

# Queensland Community Pharmacy Scope of Practice Pilot

## Mild to Moderate Atopic Dermatitis – Clinical Practice Guideline

### Guideline Overview

**📋 Confirm management is appropriate****👥 Communicate agreed treatment plan****! Refer when****⊕ Clinical review**



## **‘Red flag’ warning signs at patient presentation that necessitate referral to a medical practitioner:**

- Widespread rash with painful skin
- Raised purple rash that doesn’t blanch
- Generalised erythema that covers 90% or more of the skin
- Blistering of the skin and mucous membranes (that may include mouth and eyes)
- Rash with signs of systemic illness including fever, lethargy, nausea and vomiting, headache
- Chronic sores or ulcers.

### **Key points**

- Both pruritus and a rash must be present for a diagnosis of atopic dermatitis <sup>(1)</sup>.
- Atopic dermatitis (AD) imposes a significant financial, psychological and social burden on the lives of patients and their families, and is associated with poor sleep, depression, anxiety, poor self-esteem and reduced quality of life <sup>(2, 3)</sup>.
- Secondary bacterial infection is a common complication of atopic dermatitis e.g., secondary impetigo <sup>(4)</sup>. Where impetigo is present, it should be treated as per the Clinical Practice Guidelines for Impetigo.
- Patients with atopic dermatitis are more likely to have an immediate or family history of atopic conditions e.g., allergic rhinitis and asthma <sup>(5)</sup>.
- The mainstay of treatment for active atopic dermatitis is topical corticosteroids (TCS) in combination with emollients, identification and avoidance of triggers, and the early treatment of infection <sup>(6)</sup>.

When applying the information contained within this clinical practice guideline, pharmacists are advised to exercise professional discretion and judgement. The clinical practice guideline does not override the responsibility of the pharmacist to make decisions appropriate to the circumstances of the individual, in consultation with the patient and/or their carer.



## Refer when

- The patient has 'red flag' warning signs
- The diagnosis is unclear
- The patient is under 6 months or over 65 years of age
- The patient is planning a pregnancy or pregnant
- The AD is severe (SCORAD score >51 or EASI score >21.1)
- The patient presents with warning signs, including systemic signs and symptoms
- A paediatric patient presents with a history of immediate or delayed-type hypersensitivity to food, poor feeding or sleep, concerns about failure to thrive
- The patient is immunocompromised due to an underlying medical condition (including diabetes) and/or medicines
- The patient presents with, or develops, complications requiring referral including eczema herpeticum
- The condition is having a marked negative emotional and social effect
- The patient requires large quantities of topical products/ topical corticosteroids that would generally require authority from the pharmaceutical benefits scheme (refer to the [therapeutic guidelines: application and quantity of topical steroids](#), full body coverage is approximately 20g ointment or 30g cream for an average adult)
- The condition does not respond to optimal treatment, worsens or reoccurs (treatment failure) within 2-4 weeks, specifically when there is:
  - Inadequate clinical improvement after 1-2 weeks
  - Failure to achieve stable long-term disease control
  - Presence of ongoing impairment e.g., pruritus, pain, loss of sleep, learning difficulties and poor quality of life while on treatment.

## Gather information and assess patient's needs

Atopic Dermatitis (AD) is usually diagnosed clinically, based on patient history and physical findings <sup>(7, 8)</sup>.

### Patient history

Sufficient information should be obtained from the patient to assess the safety and appropriateness of any recommendations and medicines.

The patient history should consider:

- age
- weight (if a child)
- pregnancy and lactation status (if applicable)
- onset, duration, nature, location, severity and extent of patches and plaques, including recent or previous relapses or flare ups
- response to any previous treatments
- impacts on quality of life and psychosocial wellbeing including sleep and learning
- dietary history and changes in diet

- underlying and associated medical conditions including asthma, allergic rhinitis, allergic conjunctivitis, allergic contact dermatitis, food allergy and depression
- exposure to potential triggers or irritants
- other factors including family history, environmental factors (e.g., exposure to smoking and airborne pollution) and infectious factors
- current and recently commenced medicines (including prescribed medicines, vitamins, herbs, other supplements and over-the-counter medicines)
- drug allergies/adverse drug events.

A comprehensive assessment template to assist with patient history is provided at Appendix 1 - Assessment template.

