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## A Review on Herbal Immunomodulators in Cancer

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Abstract: Natural products with immunomodulatory activity are widely used in treatment of many diseases including autoimmune diseases, inflammatory disorders in addition to cancer. They gained a great interest in the last decades as therapeutic agents since they provide costly effective and less toxic products than the synthetic chemotherapeutic agents. Immunomodulators are the agents that have the ability to boost or suppress the host defence response that can be used as a prophylaxis as well as in combination with other therapeutic modalities. The anticancer activity of these immunomodulators is due to their anti-inflammatory, antioxidant, and induction of apoptosis, anti-angiogenesis, and anti-metastasis effect. These natural immunomodulators such as genistein, curcumin, and resveratrol can be used as prophylaxis against the initiation of cancer besides the inhibition of tumor growth and proliferation. Whereas, immunostimulants can elicit and activate humoral and cell-mediated immune responses against the tumor that facilitate the recognition and destruction of the already existing tumor. This review represents the recent studies on various natural immunomodulators with antitumor effects.

Keywords: Immunomodulator, Apoptosis, Antioxidant, Antitumour

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