Consensus statement

THE AUSTRALASIAN COLLEGE OF DERMATOLOGISTS

Management of atopic dermatitis in adults

Purpose: To provide evidence-based insights and practical advice on the management of atopic dermatitis in adults.

Audience: Health professionals

Acknowledgement: This statement has been adapted from *Smith S et al. (2020), Atopic dermatitis in adults: An Australian management consensus. Australas J Dermatol, 61: 23-32.* by The Australasian College of Dermatologists with permission from the authors.

College would like to thank A/Prof Saxon Smith, A/Prof Gillian Marshman, A/Prof Erin McMeniman, Dr Gayle Ross, A/Prof Michael Sladden for developing this adaptation.

Endorsement: This consensus statement has been reviewed and approved by the ACD Expert Advisory Committee.

Disclaimer: This consensus statement reflects the general views of The Australasian College of Dermatologists at the date of release and may be subject to amendment to reflect emerging clinical and scientific evidence. This information provides educational information and is not intended as a substitute for individual patient assessment. Practitioners are advised to interpret and apply recommendations according to the needs and circumstances of each patient.

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Purpose

The Australasian College of Dermatologists is the sole medical college accredited by the Australian Medical Council for the training and continuing professional development of medical practitioners in the speciality of dermatology. As the national peak membership organisation, we represent over 550 dermatologist Fellows (FACD) and 100 trainees.

As the leading authority in Australia for dermatology, we provide information, advocacy and advice to patients, communities, government and other stakeholders on skin health and dermatological practice. Our vision is for the highest standard of skin health and dermatology care to be available and accessible to all patients and communities.

The purpose of this consensus statement is to provide insights and practical advice to health professionals on the management of atopic dermatitis in adults in Australia including on:

- The definition, diagnosis and severity of atopic dermatitis (AD)
- Treatment goals and treatment choices
- Consideration of patient perspectives: comorbidities, quality of life (QOL) and education

Background and context

Atopic dermatitis is a chronic, relapsing, pruritic skin condition, affecting both adults and children that negatively impacts on QOL.

Its aetiology involves a complex interaction of a dysfunctional skin barrier, immune dysregulation, individual genetics and environmental factors. There is now focused research interest on the interplay of the epidermis and immune system in patients with AD; multiple molecular targets are being explored with agents in development that target specific components of the immune system and inflammation-related itch.

This evolving research and the availability of new systemic therapies is rapidly changing how this condition is managed by health professionals. Access to many of these new treatments requires an assessment of severity based on validated assessment scales. A current lack of comparative data for new systemic therapies means as of yet there is no established algorithm.

Methodology

An Australian panel of five dermatologists and one clinical immunologist met to review the literature and critically examine clinical questions of relevance to Australian healthcare practitioners and develop a series of recommendation statements. A consensus panel, comprising the initial panel plus nine additional members, used a 2-round Delphi voting process to determine a set of final guidance statements.

The resulting publication (Smith S, et al. (2020), *Atopic dermatitis in adults: An Australian management consensus.* Australas J Dermatol, 61: 23-32) has been adapted for use by health professionals by the Australasian College of Dermatologists.

ACD consensus recommendations for health professionals

Definition, diagnosis and severity

Defining AD

Severity definitions for AD are continuing to evolve, with clinical trials generally based on a composite 'moderate-to-severe' definition. In Australia, the Pharmaceutical Benefits Advisory Committee (PBAC) has chosen to define 'severe' separately for the purposes of subsidisation of medicines under the Pharmaceutical Benefits Scheme.

As this consensus statement is to provide clinicians and patients in Australia with a *guideline* on how best to manage these disease states in the Australian context, the authors have taken the pragmatic decision to follow suit in defining 'severe' separately. This consensus statement will however continue to be reviewed and adjusted as the broader consensus on severity definitions evolves.

Cases of AD can be divided into three main categories – mild, moderate and severe – on the basis of treatment response based on the following definitions. However, it is important to note that AD patients will fluctuate across the different scales used to assess severity.