## Examination

### Clinical features

- AD is characterised by dry, scaly erythematous patches with the primary hallmark being itch <sup>(9)</sup>. while AD can affect any area of skin, patches typically occur on the:
  - face
  - inside of the elbow/arm and back of the knee (cubital and popliteal fossae)
  - wrists and ankles.
- For a diagnosis of AD to be made, both signs of itching and a rash must be present <sup>(7)</sup>.
- Further information on clinical features is available from the [Therapeutic Guidelines: atopic dermatitis](#) and [Dermnet NZ: guidelines for the diagnosis and assessment of eczema](#).
- The skin signs of AD may vary depending on age and ethnicity <sup>(7, 10)</sup>.
- People with AD are also at a higher risk of allergic contact reactions (e.g., nickel is a common contact allergen) and are prone to other viral skin infections (e.g., common warts and molluscum contagiosum) <sup>(4)</sup>.
- For patients without an existing diagnosis of AD, other conditions with similar clinical features, symptoms and presentations that may be considered are outlined in [Dermnet NZ: guidelines for the diagnosis and assessment of eczema](#) <sup>(5)</sup>.

### Severity

For the purposes of the Pilot, the [SCORing Atopic Dermatitis \(SCORAD\) index](#) or the [Eczema Area and Severity Index \(EASI\)](#) can be used to assess the severity of the AD to determine whether the patient requires referral, to inform the treatment plan and to monitor treatment effectiveness:

- mild AD is indicated by a score of <25 (SCORAD) or <7 (EASI)
- moderate AD is indicated by a score 25-50 (SCORAD) or 7.1-21 (EASI)
- severe AD is indicated by a score >50 (SCORAD) or >21.1 (EASI) <sup>(2, 11)</sup>.

Conventional scoring systems may underestimate AD severity and erythema in people with darker skin tones, including Aboriginal and Torres Strait Islander and Pacific Islander populations, and people of African descent <sup>(8)</sup>. Consider the skin tone when assessing erythema and where there is uncertainty, severity can be assessed using the EASI and

upgrading the score by 1 grade or more for heavily pigmented skin (e.g., from mild to moderate) <sup>(5, 11)</sup>.

## Complications of AD

- Secondary bacterial infections (impetiginisation) are the most common complication of AD <sup>(4, 10)</sup>.
  - Early treatment of concurrent infection is important for successful management of active AD <sup>(6)</sup>.
  - Suspected impetigo must be assessed and treated as per the clinical practice guideline for impetigo (if suitable) or referred to a medical practitioner.
- Eczema herpeticum is an infection of the AD with herpes simplex virus (hsv) <sup>(4, 10)</sup>.
  - Vesicles develop usually in areas of active or recent AD, followed by the onset of high fever and adenopathy <sup>(4)</sup>.
  - Painful corneal lesions will develop if the eye is involved and if the hsv infection becomes systemic, it may be fatal <sup>(4)</sup>.
  - Refer to a medical practitioner if eczema herpeticum is suspected.

## Management and treatment plan

Pharmacist management of mild to moderate AD involves:

- **development of an Eczema Action Plan:**
  - Based on the Australasian Society of Clinical Immunology and Allergy [Action Plan for Eczema template](#) <sup>(12)</sup>.
- **non-pharmacological/general measures:**
  - Advice regarding skin care and minimising aggravating factors as per the [Therapeutic Guidelines: Atopic dermatitis](#) <sup>(13)</sup> and the [Australian Medicines Handbook: Eczema](#) <sup>(14)</sup>.
- **pharmacotherapy:**
  - Topical corticosteroids as per the [Therapeutic Guidelines: Atopic dermatitis - Topical corticosteroids for atopic dermatitis](#) <sup>1 (13)</sup>.
  - Tar preparations as per the [Therapeutic Guidelines: Atopic Dermatitis - Nonsteroid-based topical treatments](#) <sup>(13)</sup>.

**NB1:** Very potent TCS (class IV), and potent TCS (class III containing betamethasone dipropionate 0.05%, betamethasone valerate 0.1%, methylprednisolone aceponate 0.1% or mometasone furoate 0.1%) should not be used for children aged 12 months or younger <sup>(14)</sup>.

