Received: 7 March 2024 | Revised: 14 April 2024 | Accepted: 28 April 2024

DOI: 10.1111/ajd.14303

ORIGINAL RESEARCH

Australasian Journal of Dermatology

Australian consensus: Treatment goals for moderate to severe psoriasis in the era of targeted therapies – Considerations for paediatric patients

Peter Foley MBBS, BMedSc, MD, FACD[1,2,3] | **Patrick D. Mahar MBBS, LLB, GDLP, MBA, MDerm, PhD, DMedSc, FACD**[1,3,4] | **Saxon D. Smith MBBS, MHL, PhD, GAICD, FAMA, IFAAD, FACD**[5,6] | **Monisha Gupta MBBS, MD, FACD**[7,8,9,10] | **Nicholas Manuelpillai MBBS, BEng, BCom, MPH**[2] | **David Orchard MBBS, FACD**[4,11] | **Li-Chuen Wong MBBS, FACD**[12,13,14] | **John C. Su MBBS, MEpi, FACD**[3,4,15,16] | **Amelia James BSc, MD**[17] | **Gayle Fischer MBBS, FACD, MD**[14,18] | **Gillian Marshman MBBS, FACD**[19,20,21] | **Morton Rawlin MBBS, FRACGP**[22] | **Murray Turner LLB, BArts(Rec)**[23] | **Emma King RN**[4] | **Robyn Kennedy RN**[4] | **Christopher Baker MBBS, FACD, FRCP**[1,2,3]

Correspondence
Peter Foley, Skin Health Institute, Carlton, VIC, Australia.
Email: pfoley@skinhealthinstitute.org.au

Funding information
Janssen Pharmaceuticals

Abstract

Background: Treatment goals have been established in Australia to facilitate the management of adults with moderate to severe psoriasis. The Australasian College of Dermatologists sought to determine if and how these adult treatment goals could be modified to accommodate the needs of paediatric and adolescent patients.

Methods: A modified Delphi approach was used. Comprehensive literature review and guideline evaluation resulted in the development of statements and other questions to establish current clinical practices. Two rounds of anonymous voting were undertaken, with a collaborative meeting held in between to discuss areas of discordance. Overall, consensus was defined as achievement of ≥75% agreement in the range 7–9 on a 9-point scale (1 strongly disagree; 9 strongly agree).

Results: Consensus was achieved on 23/29 statements in round 1 and 17/18 statements in round 2. There was a high level of concordance with treatment criteria in the adult setting. The limitations of applying assessment tools developed for use in adult patients to the paediatric setting were highlighted. Treatment targets in the paediatric setting should include objective metrics for disease severity and psychological impact on the patients and their family, and be based on validated, age-appropriate tools.

For affiliations refer to page 8.

Conclusion: While the assessment, classification and management of moderate to severe psoriasis in paediatric patients aligns with metrics established for adults, it is vital that nuances in the transition from childhood to adolescence be taken into account. Future research should focus on psoriasis severity assessment scales specific to the paediatric setting.

KEYWORDS

adolescent, Australia, child, consensus, paediatric, patient acuity, psoriasis, quality of life, treatment goals

INTRODUCTION

Psoriasis is an immune-mediated inflammatory skin disease with a chronic, relapsing–remitting course. While approximately one-third of psoriasis cases commence during childhood, clinical features and environmental triggers may differ from those in adult patients, contributing to misdiagnosis and undertreatment.[1–3] Differences in clinical presentation compared with adults challenges diagnosis in the paediatric setting.[4,5] Paediatric patients frequently present with disease affecting the face, scalp and intertriginous skin.[2] They experience reduced quality of life, low self-esteem, stigmatisation, and impaired social relationships and reduced school productivity.[2] Anxiety and depression are prevalent,[6] and there is a significant association between childhood psoriasis and obesity, central adiposity and other cardiometabolic comorbidities.[7]

To improve quality of life and avoid potentially serious future complications, early diagnosis and access to effective treatment are critical. As in the adult setting, therapeutic options have expanded to include a number of systemic targeted therapies for moderate to severe paediatric psoriasis.[8] However, real-world data suggest that less than one-fifth of eligible paediatric patients have ever received targeted therapy.[1]

Therapeutic guidance specifically addressing the needs of paediatric patients is limited. A critical review of 33 psoriasis clinical practice guidelines identified only two directed specifically at paediatric patients.[9] Evidence-based treatment algorithms to accommodate the role of approved targeted therapies in the management of paediatric psoriasis have been published in Canada,[10] Germany[3] and Italy.[11] The latter additionally considers the implications of using tools developed for use in adults in the paediatric setting to assess and classify disease severity.[11] However, these guidance papers do not consider quantified treatment targets in the paediatric setting. Australian treatment goals, initially published in 2013[12] and updated in 2023,[13] have been established for adults with moderate to severe psoriasis.