Mild AD	Mild AD refers to any patient whose condition responds adequately to optimised outpatient emollient use, avoidance of irritants and disease triggers, and standard topical anti-inflammatory therapies
Moderate AD	Moderate AD refers to patients whose condition may not be adequately controlled by topical therapies alone. EASI score between 10-20, intermittent flares, some impact on QOL, however may not require continuous therapy.
Severe AD	Severe AD refers to any patient whose condition does not respond adequately to optimised outpatient emollient use, avoidance of irritants and disease triggers, and standard topical anti-inflammatory therapies. EASI score >20, frequent flares, poor QOL.
A flare	A flare is an acute, clinically substantial worsening of signs and symptoms of AD requiring therapeutic intervention with increased quantities of anti-inflammatory therapy, or escalation to more potent immunosuppressive treatment, or hospitalisation.

Criteria for specialist referral

Referral to a dermatologist/immunologist is advisable if a person's dermatitis:

- is not responsive to standard treatment;
- if it causes significant distress and is interfering with sleep, school or work;
- if an allergy is suspected; and/or
- if there are recurrent bacterial or viral infections.

Diagnosis of AD

Patients with presumed AD should have their diagnosis based on documentation of pruritus, typical morphology and distribution, chronic (or chronic relapsing) course and consideration of other diagnostic features, including:

- Family history (bronchial asthma, allergic rhinitis and/or conjunctivitis, atopic dermatitis, IgE mediated food type allergy);
- Personal history (bronchial asthma, allergic rhinitis and/or conjunctivitis, IgE-mediated food allergy);
- Follicular papules;
- Elevated serum IgE levels.

Severity of AD

Assessment scales

Both patient-reported outcome scales and clinician assessed scales are used to assess disease severity. There are many different scales available. It is important to become familiar and comfortable with the scales selected and to adopt a system that is practical in the context of your clinical practice.

Patient reported outcome scales

Currently available scales for eliciting information on itch, sleep, impact on daily activity and persistence of disease should be used mainly when practical. For the purposes of quantifying severity, there should be:

- a minimum of two patient-related measurements PLUS
- a direct measurement of sleep impact

Validated QOL scales may be used to help document the impact of AD on the patient. Such tools include:

Dermatology life quality index (DLQI)	10 item questionnaire assessing impact on daily activities and overall QOL including work, social activities and intimacy. Each of 10 items is scored on a 4-point scale. It is validated in many patient populations and languages and is readily incorporated into dermatology clinics. https://www.cardiff.ac.uk/medicine/resources/quality-of-life-questionnaires/dermatology-life-quality-index
Skindex-16	Assesses the effects of skin disorders on QOL, regardless of the type of dermatosis or patient's comorbidity. Derived from Skindex-29, the questionnaire consists of 16 items and is easy to apply. It includes subscores for emotional, symptom, and functional impact on QOL. https://eprovide.mapi-trust.org/instruments/skindex

Sleep impact can be measured using one of the following:

5-D pruritus scale (item 4)	Developed as a brief but multidimensional questionnaire. Item 4 asks patients to rate the impact of their itching on sleep, leisure/social, housework/errands and work/school over the last two weeks. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2875190/
Patient-Oriented Eczema Measure (POEM) scale (item 2)	Assesses severity and duration of 7 symptoms (itch, sleep, bleeding, weeping/oozing, cracking, flaking, and dryness/roughness) over the preceding week on a 5-point scale. Item 2 relates to impact on sleep. This assessment is validated in AD and is available in several languages, correlates well with disease severity, and is readily incorporated into dermatology clinics. https://www.nottingham.ac.uk/research/groups/cebd/resources/poem.aspx
Visual analogue scale (VAS)	Quick, easy to use, unidimensional visual scale to assess pruritis severity, with 0 being no itch and 10 being the worst imaginable itch. Validated in several languages. http://www.pruritussymposium.de/visualanaloguescale.html

Clinician assessed scales

Currently available scales for enabling a clinical assessment of disease severity include:

Physician Global Assessment (PGA)	Assesses overall disease severity at a given point in time on a 5-point severity scale. PGA scales often use different descriptors.
Eczema Area and Severity Index (EASI)	Assesses disease extent on a 7-point scale in 4 defined body regions, based on severity of 4 clinical signs on a 4-point scale to a maximum score of 72. It is less sensitive for patients with a very low body surface area. https://dermnetnz.org/topics/easi-score/
Body Surface Area (BSA)	Assesses disease extent as a percentage of total body area. It does not assess disease severity. It can be difficult to evaluate in patients with less severe lesions.

