

Supplementary Information

Enhanced photodynamic therapy and fluorescence imaging using gold nanorods for porphyrin delivery in a novel *in vitro* squamous cell carcinoma 3D model

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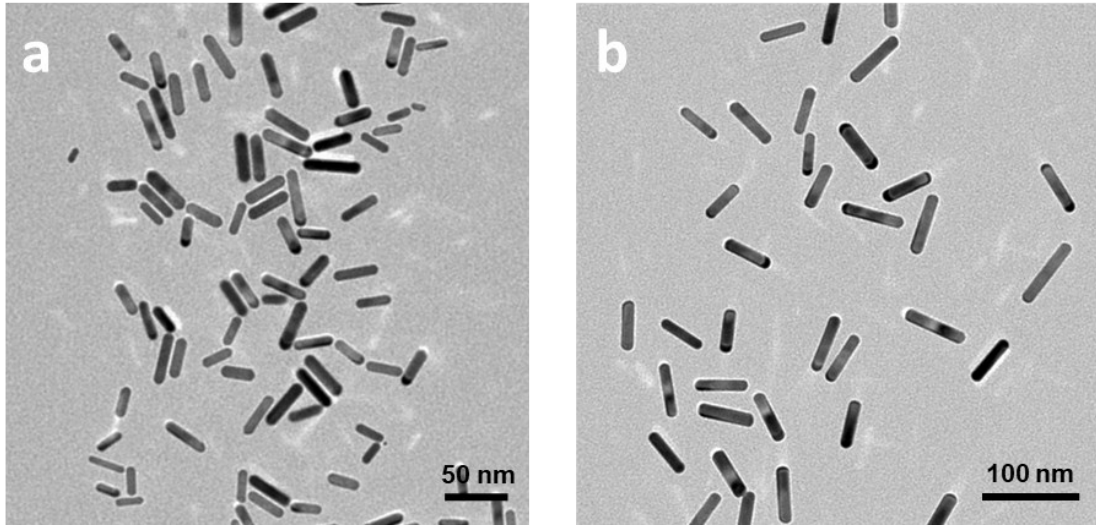


Fig. S1 TEM images of a) Au NRs and b) PAA-Au NRs.

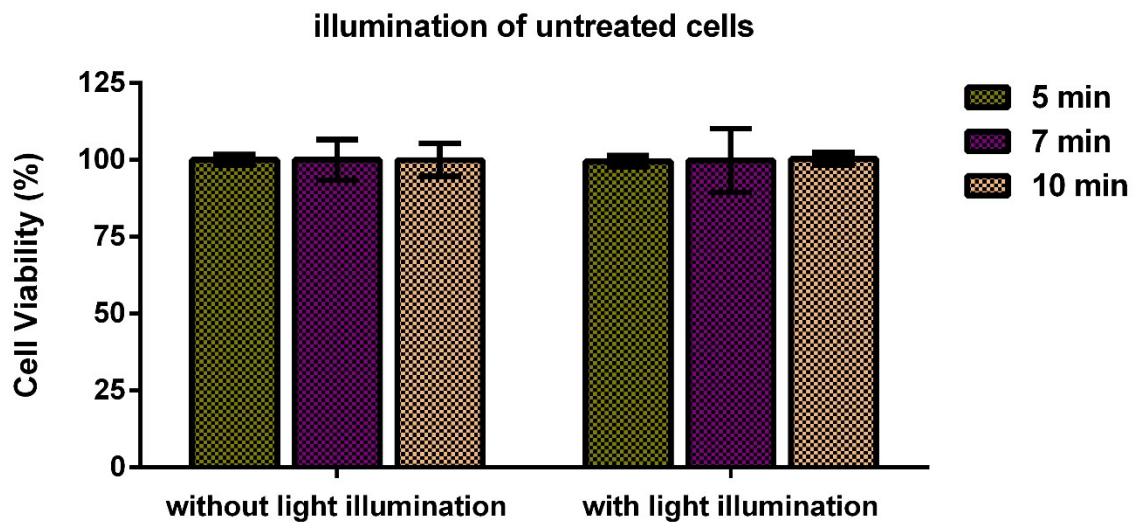


Fig. S2 The effect of light illumination to cell viability of untreated control cells with the samples. Cells were illuminated for 5, 7 and 10 min with blue LumiSource® flatbed lamp at 420 nm and 7 mW/cm² output. Cytotoxicity were measured by MTT assay.