What this research adds

Goals for the assessment, classification and management of children and adolescents with moderate to severe psoriasis in Australian clinical practice align with those developed for the adult population, with the additional requirement to use age-specific tools to better understand the burden of disease on the patients and their family.

This paper expands on these, providing considerations for paediatric and adolescent patients.

MATERIALS AND METHODS

The methodology mirrored that of concurrent work undertaken in the adult setting.[13] Briefly, a comprehensive literature search was conducted (Table S1), two of the authors (PF, CB) reviewed the search outputs and considered them in context with published guidelines and consensus opinions,[10,11,14–27] and developed a framework of guidance statements of relevance to the Australian setting. In April 2022 the authors (6 Dermatologists, 4 Paediatric Dermatologists, 2 Paediatric Dermatology Nurses, a Dermatology Registrars, a Junior Medical Officer, a General Practitioner, and a patient representative) were invited to respond to a 43-question survey, which included 29 guidance statements. The authors voted on using a modified Delphi process, by assigning their level of agreement with the statements using a 9-point scale (1 strongly disagree; 9 strongly agree). Consensus was defined as achievement of ≥75% agreement in the range 7–9. A medical writer generated an overall strength score (the median score) and a level of consensus (proportion of voters with a score of 7–9) for each guidance statement. All authors discussed the voting results via a hybrid meeting, during which they had the opportunity to review the guidance statements and make suggestions or changes. Following

this, a further round of voting took place (November 2022) on an 18-question survey comprising 12 modified and six new guidance statements. At the completion of both voting rounds, final strength scores and consensus scores were assigned to each guidance statement.

RESULTS

Voting analysis

During voting round 1, participants answered all 43 survey questions and consensus (≥75%) was achieved on 23/29 clinical statements. There was a high level of concordance between the paediatric and adult[13] round 1 voting outcomes (Table 1). During voting round 2, an expanded panel of 16 participants answered the follow-up survey and consensus (≥75%) was achieved on the majority (17/18, 94%) of clinical statements. A detailed summary of the final clinical statements and voting outcomes is provided in Table S2.

Definition and classification

There was very strong consensus (strength: 8.2, consensus: 90%) that patients could be grouped dichotomously as mild/mild to moderate or moderate to severe/severe and that quantitative metrics (psoriasis area and severity index [PASI], body surface area [BSA], dermatology life quality index [DLQI], physician's global assessment [PGA] and disease in specific high impact sites) could be used to further guide classification based on disease severity. This concurs with the International Psoriasis Council,[19] the recently updated Australian adult treatment targets,[13] and is in concert with guidance found in published paediatric treatment algorithms.[10,11,14,18] However, the group did not reach consensus on the statement that "the definition and classification of psoriasis for paediatric patients should be the same as it is for adults" (5.8, 60%). During re-voting, the statement "PASI and BSA are not validated for use in children and young people" also did not achieve consensus (6.9, 56%), but there was very strong consensus (8.3, 94%) that age-appropriate, validated assessment scales should be used to determine severity when assessing paediatric patients.

Treatment goals

There was unanimous agreement with the EuroGuiDerm Guideline[23] that the availability of new targeted therapies supports the possibility of attaining higher treatment outcomes and that prior definitions of treatment success (for example a 75% reduction in PASI [ΔPASI ≥ 75%] or a 50% reduction in PASI [ΔPASI ≥ 50%] and a DLQI ≤ 5) were now outdated (very strong consensus, 7.6, 90%). The concept of adopting a treat to target approach,[20,28] did not achieve consensus in the first-round voting (6.9, 50%). The primary reason was because clinicians managing paediatric patients take a more individually tailored approach to develop personalised care plans. During re-voting, there was unanimous consensus (8.5, 100%) that in the paediatric setting, treatment targets should be patient-centric and based on a composite of outcomes that take the individual's needs into account.

