

Psoriasis

Psoriasis is a benign relatively moderate dermatological disease which however, affects the quality of life of patients representing 2% to 3% of the population in Europe, the United States and Japan.

Psoriasis is characterized by peeling, a thickening and reddening of the skin, often accompanied by itching. Recurrences are frequent between periods of remission of varying lengths and a definite cure is exceptional. Some forms cover a large proportion of the body surface area with varying degrees of severity.

The thickening of the skin and the squama are caused by excessive reproduction of keratinocytes, the skin cells which form the superficial keratinized layer protecting the skin. The uncontrolled growth of the keratinocytes means that they no longer differentiate sufficiently causing psoriatic lesions on the skin's keratinous layer. The anti-proliferative and pro-differentiating properties of vitamin D analogues on keratinocytes have led to them being used as medicines for direct cutaneous application to treat psoriasis. Three vitamin D derivatives have been marketed for several years in this dermatological indication: calcitriol, calcipotriol and tacalcitol. The effectiveness of vitamin D analogues on the reproduction of keratinocytes has been shown to be similar to that of very strong cortisone-based derivatives. The advantage of vitamin D analogues is that they exercise more of a differentiation activity, which restores the skin more completely. However, there is a risk of hypocalcaemia due to the products passing through the skin, if too much cream is applied over too large an area. This is especially true for calcitriol or tacalcitol, the concentrations of which are limited to 3 and 4 µg/g of cream or pomade respectively. Calcipotriol, the leading vitamin D analogue on the market is marketed in many galenic forms with a concentration of 50 µg/g due to its low hypocalcaemia power. A inecalcitol based pomade has been developed up to Phase IIa with a concentration of 5 µg/g, in this anti-psoriatic indication.

The first signs of effectiveness have been observed, but the optimum dosage remains to be determined in a Phase IIb study testing 10, 20 and 30 µg/g concentrations of pomade. A partner is actively being sought to continue developing the inecalcitol in this indication.