Quantification of AD severity

Scores on the following scales are deemed to be representative of moderate, moderate-to-severe and severe disease. It should be noted that:

- These are composite measures and a score representing e.g. severe disease does not need to be achieved across each and every measure to be representative of severe disease.
- Australia is home to people of diverse racial and ethnic backgrounds. Care needs to be taken when using these severity scales for patients with skin of colour including Aboriginal and Torres Strait Islander peoples. With EASI scoring in particular, it may significantly underestimate severity in people with skin of colour in whom erythema is sometimes very difficult to assess.

Scale	Score representative of		
	Moderate disease	Moderate-severe disease	Severe disease
Dermatology life quality index (DLQI)	≤ 5	6 - 9	≥ 10
Patient/physician global assessment (PGA)	≥ 2	≥ 3	= 4
Eczema Area and Severity Index (EASI)*	≥ 10	>16	≥ 20
Body surface area (BSA)* †	≥ 10%		
5-D Pruritus scale	≥ 4		

* The scores representative of disease severity using the EASI and BSA scores relate to a body limb not a special site.

† Body surface area (BSA) measurement is a simple measure of percentage of body surface area involved and does not incorporate disease severity.

Treatment goals, choices and duration

Overall treatment goal

The overall goal of treatment is to reach and maintain a state in which symptoms are absent or mild without daily activities being disturbed by AD, treatment impacts minimally on QOL, and there are no/minimal drug-related toxicities.

Treatment failure

Treatment failure, despite appropriate dose and duration of and adherence to a therapeutic agent, may be defined by one or more of the following:

- Inadequate clinical improvement
- Failure to achieve stable long-term disease control,
- Presence of ongoing impairment (e.g. pruritus, pain, loss of sleep and poor QOL while on treatment
- Unacceptable adverse events or poor tolerability experienced with the treatment.

Quantification of treatment success and failure

Outcome	Quantification
Treatment success *(note this is not intended to be a definitive measure of clinically meaningful improvement, rather a gauge as to whether the optimal goal for a patient's condition has been reached)*	If DLQI $\leq$ 5 and/or PGA‡ has improved by at least 2 points from a baseline of $\geq$ 3, then treatment success has been achieved and appropriate maintenance therapy can be commenced. *(‡PGA = physician's global assessment: How is the patient's atopic dermatitis today? [0] Clear, [1] Almost clear, [2] Mild, [3] Moderate, [4] Severe.)*
Treatment failure	If DLQI $\geq$ 6 and PGA has either not improved or improved by less than 2 points, then treatment success has NOT been achieved and a change or modification to the treatment regimen is recommended.

Considerations to escalate therapy

Ascertain reasons

It is important to ascertain whether failure of topical treatment is due to:

- the severity of the disease (lack of efficacy of topical therapy);
- incorrect usage (dose/application);
- intolerance;
- or lack of adherence to the treatment when making the decision to begin systemic therapy.

Intolerance to topical treatment

Intolerance to topical treatment is the patient's opinion of worsening of lesions after 1-2 weeks of therapy with a new topical treatment or any difficulty to apply the drug (pain, burning or any uncomfortable sensation, which may develop sooner).

Inadequate response to topical treatment

Inadequate response to topical treatment is the physician's opinion of a situation with insufficient clinical score or deterioration in clinical score after at least 4 weeks of appropriately dosed and performed treatment, in the absence of an acute adverse reaction.

Careful consideration is required before commencing systemic therapies to manage AD. All patients who fail to respond to optimised topical therapy should be evaluated for exacerbating factors (e.g. infection, psychiatric or behavioural issues) and for alternative diagnoses (e.g. allergic contact dermatitis).

Treatment choices

General measures

All general skin measures (soap-free wash, moisturiser, short, lukewarm showers, bath oils) should be maintained as a constant background therapy in all patients. Moisturisers are a cornerstone of therapy and should be included in the daily management plan.

Clinicians should optimise general measures and topical therapy before considering systemic medications for AD, unless the impact on QOL is substantial at the initial consultation.

Topical therapy

The aim is always to optimise topical therapies which include topical microbiome measures (e.g. bleach baths), wet wrap therapy, emollients and appropriate use of topical corticosteroids and topical calcineurin inhibitors.

Systemic therapies

Phototherapy

Phototherapy (narrowband ultraviolet B [NB-UVB] or ultraviolet A1 [UVA1]) should be considered before the use of other systemic therapy if accessible and practical.

