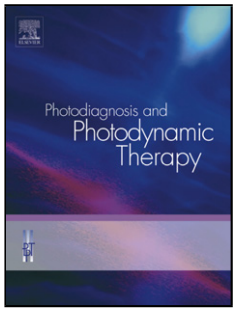

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<AT>In vitro effects of photodynamic therapyinduced by chloroaluminum phthalocyanine nanoemulsion

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<ABS-Head><ABS-HEAD>Graphical abstract
<ABS-P>
<ABS-P><xps:span class="xps_Image">fx1</xps:span>
 <*ABS-HEAD*>Highlights► The photodynamic therapy (PDT) induced more cell death in HeLa compared to A549 cells► Apoptosis was the main cell death pathway detected in HeLa cells► The APE1 protein impairment increases the efficacy of PDT

<ABS-HEAD>Abstract

<ABS-P><ST>Background</ST> The photodynamic therapy (PDT) has been used to treat cancer mainly by inducing oxidative stress. Our aim was to evaluate the effect of PDT and its combination with methoxyamine (MX), a blocker of base excision repair (BER), in cells expressing high levels of the APE1 protein, which is involved in cell oxidative damage response.

<ABS-P><ST>Methods</ST> The HeLa and A549 cells were treated for 3 h with chloroaluminum phthalocyanine incorporated into a well-designed nanoemulsion (ClAlPc/NE); and then irradiated by visible light (@670 nm) with doses of 0.1, 0.5 and 1.0