Supporting Information

Multifunctional single-drug loaded nanoparticles for enhanced cancer treatment with low toxicity \textit{in vivo}

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Scheme S1. Synthesis of Z-DMC-OXA(N$_3$).

Fig. S1 IR spectra of c,c-[Pt(DACH)Cl$_2$] (i), c,c-[Pt(DACH)(N$_3$)$_2$] (ii), c,c,t-[Pt(DACH)(N$_3$)$_2$(OH)$_2$] (iii) and Z-DMC-OXA(N$_3$) (iv).
Fig. S2 $^1$H NMR spectra of Z-DMC-OXA(N$_3$) (DMSO- d$_6$).
**Fig. S3** Theoretical isotope pattern (A), experimental results (B) and (C) of Z-DMC- OXA(N₃) a measured by ESI-MS (negative mode).

**Scheme S2.** Synthesis of P-Z-DMC-OXA(N₃).
**Fig. S4** $^1$H NMR spectra of mPEG-b-P(LA-co-MPD) (CDCl$_3$).

**Fig. S5** Cell viability of HeLa cells without any drug in the presence of UVA irradiation.
**Fig. S6** Images of HeLa cells under different drug treatment at a concentration of 54 μM (Pt or DMC) for 72 h.

**Fig. S7** TUNEL staining of H22 tumors from mice after different drug treatment on day 29.