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P 27**Alchemilla vulgaris agg ethanol extract enhances the antitumor immune response in syngeneic mouse melanoma model**

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Alchemilla vulgaris is well known for its diverse biological properties such as antiinflammatory, antioxidant, wound healing, neuroprotective as well as for the treatment of female reproductive system disorders. Our previous results showed that *Alchemilla vulgaris* agg. ethanol extract suppresses the growth of melanoma cells *in vitro* and *in vivo*. The aim of this research was to evaluate the effect of this extract on immune response in spleen and tumor microenvironment in syngeneic model of solid melanoma. The obtained results strongly suggest that treatment with *A. vulgaris* extract significantly modulates the systemic, as well as local intratumor immune response. A similar response was observed in the spleen and tumor microenvironment. Applied treatment significantly increases the accumulation of cytotoxic lymphocytes, while reducing the percentage of CD8⁺ cells that express inhibitory molecules on their surface. On the other hand, treatment increased expression of cytotoxic activity markers of CD8⁺ T cells derived from spleen and primary tumor. In line with this, *A. vulgaris* extract facilitates maturation of dendritic cells making them efficient initiators as well as regulators of acquired immune response to growing tumors. All mentioned above suggest that *Alchemilla vulgaris* agg. ethanol extract diminishes immunosuppressive branch of immune response and stimulates the antitumor activities of immune system through accumulation of cytotoxic lymphocytes and DCs maturation.