There was some agreement on the need for options for the use of a variety of metrics when considering a

TABLE 1 Comparison of round 1 voting outcomes: Paediatric versus adult[a] treaters.

	Number (%) of statements	
Both voting groups agreed:	23 (80%)	
Both voting groups disagreed:	3 (10%)	
Only the paediatric voting group disagreed:	3 (10%)	
	Voting outcomes (score, % consensus)	
	Adult	**Paediatric**
Statements with which both voting groups disagreed:		
There is a strong correlation between PASI and PGA	6.3, 54%	6.3, 60%
Specified criteria for a lack of response/therapy failure	6.7, 54%	5.8, 50%
'Conventional' systemic agents should be first-line when choosing a systemic therapy	5.8, 54%	6.3, 60%
Statements with which only the paediatric voting group disagreed:		
The definition and classification of psoriasis for paediatric patients should be the same as it is for adults	6.8, 77%	5.8, 60%
How strongly do you agree with adopting a 'treat-to-target' approach?	7.4, 85%	6.9, 50%
How strongly do you agree with the need for there being options in a treat-to-target approach (e.g. PASI, PGA, BSA, to accommodate the physician's choice of criteria)?	7.8, 92%	7.2, 70%

[a]Data for adult treaters has been sourced from Foley et al, 2023.[13]

Abbreviations: BSA, body surface area; PASI, Psoriasis Area and Severity Index; PGA, physician's global assessment.

treat-to-target approach, but this did not reach consensus (7.2, 70%). The panel identified that subjective perceptions of disease severity may be disproportionate in paediatric patients compared with adults and unanimously agreed (8.6, 100%) that targets for treatment response should include age-appropriate validated scales[29–31] to determine disease impact and account for the burden of treatment on the family and/or carers, which can be substantial.[32] There was agreement (high consensus, 7.7, 80%) that health-related quality of life (HR-QOL) should be accounted for in disease management targets.[23,24] The DLQI and the children's dermatology life quality index (CDLQI)[29] were identified as the most frequently used scales for this purpose in clinical practice.

Treatment response criteria

In concert with others,[20,23,24,28] including the recently updated Australian adult treatment targets,[13] and given the availability of new treatments for moderate to severe psoriasis, there was very high consensus (8.0, 90%) that a 90% reduction in PASI (ΔPASI90) better reflected a 'clear'/'almost clear' status than did ΔPASI75. The group agreed that complete skin clearance (defined as PGA = 0) was an important treatment goal from the patient's perspective (very strong consensus: 8.0, 90%).[33]

There was unanimous consensus that treatment modification ought to be considered in patients who have an inadequate response (8.6, 100%) and that treatment should be continued in patients who achieve an adequate response (8.1, 81%),[24] noting that in such cases there is a need for ongoing reassessment of treatment suitability. There was very strong consensus (7.7, 90%) that time to onset is therapy dependent, and that during the induction phase of a new treatment, the initial response assessment interval should take this into account.[23] In clinical practice, paediatric assessments typically occur either every 6 months or as directed by the therapy.

In the first-round voting, there was a high level of consensus (7.5, 90%) with the response criteria that are utilised in the adult setting. However, the need to modify the target based on the patient population was discussed, and there was strong agreement that any criteria stated should account for disease severity and psychological impact on the patients and their family, and be based on validated, age-appropriate tools. After revision of the statements, in voting round 2, there was unanimous consensus (8.7, 100%) on the need to consider disease severity and psychosocial impact on both the patients and their family/carer in treatment response criteria. Consensus was reached on criteria for adequate and inadequate treatment responses, matching those proposed in the adult setting,[13] but modified to utilise age-specific tools for HR-QOL impact (Table 2, Figure 1).

Management framework

Efficacy, safety and individual patient needs were highlighted as the top three determinants relied on when

TABLE 2 Treatment response criteria for the paediatric setting.

