

The primary mechanism of betamethasone valerate is its ability to control inflammation. It inhibits the abnormal proliferation of keratinocytes, which are the predominant cells in the epidermis. Inflammation is a biological response to harmful stimuli such as pathogens, damaged cells, or irritants, and it involves the immune system's release of pro-inflammatory cytokines and mediators. The drug penetrates the skin and binds to intracellular glucocorticoid receptors. Betamethasone valerate reduces the recruitment and activation of inflammatory cells such as neutrophils, eosinophils, macrophages, and lymphocytes to the site of inflammation.