### Additional information for consideration

- Selecting the correct potency and formulation of TCS is important to avoid both undertreatment and fears around TCS use <sup>(15)</sup>. Pharmacists should consult:
  - the [Therapeutic Guidelines: Considerations in the use of topical corticosteroids](#) <sup>(16)</sup>
  - the [Australian Medicines Handbook: Corticosteroids \(skin\)](#) <sup>(14)</sup>
  - the Australasian College of Dermatologists:

- [Consensus statement: Management of atopic dermatitis in adults](#) <sup>(1)</sup>
- [Consensus statement: Topical corticosteroids in paediatric eczema](#) <sup>(6)</sup>
- other sources e.g., Australian Journal of General Practice [Selection of an effective topical corticosteroid](#) <sup>(15)</sup>.
- Therapeutic regimens for AD can be expensive and complicated, making long-term compliance difficult and leading to poor outcomes for patients. Choice of treatment should consider the impact of factors such as age, socioeconomic status, cost and literacy on the patient's ability adhere to prescribed therapies <sup>(4)</sup>.

## Confirm management is appropriate

Pharmacists must consult the Therapeutic Guidelines, Australian Medicines Handbook and other relevant references to confirm that the treatment recommendation is appropriate, including for:

- contraindications and precautions
- drug interactions
- pregnancy and lactation.

## Communicate agreed management plan

Comprehensive advice and counselling (including supporting written information when required) as per the Australian Medicines Handbook and other relevant references should be provided to the patient regarding:

- individual product and medicine use (e.g., dosing and application instructions for emollients, TCS, tar preparations and wet dressing use)
- how to manage adverse effects
- when to seek further care and/or treatment, including recognising secondary infection
- when to return to the pharmacist for clinical review.

It is the pharmacist's responsibility to ensure the suitability and accuracy of any resources and information provided to patients (and parents/caregivers if applicable) and to ensure compliance with copyright conditions.

The agreed management plan should be shared with members of the patient's multidisciplinary healthcare team, with the patient's consent.

### Patient resources/ information

- Eczema Association Australasia – [How to manage Eczema](#)
- American Academy of Dermatology Association – [Eczema Resource Centre](#)
- Therapeutic Guidelines: [How to apply a wet dressing and How to use the soak and Smear technique.](#)

### General advice

- Treatment may be unsuccessful when there is poor adherence with therapy, skin infection, allergy or severe dermatitis <sup>(4, 8, 14)</sup>.
- The patient should be advised to immediately see a medical practitioner if symptoms worsen after commencing treatment.

- Common adverse effects of TCS, such as transient burning, stinging or pain on application, can generally be reversed by stopping the medicine.
  - Refer to a medical practitioner when adverse effects cannot be managed in the pharmacy setting.
- When recommending TCS for AD, pharmacists should reassure patients/caregivers who have concerns about the safety of TCS that they are safe when used appropriately <sup>(6)</sup>.

## Clinical review

Clinical review with the pharmacist should occur in line with recommendations in the therapeutic guidelines and other relevant guidelines. clinical review is recommended **7 to 14 days** after initiation of new treatment and/or changes to the treatment plan. clinical review should consider:

- response to treatment (using the SCORAD index or EASI)
- adverse effects
- if changes are required to the treatment plan. decisions to continue, modify or stop treatment should be reflected in the patient's eczema action plan.

Pharmacists should generally only prescribe (including repeats) a sufficient quantity of medicine for the period until the patient's next review.

Pharmacotherapy for AD may be required longer-term; patients should be advised to return to their usual medical practitioner if large quantities of topical treatments are required.



## Pharmacist resources

- Therapeutic Guidelines:
  - Dermatology: Atopic dermatitis
  - Dermatology: Considerations in the use of topical corticosteroids
- Australian Medicines Handbook:
  - Drugs for Eczema
  - General principles: topical treatment of skin conditions
  - Topical steroids – how much do I use?
- Pharmaceutical Society of Australia - Fingertip Guide
- DermNet NZ:
  - [Atopic dermatitis](#)
  - [Atopic dermatitis images](#)
  - [Guidelines for the diagnosis and assessment of eczema](#)
  - [Fingertip unit](#)
- MSD Manual (Professional version) [Atopic dermatitis \(Eczema\)](#)
- EASI [Eczema area and severity index](#)
- SCORAD calculators:
  - [MDApp](#)
  - [www.scorad.corti.li](http://www.scorad.corti.li)
- Australian Journal of General Practice - [Selection of an effective topical steroid](#)
- Australasian Society of Clinical Immunology and Allergy - [Action Plan for Eczema](#)
- The Australasian College of Dermatologists:
  - [Consensus Statement: Management of atopic dermatitis in adults](#)
  - [Consensus Statement: Topical corticosteroids in paediatric eczema](#)
  - [A-Z of skin – Atopic dermatitis](#)
- [Skin Deep](#) - An open-access bank of high-quality photographs of medical conditions in a wide range of skin tones for use by both healthcare professionals and the public.