Phototherapy is usually safe and well tolerated, but adverse events due to sensitive skin in AD patients may impact compliance.

Systemic corticosteroids

Systemic corticosteroids are effective, but associated with short-term and long-term adverse events; use should be limited to bridging, rescue of flares, anticipation of a major life event or in patients with severe AD.

Systemic antimicrobial agents

Systemic antimicrobials should be reserved for short-term use only in the majority of patients with infected AD, excluding those with hyper-IgE and immunosuppression.

Other systemic therapies

Considering currently available data and the safety profiles of systemic therapies that are approved by the Australian Therapeutic Goods Administration (TGA) to treat AD, it is recommended that dupilumab could be considered as a first-line systemic treatment option in adults with severe AD who are uncontrolled with topical therapies.

Duration to establish treatment response

The optimal duration of trial to establish treatment response to different therapeutic approaches are as set out below.

Therapy	Optimal trial duration†
Topical therapies	
Wet dressings	Several (5–7) days
Topical corticosteroids	2-4 weeks
Topical calcineurin inhibitors	2-4 weeks
Phototherapy (Narrowband ultraviolet B (NB-UVB) or ultraviolet A1 (UVA1))	8-12 weeks
Systemic therapies	
Ciclosporin	6 weeks
Azathioprine§	12 weeks
Methotrexate§	12-16 weeks
Mycophenolate mofetil§	12 weeks
Dupilumab	16 weeks

†Timeframes to response times may differ according to disease severity, disease location and patient factors

§ Not approved by the Australian Therapeutic Goods Administration (TGA) to treat atopic dermatitis.

Impact of comorbidities and quality of life on treatment choices

Atopic dermatitis has a significant impact on mood and sleep, health-related QOL, work productivity and everyday activities. Risk of major comorbidities is significantly increased in adult patients with AD**.** Elucidating the comorbidities of AD, such as depression, anxiety and suicidal ideation, is therefore important for disease management and overall clinical outcomes.

The impact of AD on QOL should be assessed when determining treatment options.

Physicians should be aware of, and assess for, conditions associated with AD. The presence of comorbidities has an increased, and overall negative, impact on QOL in patients with AD and compounds the effects of usual care and impacts on treatment choices.

Understanding the patient's perspective is relevant when considering management options.

Patient education

Both internet based and face-to-face approaches probably improve self-management and outcomes for patients, but the optimum means of delivering support in a cost-effective way has yet to be determined.

It is important to be cognisant of the amount of misinformation on eczema, its causes and treatments, which can lead to divergent views between patients and clinicians. It is important that clinicians actively and openly seek out patients' opinions and understanding, and tailor their communications accordingly.

