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# Investigation of Cold Atmospheric Plasma induce Apoptosis in Cancer Cell

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Nowadays, the techniques that use for cancer treatment such as chemotherapy and radiotherapy have deficiency and are not selective for killing only cancer cell. Cold atmospheric pressure plasma with dielectric barrier discharge (DBD) is one of the most important biomedical applications in cancer therapy. It can be applied to living cells and tissues and generated large amount of H2O2 and NOx radicals to anti-cancer. The purpose of this study was to develop mini-DBD air plasma device as the tool for apoptotic cell death in SW480 colorectal cancer cell. The coaxial mini-DBD was driven by kHz DC pulse and generated filamentary plasma with 1 mm length and 2 mm diameter. Plasma powers that modulated by pulse width modulation were carried out by I-V characteristic curves.

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