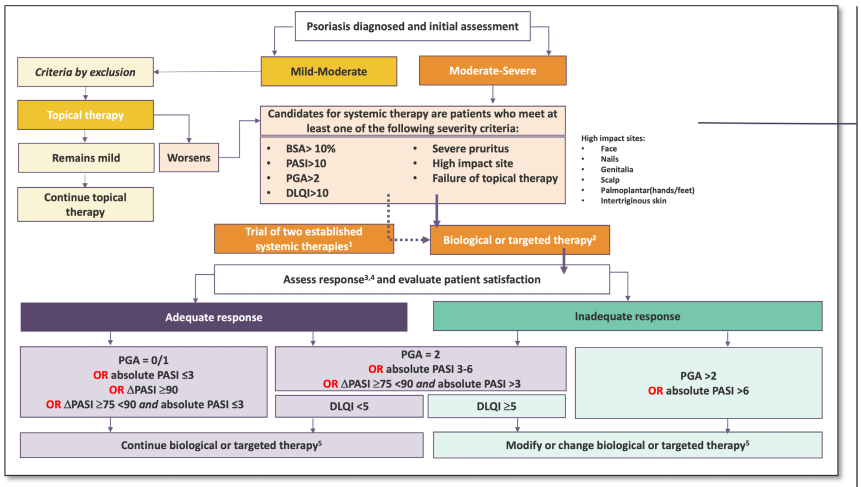
Adequate response	Inadequate response
Treatment should be *continued*[a] in patients who achieve an *adequate* response	Treatment should be *modified*[a] in patients with an *inadequate* response
An adequate response to treatment is defined as either: • Absolute PASI ≤3 • PGA = 0/1	An inadequate response to treatment is defined as either: • Absolute PASI >6 • PGA ≥2
If neither of these criteria are met an age appropriate QOL measure should also be considered • Absolute PASI 3–6 or PGA = 2 with one of the following: ○ Age < 4 years: IDLQI[30] ○ Age 4–12 years: CDLQI[29] ○ Age12–17 years: APso-QoL[31]	If neither of these criteria are met an age appropriate QOL measure should also be considered • Absolute PASI 3–6 or PGA = 2 with one of the following: ○ Age < 4 years: IDLQI[30] ○ Age 4–12 years: CDLQI[29] ○ Age12-17 years: APso-QoL[31]
If ΔPASI is being used as the metric, the corresponding criteria are: • ΔPASI ≥90 • ΔPASI ≥75 < 90 AND absolute PASI ≤3 • ΔPASI ≥75 < 90 AND absolute PASI >3 with age appropriate QOL measure (as above)	If ΔPASI is being used as the metric, the corresponding criteria are: • ΔPASI ≥75 < 90 AND absolute PASI >3 with age appropriate QOL measure (as above)

[a]Continuation/discontinuation is modulated by toxicity, contraindications, patient preferences and may also include adding topical therapies, adding other systemic treatment, increasing dose and/or frequency of a treatment, or admission to hospital.

Abbreviations: APso-QoL, Adolescent Psoriasis Quality of Life instrument[31]; CDLQI, Children's Dermatology Life Quality Index[29]; IDLQI, Infants' Dermatology Life Quality Index[30]; PASI, Psoriasis Area and Severity Index; PGA, physician's global assessment; QOL, quality of life.

Australasian Journal of Dermatology

*Treatment goals algorithm for adult patients with psoriasis in Australia**



1 To be eligible for access to biological or targeted therapies, the Australian reimbursement body, the Pharmaceutical Benefits Scheme, requires that a patient has failed to achieve an adequate response following a minimum of 6 weeks treatment to at least 2 of the following 5 treatments: phototherapy, methotrexate, cyclosporin, acitretin, apremilast. **The Australian consensus group failed to reach consensus with the requirement to use established systemic agents before moving onto targeted therapy and propose that in cases of severe, active disease the initiation of targeted therapy was reasonable and best practice.**
2. Targeted therapies available via the Australian reimbursement body, the Pharmaceutical Benefits Scheme, are: adalimumab, apremilast, etanercept, guselkumab, infliximab, ixekizumab, risankizumab, secukinumab, tildrakizumab, ustekinumab.
3 Appropriate time for review varies with each treatment and the range is 16-24 weeks.
4 For high impact sites use validated, site-specific assessment tools where available.
5 Continuation/discontinuation is modulated by: toxicity, contraindications, patient preferences and may also include adding topical therapies, adding other systemic treatment, increasing dose and/or frequency of a treatment, or admission to hospital.

