**Supplemental Material**

**Synergic Highly Effective Photothermal-chemotherapy with Platinum Prodrug Linked Melanin-like Nanoparticles**

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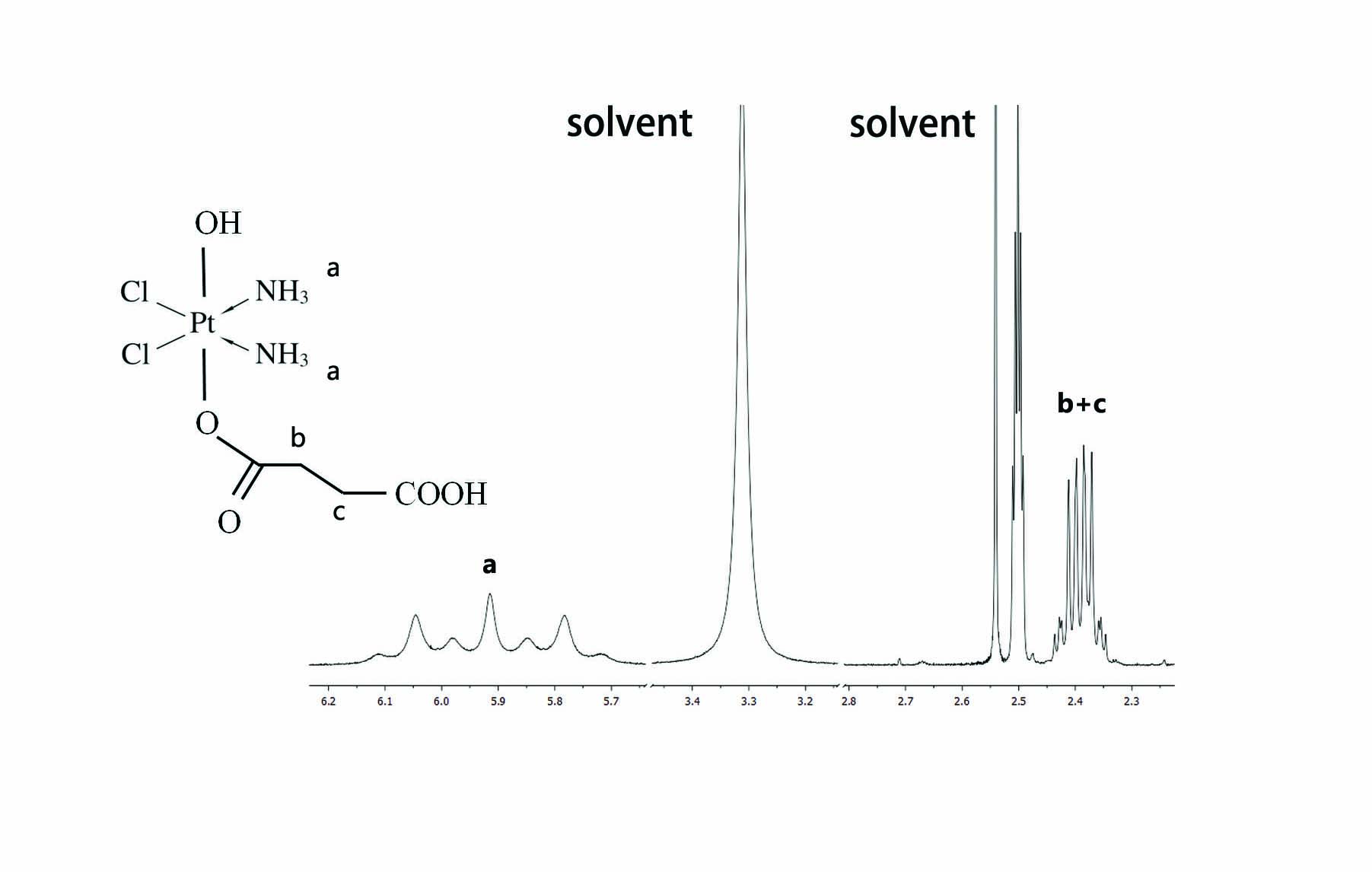
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**Table S1 IC50 values of Pt(IV)-MeNP, Pt(IV)-COOH or** **cisplatin in different**

**prostate cancer cell lines after 48h treatment**

|  |  |  |  |
| --- | --- | --- | --- |
| **IC50 (95% CI) µM** | **PC 3** | **DU 145** | **LnCap** |
| **Pt(IV)-MeNP** | **7.161 (5.785-9.063)** | **3.606 (2.530-5.105)** | **7.164 (1.960-31.751)** |
| **Pt(IV)-COOH** | **>32** | **>32** | **20.437 (15.484-29.474)** |
| **Cisplatin** | **2.067 (1.693-2.485)** | **0.980 (0.338-1.744)** | **1.116 (0.581-1.746)** |

IC50, half inhibitory concentration; 95% CI, 95% confidence interval.



**Fig.S1** 1H NMR spectra of Pt(IV)-COOH in DMSO-d6.

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**Fig.S2** Changes in the mitochondrial membrane potential in PC3 cells as revealed by the JC-1 assay. JC-1 assay of PC3 cells treated with various drugs [Pt(IV)-MeNP, Pt(IV)-COOH, cisplatin, NH2-MeNP and PBS]. Platinum concentration was 10 μM. (a) The JC-1 stained cells images were viewed by confocal laser scanning microscopy after 4 h incubation. Scale bar 50 μm. (b) the fluorescence intensity ratio (green to red) was measured with plate reader at different time points. \**P*<0.05 were calculated by student's t-test.

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**Fig.S3** Micrographs of H&E stained tumor or major organ slices from mice with different treatments collected when the monitoring finished. Scale bar 100 μm.

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**Fig.S4** Serum biochemical examination of treated mice. AST, aspartate transaminase; ALT, alanine aminotransferase; ALP, alkaline phosphatase; TBIL, total bilirubin; BUN, blood urea nitrogen; Cr, creatinine.