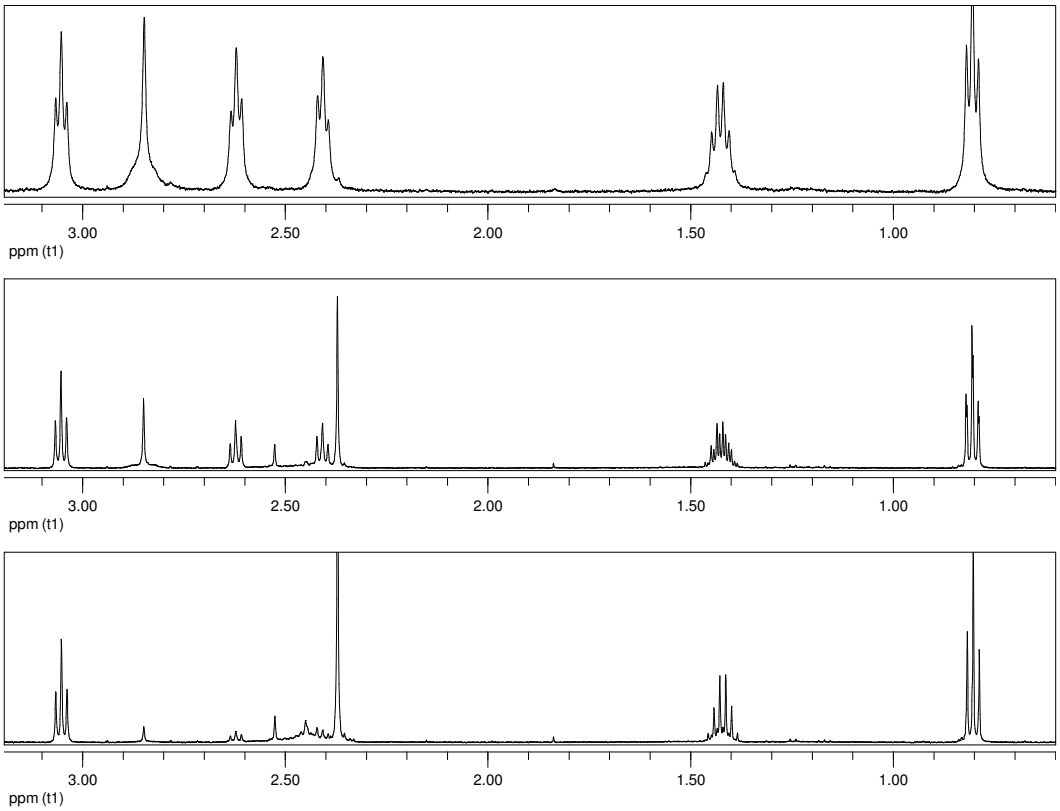

Fig. S5. ^{1}H NMR spectra of complex **M1** after addition of ascorbic acid (top – immediately, middle – after 5 hours, bottom – after 17 h); ambient temperature, pD =7.4, 1 mM complex, 50 mM phosphate buffer, 25 mM ascorbic acid.

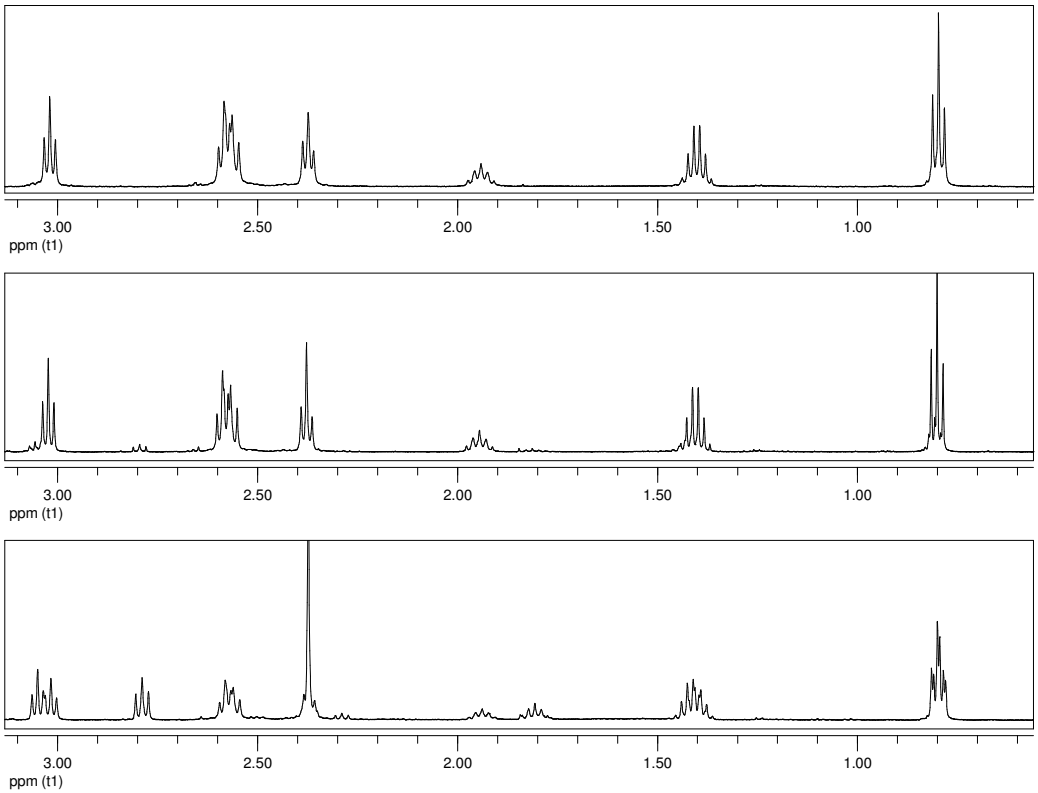

Fig. S6. [1]H NMR spectra of complex **3f** after addition of ascorbic acid (top – immediately, middle – after 3 days, bottom – after 23 days); ambient temperature, pD =7.4, 1 mM complex, 50 mM phosphate buffer, 25 mM ascorbic acid

Table S1. Comparison of redox potentials, halve life times of reduction by ascorbic acid and cytotoxicity for complexes **M1** and **3f.**

compound	Ep (V)	$t_{1/2}$	IC_{50} (CH1), µM	IC_{50} (SW480), µM
M1	**-0.60**	**5 h**	2.3±1.1[a]	31±15[a]
3f	**-0.68**	**21 d**	44 ± 8	>500

[a] data, taken from ref**.** [1]

[1] M.R. Reithofer, S.M. Valiahdi, M.A. Jakupec, V.B. Arion, A. Egger, M. Galanski, B.K. Keppler, *J. Med. Chem.*, 2007, **50**, 6692–6699.