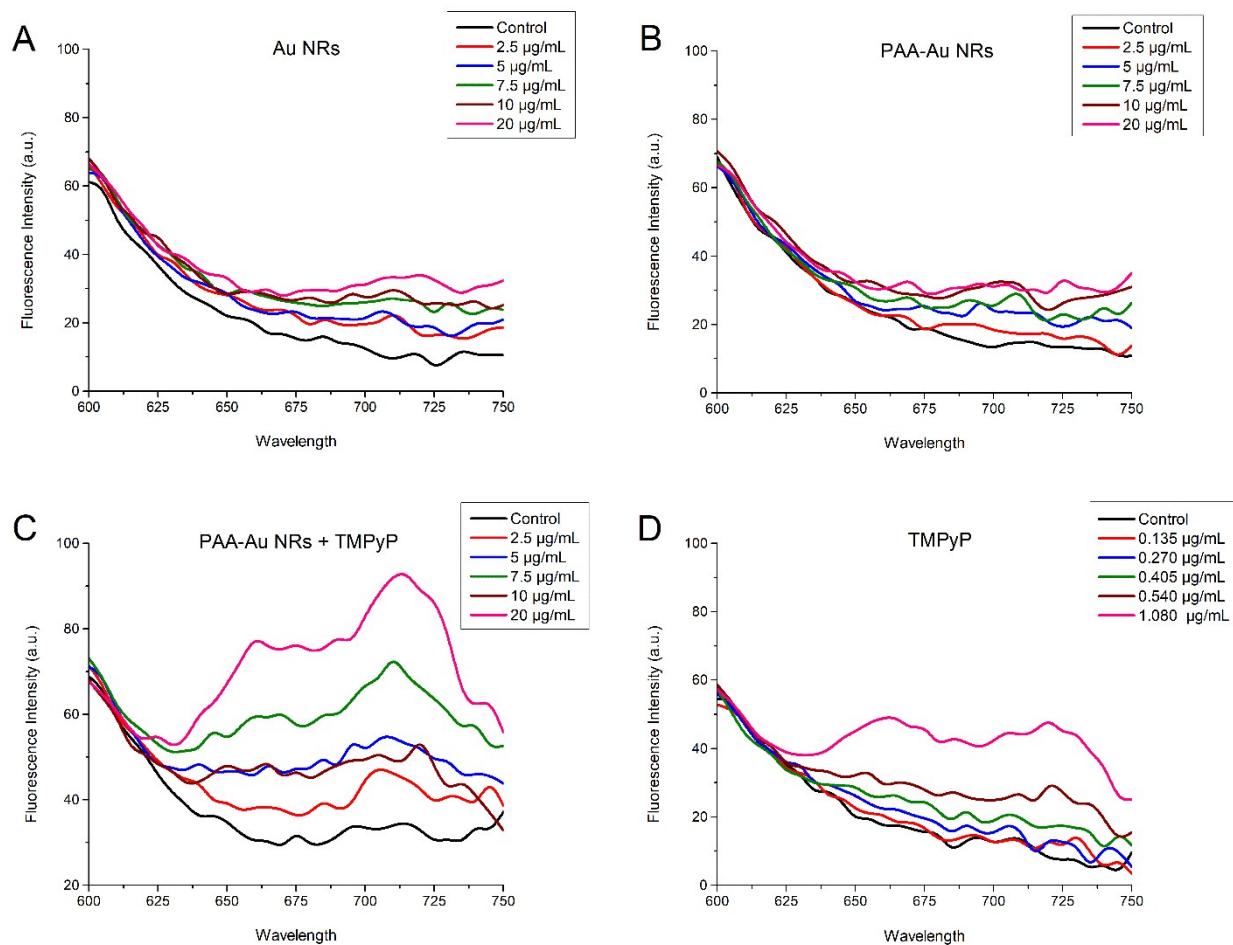
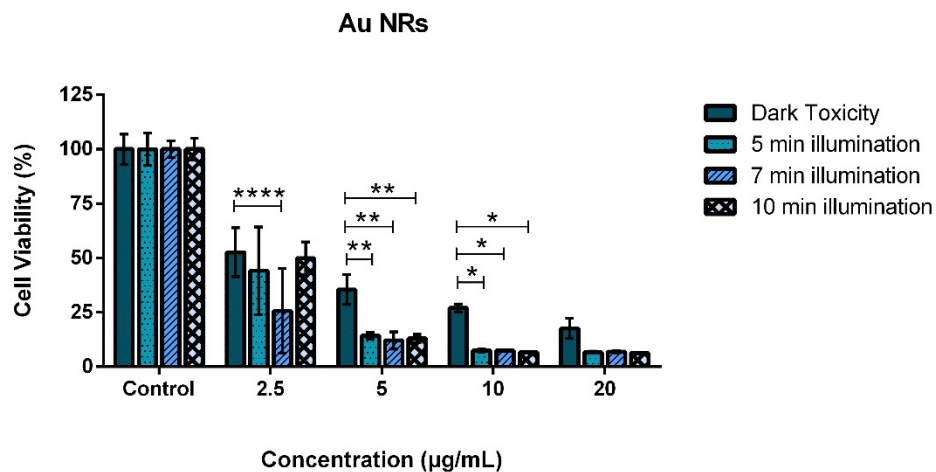


