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Triamcinolone Acetonide Transdermal System SUN-131

National Cancer Institute

Source

National Cancer Institute. *Triamcinolone Acetonide Transdermal System SUN-131*. NCI Thesaurus. Code C153426.

A transdermal system (TDS) containing triamcinolone acetonide, a synthetic glucocorticoid with anti-inflammatory and immunomodulating properties. Upon application of the TDS to the eyelid, triamcinolone acetonide binds to intracellular glucocorticoid receptors, ultimately inducing the expression of glucocorticoid-responsive genes and lipocortins. Lipocortins inhibit phospholipase A2, thereby blocking the release of arachidonic acid from membrane phospholipids and preventing the synthesis of prostaglandins and leukotrienes, both mediators of inflammation. In addition, pro-inflammatory cytokine production, including interleukin (IL)-1 and IL-6, and the activation of cytotoxic T-lymphocytes is also inhibited. Triamcinolone acetonide also decreases the number of circulating lymphocytes, induces cell differentiation, and stimulates apoptosis through increasing Ikappa-B expression and curtailing activation of nuclear factor (NF)kappa-B.