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Virtual Conference: Recent Trends in Life Sciences (TREND-LS-21) [Conducted on 13-14 March – 2021] Punica granatum Extracts Induces G1 Phase Cell Cycle Arrest and Apoptosis in Skin Cancer Cells

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Punica granatum is a traditional Middle East fruit native of Iran. The benefits of *Punica granatum* peels extracts in skin cancer are well known. *P. granatum* extract has been shown to induce suppression in proliferation of cancer cells and to induce death and G1 cell cycle arrest of Skin cancer cells. Cell cycle regulation is shown to be initiated at G1 phase. According to several studies the constituents present on the *Punica granatum* blocks cancer cells during the G0/G1 phase followed by the induction of apoptosis. *Punica granatum* former treatment of normal human epidermal keratinocytes had shown to increase the cell cycle arrest induced by UVA in the G1 phase of the cell cycle and proves to inhibit UVB induces phosphorylation. Pomegranate exerts high anticancer activity by evoking antiproliferative, anti-invasive, and antimetastatic effects. It had the ability to modulate Bcl-2 proteins, upregulates p21 and p27, and downregulates cyclin-cdk network which leads to the induction of apoptosis Pomegranate exhibits antioxidant activity and consists of anthocyanins, ellagitannins, and hydrolysable tannins which is responsible for Inhibiting UVB-induced DNA damage, UVB-mediated increase in p53 and p21 expression and many others. The present article review major mechanisms involved in anticancer activity of *P granatum*.

Biography

I Mansi Sharma is pursuing PhD from Jaypee Institute of Information Technology (Noida). It is been 1 year and 2 months since my PhD is in undergoing process.



Citation

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