

Supplementary Material for

Effect of Thioethers on DNA Platination by *trans* platinum complexes

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Scheme S1. Different pathways for the reaction of *trans-EE* with GMP in the presence of Met.

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Figure S4. ESI-MS spectrum of the end product formed by transformation of *trans*-[Pt(*E*-iminoether)₂(S-Met)₂] at pH 7.

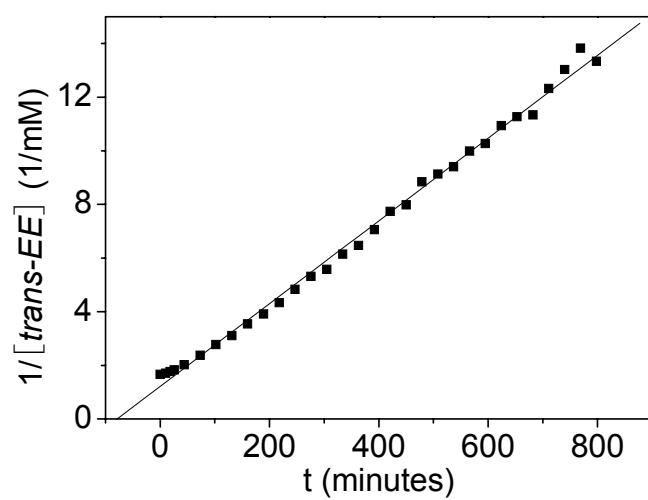


Figure S1. Plot of $1/[trans-EE]$ versus time in the reaction of *trans-EE* with AcMet (1:1 molar ratio) performed at 25 °C, at pH 3.1, and in the presence of 100 mM NaCl. The second order rate constant estimated from the slope is $0.26 \pm 0.01 \text{ M}^{-1}\text{s}^{-1}$.

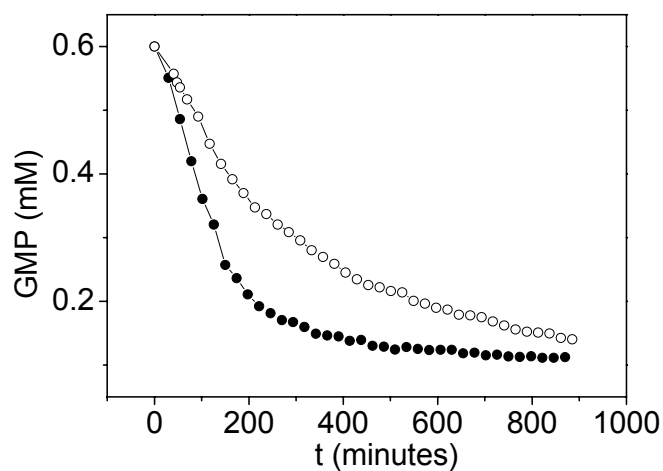
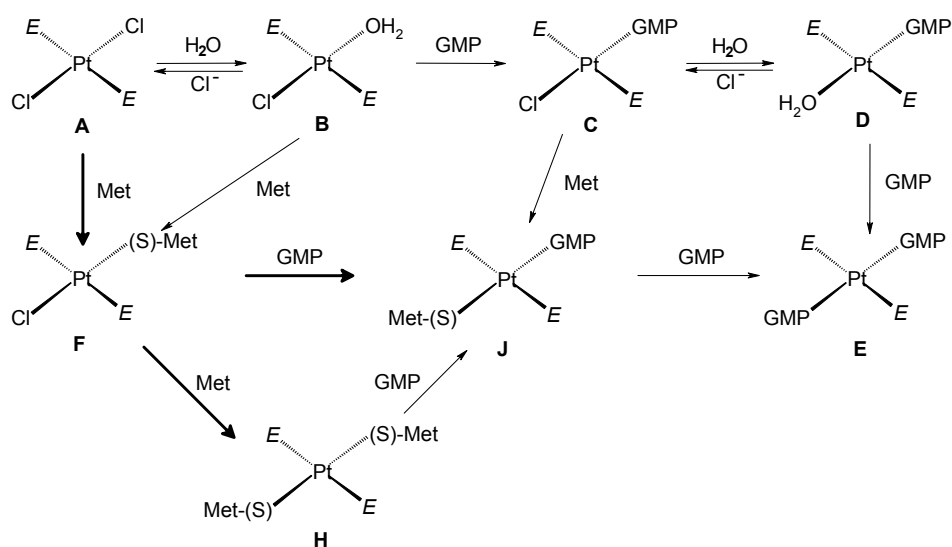


Figure S2. Reaction of 0.6 mM *trans-EE* with 0.6 mM GMP performed in the absence (○) or in the presence (●) of equimolar amount of Met at neutral pH and at 25 °C.



Scheme S1. Summary of the products and reaction pathways which have been shown to occur in the reaction between *trans-EE* and GMP in the presence of Met.

