

Supplemental Figure 2. Related to Figure 5 and 6.
Identification of the products generated by the reaction of
hexachloroplatinate(IV) with DMSO and their capacity to bind
cyanide anions

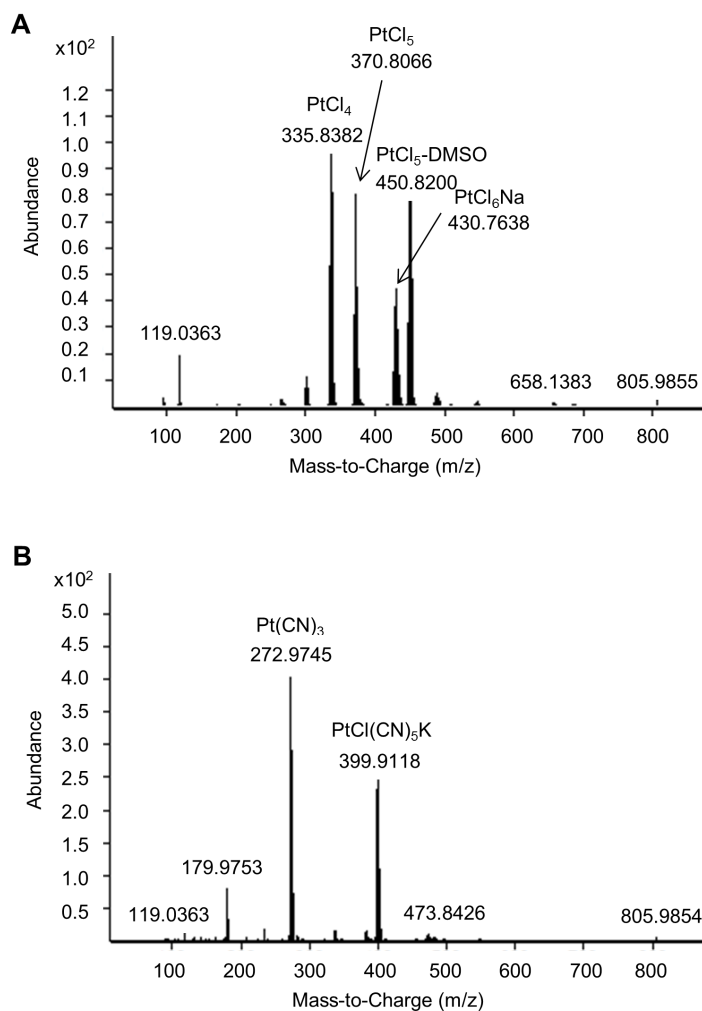


Figure S2 Related to Figure 5 and 6. Identification of the products generated by the reaction of hexachloroplatinate(IV) with DMSO and their capacity to bind cyanide anions. A) To decipher the chemical species created when hexachloroplatinate(IV) is dissolved in DMSO, we used ESI-MS. DMSO undergoes nucleophilic attack of the platinum atom, displacing one chloride ligand and generating PtCl₅-DMSO (m/z = 450). An ion signal detected at m/z = 430 corresponds to the starting material (PtCl₆Na). B) When cyanide is added to hexachloroplatinate(IV) that has been dissolved in DMSO the most abundant ion signals detected were at m/z = 272 and 399 corresponding to the platinum atom bound to 3 or 5 cyanide anions.

Supplemental Tables

Table S1. Related to Figure 1. Identification of the products generated from the reaction between cyanide and cisplatin (DMSO) using isotope distribution comparison of K¹²C¹⁴N versus K¹³C¹⁵N

Species	Peak in K ¹² C ¹⁴ N	Peak in K ¹³ C ¹⁵ N	Mass Difference
[Pt(CN) ₄]	337.9	345.9	8
[Pt(CN) ₃]	272.9	278.9	6
[Pt(CN) ₃ DMSO]	350.9	356.9	6

Table S2. Related to Figure 3. Peaks observed for ESI+ mass spectra of cisplatin dissolved in DMSO

Species	Formula	Observed Mass	Calculated Mass
[Pt(NH ₃) ₂ (Cl)(DMSO)]+	C ₂ H ₁₂ ClN ₂ OPtS	342.9996	343.0085
[Pt(NH ₃)(Cl)(DMSO) ₂]+	C ₄ H ₁₅ ClNO ₂ PtS ₂	403.9868	403.9959
μNH ₂ -[Pt(NH ₃)(Cl)(DMSO)] ₂ +	C ₄ H ₂₀ Cl ₂ N ₃ O ₂ Pt ₂ S ₂	665.9661	665.9670