## Appendix 1 - Assessment template

Atopic Dermatitis Assessment Template <sup>(17)</sup>
<p><b>Identification of triggers:</b></p> <ul style="list-style-type: none"><li>• irritants<ul style="list-style-type: none"><li>○ soaps and detergents</li><li>○ abrasive clothing</li><li>○ chlorinated swimming pools</li><li>○ emollients containing sodium lauryl sulphate</li></ul></li><li>• skin infections<ul style="list-style-type: none"><li>○ <i>Staphylococcus aureus</i></li><li>○ <i>Streptococcus pyogenes</i></li><li>○ HSV (eczema herpeticum)</li><li>○ molluscum contagiosum</li></ul></li><li>• contact allergens</li><li>• stress</li><li>• food and inhalant triggers<sup>1</sup>.</li></ul>
<p><b>Assessment of current and previous treatments:</b></p> <ul style="list-style-type: none"><li>• bathing/showering frequency and temperature</li><li>• use of soap, soap-free cleansers, shampoos and/or bath additives</li><li>• emollient/moisturizer use, application frequency and quantity applied</li><li>• topical corticosteroids (TCS) use, types, sites of application and quantity applied<sup>2</sup></li><li>• adverse reaction to topical agents e.g., stinging</li><li>• antihistamine and antibiotic use.</li></ul>
<p><b>Impact of eczema<sup>3</sup>:</b></p> <ul style="list-style-type: none"><li>• psychosocial impact</li><li>• frequency of skin infections</li><li>• frequency of days off employment, school/activities, learning</li><li>• sleep.</li></ul>

**NB1:** AD is associated with an increased risk of immediate or delayed-type hypersensitivity reactions to food proteins.

**NB2:** Underuse of TCS is a common cause of previous treatment failure.

**NB3:** Formal measures may be used e.g., The Children's Dermatology Life Quality Index (CDLQI) <sup>(18)</sup> or Patient-Orientated Eczema Measure (POEM)<sup>(19)</sup>.

