

Supplementary Information

Photodynamic and Cold Atmospheric Plasma Combination Therapy Using Polymeric Nanoparticles for the Synergistic Treatment of Cervical Cancer

Ji-Hui Ha and Young-Jin Kim*

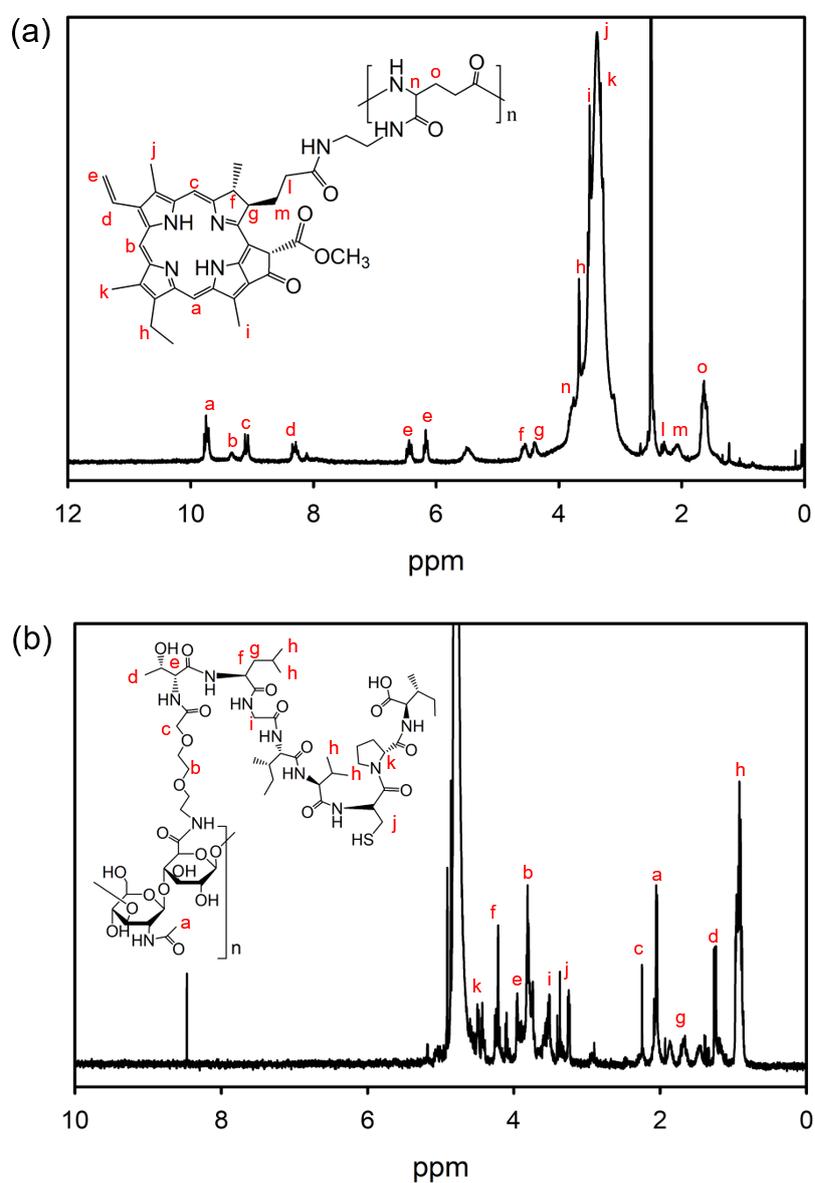


Figure S1. ^1H NMR spectra of (a) γ -PGA-Pheo a and (b) HA-EAE7.