*Foley P, Gebauer K, Sullivan J, McMeniman E, Shumack S, Ng J, et al. *Australas J Dermatol*. Nov 2023;64(4):476-487. doi:10.1111/ajd.14138

Modifications for the paediatric setting

Treatment outcomes mutually agreed with the family as part of an individualised care plan.

Substitute Dermatitis Quality of Life Index with an age-appropriate disease impact score:

- Age <4 years: Infants' Dermatitis Quality of Life Index
- Age 4-12 years: Children's Dermatitis Quality of Life Index
- Age 12-17 years: Adolescent Psoriasis Quality of Life instrument

Use validated tools to quantify impact on the family, particularly for young children.

Be sensitive to the changing needs of adolescent patients.

FIGURE 1 Considerations for paediatric treatment goals for with psoriasis in Australia.

individualising management plans for patients. There was unanimous consensus that targeted therapies should be initiated first-line in cases of severe, active disease (8.6, 100%) and in cases where response to conventional systemic agents is inadequate or they are not tolerated (8.1, 100%),[23,24] but there was discordance (6.3, 60%) with the requirement to use conventional systemic agents before moving onto targeted therapy. Specific considerations in the paediatric setting included the value of patient-reported outcome measures to provide additional relevant information to facilitate individualised treatment plans (7.8, 80%), particularly the use of validated tools to assess the impact on family quality of life (8.6, 100%), and the need for a multidisciplinary team approach in patients with comorbidities (8.5, 100%).

DISCUSSION

Paediatric psoriasis places a considerable burden on both patients and their families, but guidance on its assessment and management is limited. The primary aim of this work was to determine whether current Australian consensus treatment goals for adult patients with moderate to severe psoriasis[13] need to be modified to accommodate the needs of paediatric and adolescent patients and, if so, how that could be achieved. Overall, there was a high degree of concordance between the adult and paediatric consensus statements; the key theme of divergence centred largely on the limitations of applying assessment tools developed for use in adult patients to the paediatric setting.

Children are not just small adults

Plaque psoriasis is the most common subtype of psoriasis in children, affecting around 75% of children,[34] with scalp, genital and facial involvement also frequently observed. However, at initial presentation, the distribution, morphology and clinical symptoms of psoriasis differ depending on age and can evolve over time.[35] Infants typically present with 'diaper rash', characterised by sharply demarcated, minimally elevated erythematous plaques involving the inguinal folds. In younger children, erythematous plaques with overlying white scale are frequently observed to be thinner and smaller than in adults, and tend to develop more often on the scalp, face and flexural areas. In school-aged children, disease involvement in the ear canal, upper eyelids and nails is common, while in adolescents, chronic plaque psoriasis resembles that in adults with well-defined erythematosquamous papules or plaques with overlying silvery-white scale.[2] Preliminary diagnostic criteria with sufficient sensitivity and specificity to inform diagnostic accuracy in paediatric patients have been proposed to help guide the clinician {Burden-Teh, 2019 #1934;Burden-Teh, 2022 #1933}.

Group discussion revealed that while classification definitions based on severity are currently viewed as

being the same in adults and children for management purposes, there is limited empirical data to support this, thus raising concern that extrapolations could be made without sufficient data to support them. Opinions on the use of PASI and BSA in children and adolescents were divided. These measures have been validated in adults but do not take into consideration specifics related to paediatric patients, such as the progression of BSA according to age. Scales validated in adults may be of utility in older children and adolescents, but younger children (up to the age of 10 years[36]) have different proportional surface areas making their application in this age group less accurate. The need for user-friendly, validated assessment scales for psoriasis severity assessment in the paediatric setting was identified as a high priority area for further research. In the absence of such scales, the use of PASI and BSA remains applicable for the purposes of clinical decision-making,[11] noting that these measures will likely afford less accuracy in children under the age of 10 years.