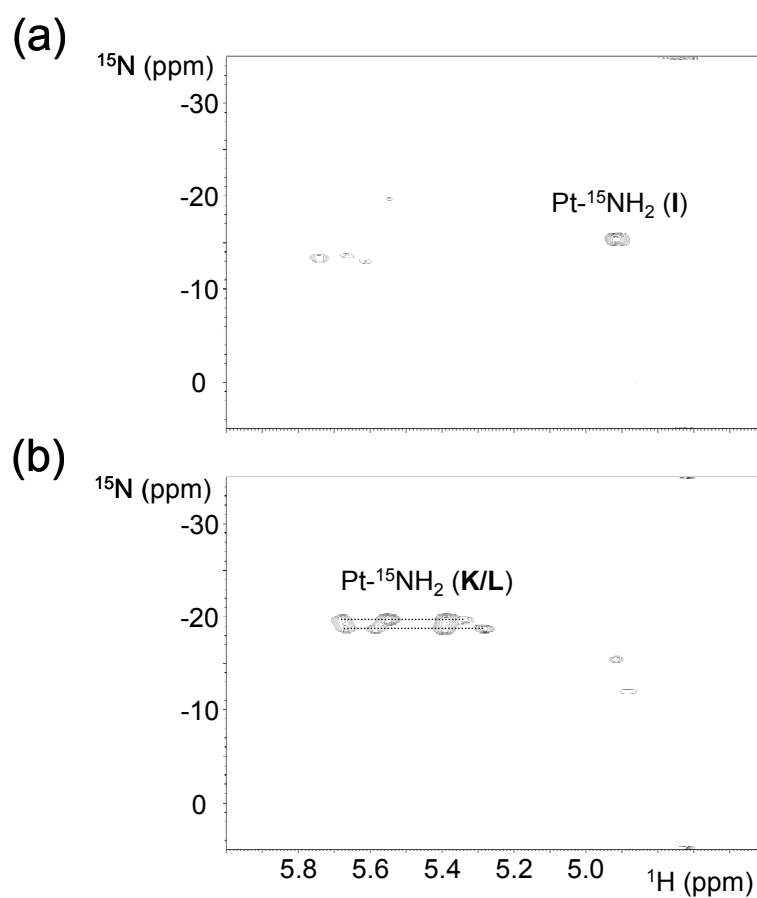


Figure S3. 2D ^1H , ^{15}N HSQC spectra of the reaction mixture of *trans-EE* and ^{15}N , ^{13}C Met (1:2.5 molar ratio, pH 7.0, solvent H_2O) after 30 minutes (a) and after 48 hours (b).

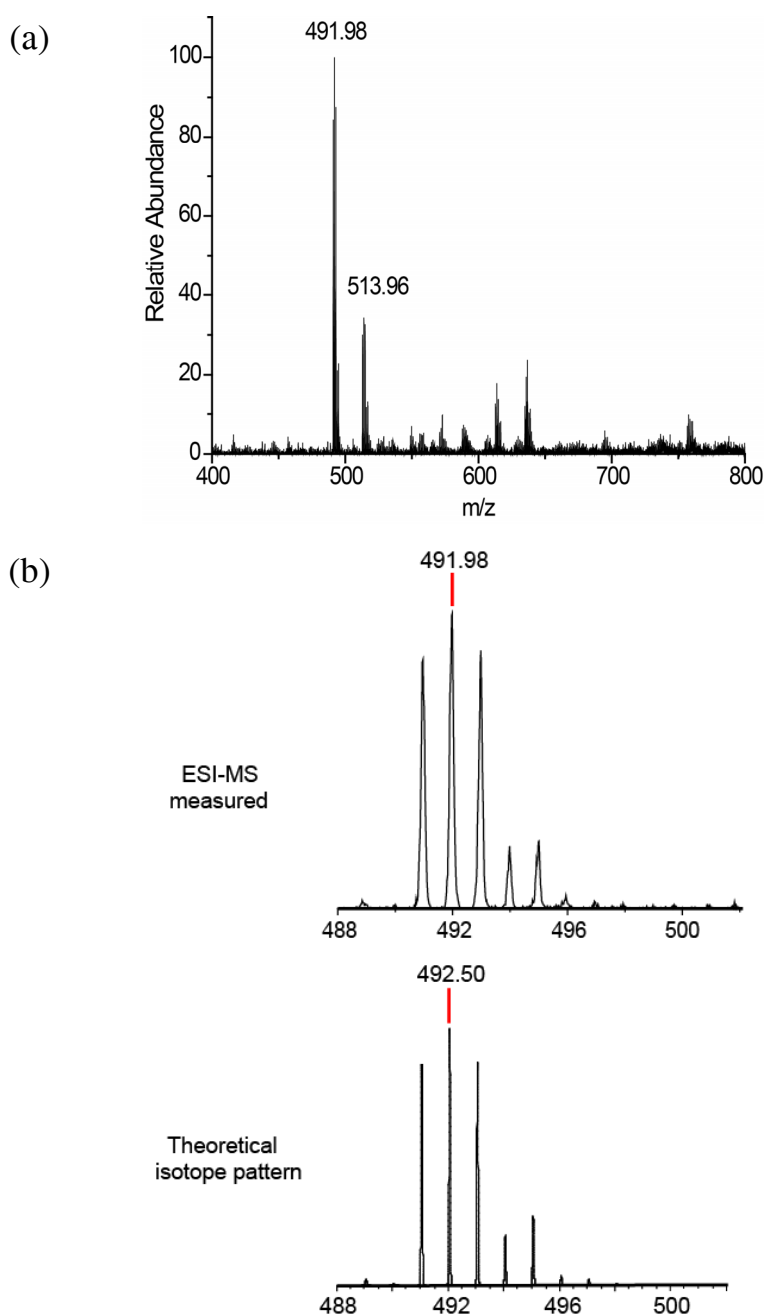


Figure S4. (a): ESI-MS spectrum of the end product formed by the transformation of *trans*-[Pt(*E*-iminoether)₂(S-Met)₂] at pH 7.0. The spectrum was recorded after 24 hours reaction time. The major peak was ([Pt(Met-S,N)₂], formula: [C₁₀H₂₁N₂O₄PtS₂]⁺, measured m/z = 491.98). The sodium salt peak was observed at m/z = 513.96. (b): ESI-MS experimental (up-portion, measured m/z = 491.98) and theoretical isotope pattern (low-portion, theoretical m/z = 492.50).