Fig. S3 Fluorescence spectra of 2D monolayer A431 models incubated with Au, PAA-Au, PAA-Au + TMPyP NRs and equivalent free TMPyP at different concentrations for 24 h, between 600-750 nm ($\lambda_{exc} = 420$ nm). Control is untreated cells for each panel.

A



B

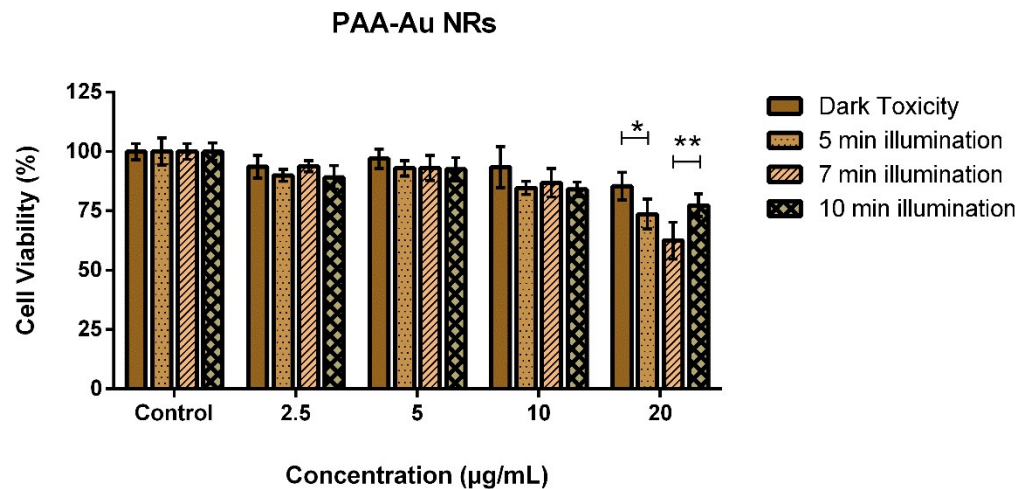


Fig. S4 Effect of light illumination on the cytotoxicity of in vitro 2D monolayer head and neck squamous cell carcinoma models treated with A) Au and B) PAA-Au NRs. The cytotoxicities were measured by MTT assay. Light illumination were carried out with a blue LumiSource® flatbed lamp at 420 nm and 7 mW/cm² output for 5 min, 7 min, and 10 min.