## References

1. The Australasian College of Dermatologists. Consensus statement: Management of atopic dermatitis in adults. Melbourne: The Australasian College of Dermatologists; 2021.
2. Wollenberg A, Christen-Zäch S, Taieb A, Paul C, Thyssen JP, de Bruin-Weller M, et al. ETFAD/EADV Eczema task force 2020 position paper on diagnosis and treatment of atopic dermatitis in adults and children. *J Eur Acad Dermatol Venereol*. 2020;34(12):2717-44.
3. Willems A, Tapley A, Fielding A, Tng ETV, Holliday EG, van Driel ML, et al. Prevalence and Associations of General Practice Registrars' Management of Atopic Dermatitis: A Cross-Sectional Analysis from the Registrar Clinical Encounters in Training Study. *Dermatology practical & conceptual*. 2021;11(4):e2021128-e.
4. Ruenger T. MSD Manual Professional Version: Atopic Dermatitis (Eczema): Merck & Co; 2021 [cited 2022 June 7]. Available from: <https://www.msdmanuals.com/professional/dermatologic-disorders/dermatitis/atopic-dermatitis-eczema?query=atopic%20dermatitis>.
5. DermNet NZ: DermNet New Zealand Trust; 2022 [cited 2021 18 August]. Available from: <https://dermnetnz.org>.
6. The Australasian College of Dermatologists. Consensus statement: Topical corticosteroids in paediatric eczema. Melbourne: The Australasian College of Dermatologists; 2017.
7. DynaMed: Atopic Dermatitis: EBSCO Information Services; 2018 [cited 2022 March 3]. Available from: <https://www.dynamed.com/condition/atopic-dermatitis>.
8. Stanway A, Jarrett P. Atopic dermatitis: DermNet New Zealand Trust; 2021 [cited 2022 February 8]. Available from: <https://dermnetnz.org/topics/guidelines-for-the-diagnosis-and-assessment-of-eczema/>.
9. Therapeutic Guidelines: Dermatology. Melbourne: Therapeutic Guidelines Limited; 2021 [cited 2022 March 4]. Available from: <https://tgldcdp.tg.org.au/topicTeaser?guidelinePage=Dermatology&etgAccess=true>.
10. Weidinger S, Novak N. Atopic dermatitis. *Lancet*. 2016;387(10023):1109-22.
11. Hanifin JM, Baghoomian W, Grinich E, Leshem YA, Jacobson M, Simpson EL. The Eczema Area and Severity Index-A Practical Guide. *Dermatitis*. 2022;33(3):187-92.
12. Australasian Society of Clinical Immunology and Allergy (ASCIA). Action Plan for Eczema: ASCIA; 2022 [cited 2022 March 29]. Available from: [https://www.allergy.org.au/images/pcc/ASCIA\\_Eczema\\_Action\\_Plan\\_2022.pdf](https://www.allergy.org.au/images/pcc/ASCIA_Eczema_Action_Plan_2022.pdf).
13. Therapeutic Guidelines: Dermatology (Dermatitis). Melbourne: Therapeutic Guidelines Limited; 2021 [cited 2022 December 15]. Available from: [https://tgldcdp.tg.org.au/viewTopic?etgAccess=true&guidelinePage=Dermatology&topicfile=c\\_DMG\\_Atopic-dermatitis\\_topic\\_1&guidelinename=Dermatology&sectionId=c\\_DMG\\_Atopic-dermatitis\\_topic\\_1#c\\_DMG\\_Atopic-dermatitis\\_topic\\_1](https://tgldcdp.tg.org.au/viewTopic?etgAccess=true&guidelinePage=Dermatology&topicfile=c_DMG_Atopic-dermatitis_topic_1&guidelinename=Dermatology&sectionId=c_DMG_Atopic-dermatitis_topic_1#c_DMG_Atopic-dermatitis_topic_1).
14. Australian Medicines Handbook: Drugs for eczema. Adelaide: Australian Medicines Handbook Pty Ltd; 2022 [cited 2022 September 21]. Available from: <https://amhonline.amh.net.au/chapters/dermatological-drugs/drugs-eczema?menu=vertical>.
15. Aung T, Aung S. Selection of an effective topical corticosteroid. *Australian Journal of General Practice*. 2021;50(9):651-5.
16. Therapeutic Guidelines: Dermatology (Considerations in the use of topical corticosteroids). Melbourne: Therapeutic Guidelines Limited; 2021 [cited 2022 September 15]. Available from: [https://tgldcdp.tg.org.au/viewTopic?etgAccess=true&guidelinePage=Dermatology&topicfile=c\\_DMG\\_Considerations-in-the-use-of-topical-corticosteroids\\_topic\\_1&guidelinename=Dermatology&sectionId=c\\_DMG\\_Considerations-in-the-use-of-topical-corticosteroids\\_topic\\_1#c\\_DMG\\_Considerations-in-the-use-of-topical-corticosteroids\\_topic\\_1](https://tgldcdp.tg.org.au/viewTopic?etgAccess=true&guidelinePage=Dermatology&topicfile=c_DMG_Considerations-in-the-use-of-topical-corticosteroids_topic_1&guidelinename=Dermatology&sectionId=c_DMG_Considerations-in-the-use-of-topical-corticosteroids_topic_1#c_DMG_Considerations-in-the-use-of-topical-corticosteroids_topic_1).
17. Purvis D. Guidelines for the diagnosis and assessment of eczema [Webpage]. DermNet New Zealand Trust; 2014 [cited 2021 August 10]. Available from: <https://dermnetnz.org/topics/guidelines-for-the-diagnosis-and-assessment-of-eczema/>.

18. Lewis-Jones M, Finlay A. The Children's Dermatology Life Quality Index (CDLQI): Initial validation and practical use. *British Journal of Dermatology*. 1995;132:942-9.
19. University of Nottingham. POEM – Patient Oriented Eczema Measure: Centre of Evidence Based Dermatology; 2022 [Available from: <https://www.nottingham.ac.uk/research/groups/cebd/resources/poem.aspx#:~:text=The%20Patient%20Oriented%20Eczema%20Measure,as%20experienced%20by%20the%20patient.>]