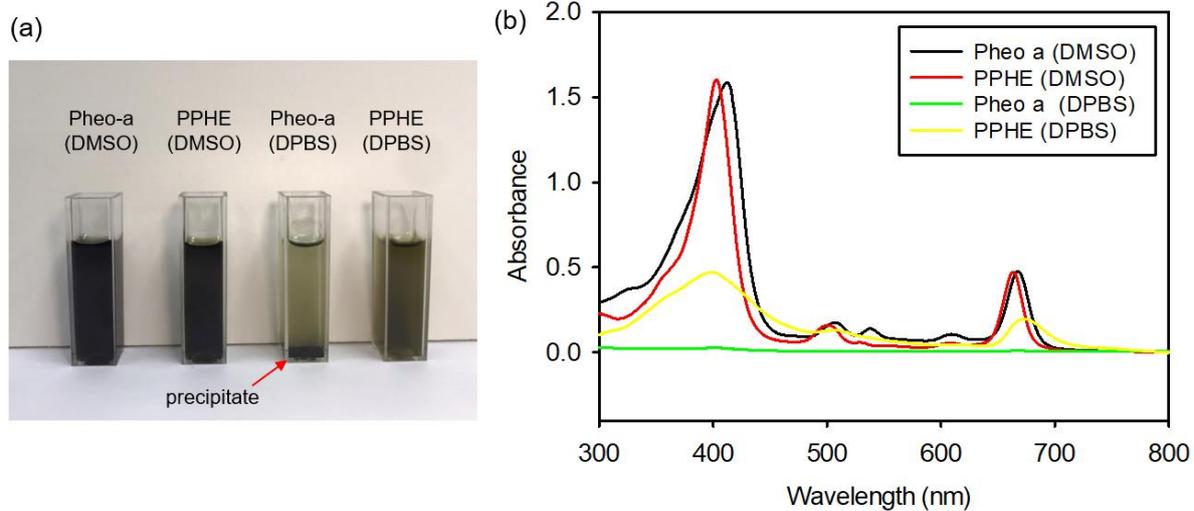


Figure S2. (a) Optical images of free Pheo a and PPHE dissolved in DMSO or DPBS (0.4 mg/mL Pheo a). The arrow shows the precipitate of Pheo a. (b) UV-visible spectra of free Pheo a and PPHE in DMSO or DPBS (10 $\mu\text{g}/\text{mL}$ Pheo a).

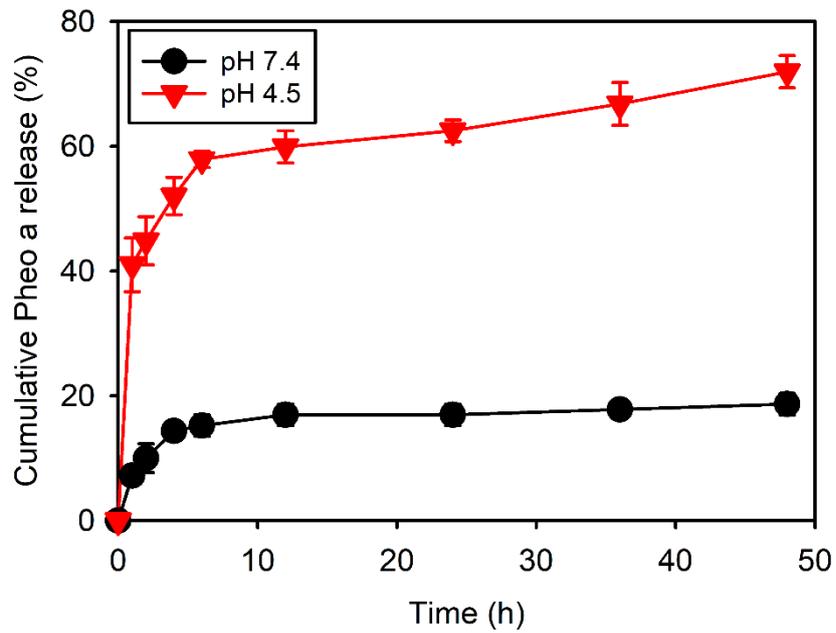


Figure S3. The cumulative release profiles of Pheo a from the PPHE polymeric nanoparticles in different pH conditions at 37 °C ($n = 3$).

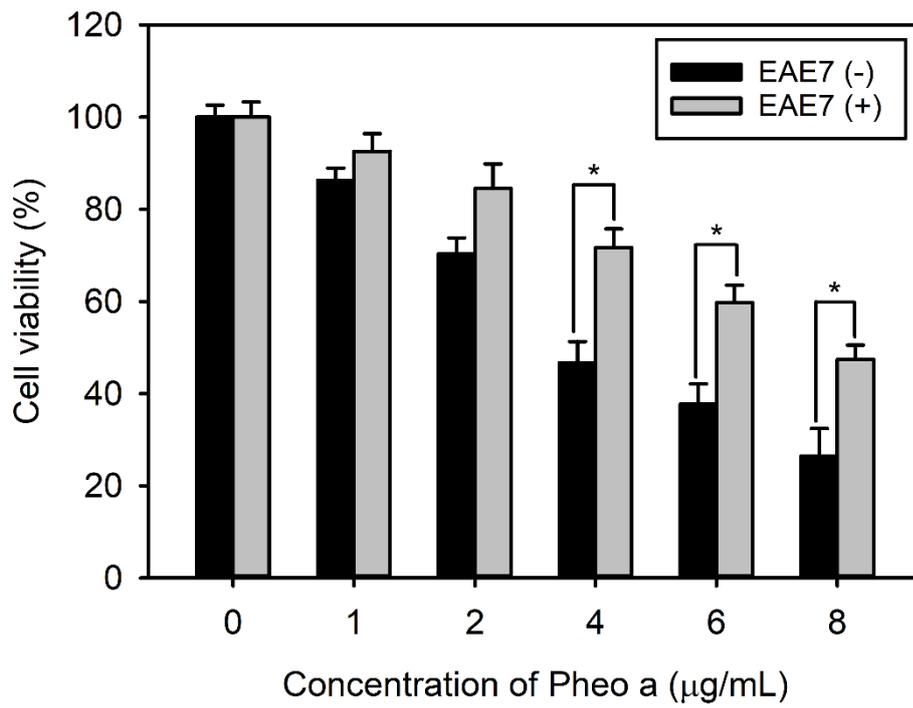


Figure S4. Phototoxicity of PPHE polymeric nanoparticles on CaSki cells after preincubation with (+) or without (-) excess free EAE7.