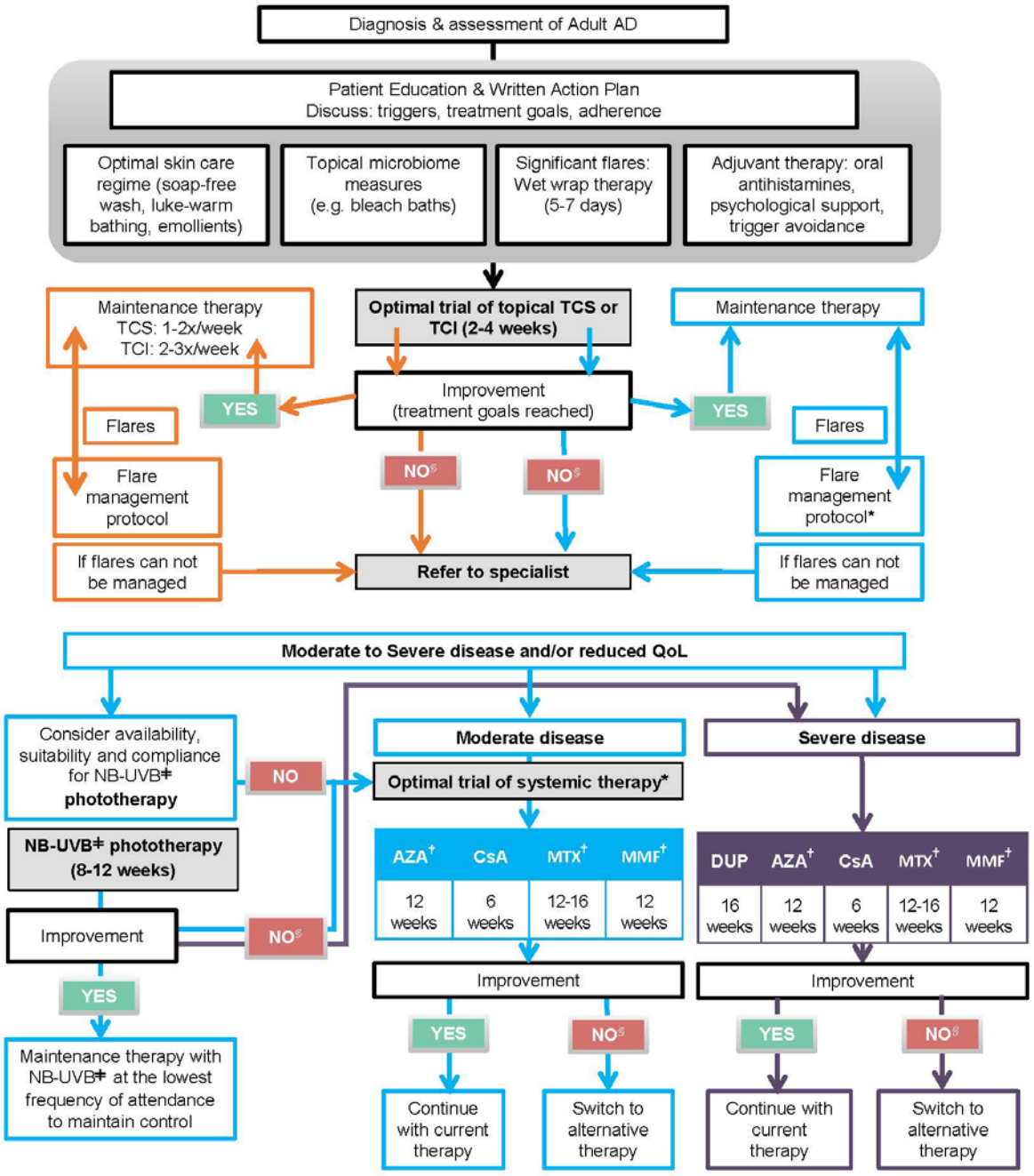
Together with assessing the psychosocial as well as the physical impact of eczema, engaging the patient in an open discussion about e.g. diet (including unsupervised elimination diets), lifestyle, current or intended use of complementary therapy, and involving patients in treatment decisions is critical in building an effective therapeutic relationship.

Trigger avoidance

There is not sufficient high-quality evidence to make recommendations for environmental trigger avoidance measures in patients with AD.

While acknowledging that triggers are often hard to avoid, it is important to try to identify triggers in a structured way. It may be appropriate to enlist multidisciplinary or immunologist support.

Management flowchart for adult atopic dermatitis patients in Australia



Follow **orange boxes** for patients with **mild disease**, **blue boxes** for patients with **moderate to moderate-severe disease** and **purple boxes** for patients with **severe disease**.

AZA = azathioprine, CsA = Ciclosporin A, MTX = methotrexate, MMF = mycophenolate mofetil, DUP = dupilumab

* **Short-term** systemic corticosteroids should be limited to: Bridging, rescue of acute flares, anticipation of a major life event or in patients with very severe disease.

† Indication not approved for atopic dermatitis

‡ UVA1 where available and appropriate

§ Treatment failure, despite appropriate dose, duration and adherence = inadequate clinical improvement OR failure to achieve stable long-term disease control OR presence of ongoing impairment while on treatment or unacceptable adverse events OR poor tolerability.

Figure 1 Management flow chart for adult atopic dermatitis (AD) patients in Australia. Algorithm adapted with permission from version published in Smith et al, 2020 (An Australian management consensus. Australas J Dermatol, 61: 23-32), which originated from concepts presented in Lynde, 2017 (Canada), Simpson, 2017 (International Eczema Council, IEC), Saeki, 2017 (Japan), Drucker, 2017 (IEC: Systemic corticosteroid guidance) and Gooderham, 2017 (maintenance data topical corticosteroids [TCS] and topical calcineurin inhibitors [TCI]).

ACD Consensus Recommendations for Health Professionals: Management of atopic dermatitis in adults

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