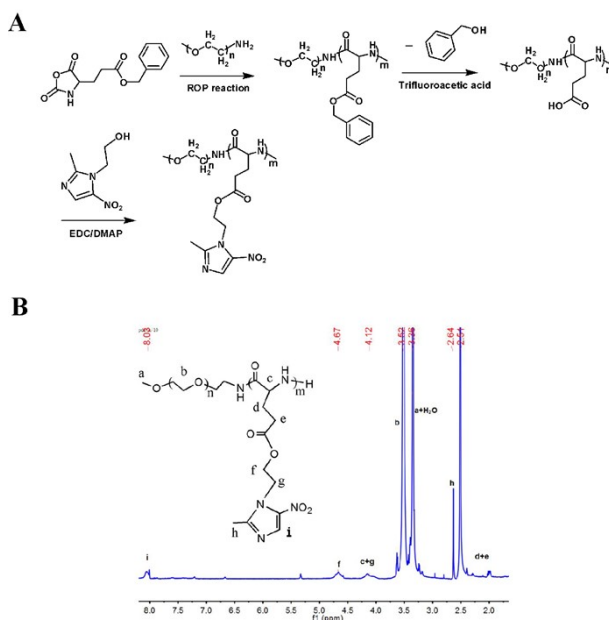
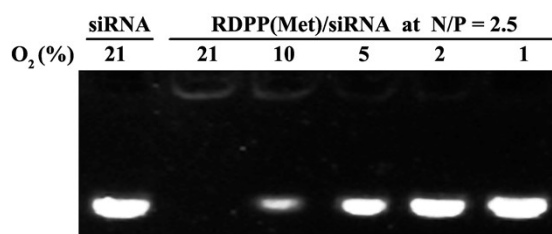


## Supporting Information

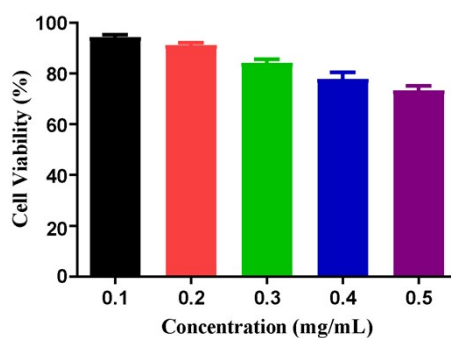
Hypoxia-dissociable siRNA nanoplatform for synergistically enhanced  
chemo-radiotherapy of glioblastoma



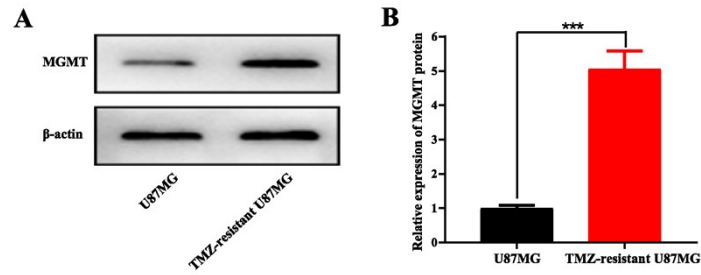
**Figure S1.** (A) Synthetic routes of PEG<sub>2000</sub>-Poly(Met) block copolymers by ROP reaction and condensation reaction. (B) <sup>1</sup>H NMR spectrum recorded for PEG<sub>2000</sub>-Poly(Met) in DMSO-*d*<sub>6</sub>.



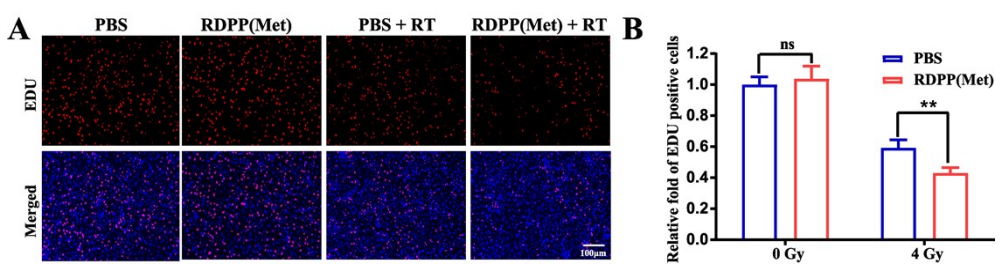
**Figure S2.** Gel retardation assay of siMGMT release behavior from RDPP(Met)/TMZ/siMGMT at different oxygen concentrations.



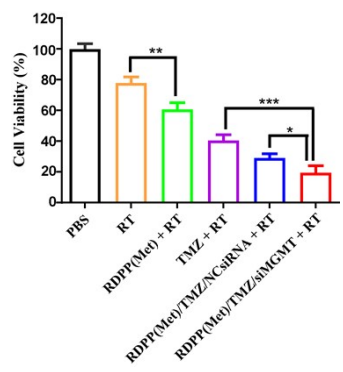
**Figure S3.** Cytotoxicity of RDPP(Met) evaluated by MTT assay.



**Figure S4.** (A) MGMT protein level in U87MG cells and TMZ-resistant U87MG cells by western blot analysis. (B) Relative expression of MGMT protein level in U87MG cells and TMZ-resistant U87MG cells by western blot analysis. Data are shown as mean  $\pm$  SD (n = 3), \*\*\*P < 0.001.



**Figure S5.** (A) U87MG cell proliferation was examined by EdU incorporation assay at 24 h after treatment with PBS, PBS combination with 4 Gy X-ray, RDPP(Met), RDPP(Met) combination with 4 Gy X-ray under hypoxic condition (pO<sub>2</sub>: 2%) and corresponding cell nuclei stained with DAPI. Scale bar: 100 μm. (B) Quantification analysis of percentage of EdU-positive cells of EdU assay results in U87MG cells with different treatment. Data are shown as mean  $\pm$  SD (n = 3), \*\*P < 0.01.



**Figure S6.** MTT assay of U87MG cells. Data are shown as mean  $\pm$  SD (n = 3), \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001.