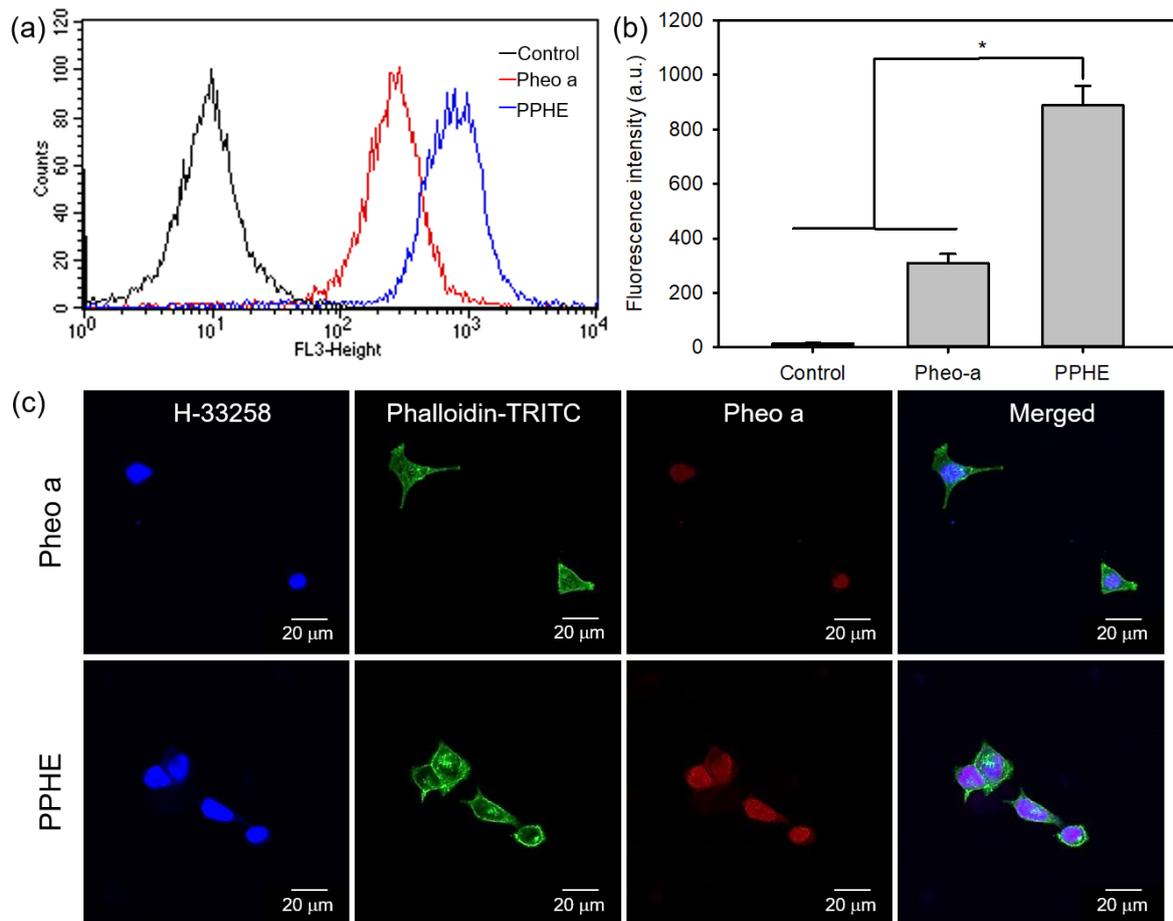


Figure S5. (a,b) Flow cytometric analysis of the intracellular uptake of free Pheo a and PPHE polymeric nanoparticles ($4 \mu\text{g}/\text{mL}$ Pheo a) in CaSki cells after incubation for 2 h in the dark: (a) Shift in fluorescence peak and (b) fluorescence intensity due to the intracellular uptake of free Pheo a and PPHE polymeric nanoparticles ($n = 5$). (c) Confocal laser scanning microscopy images of the intracellular distribution of free Pheo a and PPHE polymeric nanoparticles ($4 \mu\text{g}/\text{mL}$ Pheo a) in CaSki cells after incubation for 2 h in the dark.