



[Authoritative facts](#) about the skin from the [New Zealand Dermatological Society Incorporated](#).

[Home](#) | [Treatments](#)

## Calcipotriol

Calcipotriol is a vitamin-D derivative, about 1% as powerful as the natural hormone calcitriol (also known as 1,25 dihydroxycholecalciferol).

Known as calcipotriene (Dovonex) in the United States, calcipotriol is available as an ointment, cream and scalp solution at a concentration of 50µg/g. The trade name in New Zealand is Daivonex. It is not available in tablet or injection form.

### Uses

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Calcipotriol is a prescription medication used mainly for [psoriasis](#). It is moderately or very effective for about 80% of patients. This means the patches become less scaly and thick, but red patches often persist despite continued treatment.

It should be applied to the affected patches of psoriasis twice daily and can be used safely long term. The ointment is used on trunk and limbs. The cream is more often used in the body folds or on face and ears. The scalp solution is used in hairy areas.

#### Plaques of severe psoriasis before and after six weeks use of calcipotriol ointment



Calcipotriol is sometimes also helpful in the following skin conditions:

- [Morphoea](#)
- [Palmoplantar pustulosis](#)
- [Ichthyosis](#)
- Keratoderma
- [Grover's disease](#)
- [Disseminated superficial porokeratosis](#) & [linear porokeratosis](#)
- [Hailey-Hailey disease](#)
- [Pityriasis rubra pilaris](#)
- [Acanthosis nigricans](#)
- [Epidermal naevi](#)

### Side effects

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Topical calcipotriol is usually well tolerated. Side effects are more common with ointment than cream (but the ointment is more effective on plaque psoriasis).

- It may sting or cause an irritant [dermatitis](#) (dry itchy rash) on facial skin: use very cautiously in psoriasis affecting this area. When used on other sites, wash hands carefully to reduce the chance of inadvertent application to the face.
- Treated psoriasis may develop peeling around the edge of the plaques.
- Surrounding skin may be irritated i.e. become red, dry and itchy.
- About 1% is absorbed through the skin. An overdose (more than 100g/week) could have an effect on calcium metabolism. If large doses are necessary, calcium levels in blood and urine should be monitored.

Keep calcipotriol away from your dog: it is very poisonous and may be fatal if eaten by a dog.

## Combined treatment

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Calcipotriol is often used with other treatments for psoriasis with good effect. These include:

- **Topical steroids** Calcipotriol may reduce the skin thinning effect of [topical steroids](#). The best way to combine them is still unclear; examples include:
  - Both calcipotriol and topical steroid are applied twice daily.
  - Calcipotriol may be used once daily, and a topical steroid once daily 12 hours later.
  - Calcipotriol may be used twice daily Monday to Friday, and the topical steroid twice daily at weekends. This may be a safer regime.
- **Salicylic acid** [Salicylic acid](#) is used to remove scale but unfortunately deactivates calcipotriol. Calcipotriol should therefore not be applied at the same time. If combined use is required, apply at a different time of day.
- **Ultraviolet radiation (UVR)** UVR deactivates calcipotriol, which could also act as a [sunscreen](#), so the calcipotriol should be applied after [UVR](#) and not beforehand.
- **Acitretin** Some patients find calcipotriol more irritating when they are on [acitretin](#), because acitretin thins the skin and make it more sensitive. Use emollients regularly.
- **Methotrexate** No special precautions are necessary with the combination of calcipotriol with [methotrexate](#).

### Related information

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#### On DermNet NZ:

- [Psoriasis](#)

#### Other websites:

- [Medsafe](#) information about medicines

**Author:** Amanda Oakley MBChB FRACP DipHealInf Department of Dermatology, Health Waikato.

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

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