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Influence of artocarpus altilis fruit extract on cancer cell (Conference Paper)

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Abstract

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Conventional chemopreventive agents causes adverse side effects in cancer patients. Thus, this study focuses on the effects of natural plant extract against cancer cell as a way to reduce or detrimental effects of orthodox drugs. The present study emphasizes on anti-cancer potentiality of Artocarpus altilis fruit extract against cervical cancer cell. Cervical cancer cell treated with methanol extract of artocarpus altilis fruit with the concentration varied from 10µg/ml, 20µg/ml, 30µg/ml, 40µg/ml and 50µg/ml. Treated and untreated (cells without treatment) cell proliferation and half maximal inhibitory concentration IC50 measured after 72 hours of incubation. Cells without treatment, 10µg/ml, 20µg/ml, 30µg/ml, 40µg/ml and 50 µg/ml of extract concentration showed 1.3, 0.98, 0.72, 0.65, 0.51, and 0.3 of cell proliferation factor accordingly with 40µg/ml of IC50 value. The result shows that artocarpus altilis is capable in opposing cervical cancer cell proliferation or growth as the proliferation factor decreases with the increasing dose of extract concentration which can be attributed to the presence of bioactive compound in Artocarpus altilis. © 2018 IEEE.

SciVal Topic Prominence

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Author keywords

Artocarpus altilis cell proliferation cell viability HeLa cancer cell

Indexed keywords

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Engineering uncontrolled terms: Adverse side effects Artocarpus altilis Cancer cells Cell viability Cervical cancer cells Chemopreventive agents Inhibitory concentration Natural plant extracts

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