Cautions with identifying and scoring disease flares

Psoriasis flares can be provoked by a number of non-specific factors. In children flares are most frequently associated with stress/anxiety, trauma (Koebner phenomenon) and infections (viral, streptococcal),[3,37] and there is a need to differentiate sudden worsening due to a triggered immune stimulation from an overall progressive disease worsening. In the adult setting PASI and DLQI scores can be used to monitor patients for the occurrence of acute disease flares. For example, in the clinical trials setting criteria such as a single PASI score >5 and/or a single DLQI score >5 have been used to indicate a short disease flare while on treatment.[38] While PGA could be used as an alternative to PASI for measuring disease severity and providing an objective measure of disease response, it is too blunt an instrument to detect disease flares. In the paediatric setting, BSA in combination with consideration of the pattern of disease and sites of involvement may be a more suitable means of evaluating a flare and should ideally be considered before changes to treatment plans are considered.

Navigating the transition from childhood to adolescence

While there was group consensus that treatment response criteria should include measures of both severity and impact, it was also recognised that impact measurement scales should ideally account for age-related nuances of the population being treated. In younger children, the therapeutic strategy is more likely to focus on providing symptomatic relief, while in older children, concerns about cosmetic appearance may become a higher priority. Similarly, concerns regarding high impact sites are dependent on the individual and their level of body awareness. It is recognised that the transitional period from child to adolescent presents its own unique set of challenges for the clinician.[39] There is a shift in the management dynamic, with a greater need to account for patient disengagement, potential parental conflict, and a widening burden of disease impact encompassing social interactions, schooling, absenteeism, body awareness, sexuality, and stigmatisation.[39]

The CDLQI was adapted from the DLQI to meet the needs of children, however it has been validated for use only in children aged 4–12 years.[29] A 'cartoon' version of the CDLQI is available for younger children, facilitating their ability to self-report; nevertheless, questions remain as to the suitability of the CDLQI as an HR-QOL assessment tool for children outside of the validated age ranges. For children below the age of 4 years, the Infants' Dermatology Life Quality Index (IDLQI) has been evaluated in atopic dermatitis,[30] but not in psoriasis. Given the young age of the patients, consideration could be given to either substituting or combining this measure with a validated family impact measure. A variety of tools exist that quantify the impact of disease on other family members, including the Family Dermatology Life Quality Index (FDLQI)[40] and the Dermatitis Family Impact Questionnaire (DFIQ),[41] but the Psoriasis Family Index (PFI-14)[42] is the only tool specific to psoriasis.

The question of how to assess HR-QOL in adolescent patients takes on added importance considering research demonstrating specific issues, such as an increased emphasis on appearance and social acceptance, that are distinct from those of younger children and of adults.[43] Close correlation has been observed between the CDLQI and the DLQI in patients aged 16–17 years with psoriasis, but statistically significant discrepancies in mean scores were found to be caused by differences in questions relating to sleep and sexual difficulties.[44] A validated adaptation of the Skindex questionnaire for use in adolescents aged 12–17 years – Skindex-Teen – is available,[45] but remains underutilised in clinical practice.[43] Similarly, the Teenagers' Quality of Life (T-QoL) instrument measures the secondary impact of skin disease in adolescents (12–19 years) but its validation study was skewed towards patients with acne and only 4% of the study population had psoriasis.[46] A more recent alternative, the Adolescent Psoriasis Quality of Life instrument (APso-QoL), designed for use in daily clinical practice, has undergone preliminary validation in adolescents aged 12–17 years.[31] This

new 17-item assessment tool incorporates separate assessment scales for psychosocial impact and physical symptoms and treatment.

Management considerations

In the paediatric setting treatment, outcomes are typically mutually agreed with the family as part of an individualised care plan and not based on the achievement of a single metric. Treatment planning should take long-term disease course (paediatric to adolescent to adult) and prognosis into consideration. A proactive approach encompassing education, avoidance of trigger factors, topical therapy including the use of emollients, early management of disease flare-ups, and use of systemic therapies is advocated.[47,48] Educating the patient and family on the chronicity of psoriasis, triggering factors, and treatment modalities are all important adjuncts to prescribing. There is the potential for conflict to arise with adolescents if their views are different to those of their family. Treatment approaches should be discussed with the patient and the appropriate adult responsible for their care. In addition to this, where practicable, reserving time for a discussion with adolescent patients alone creates an opportunity to educate them about their disease and its treatment, and may provide insights that can help resolve these issues.[48]

Treating paediatric psoriasis can be challenging and requires careful compliance to a specific treatment regimen. Several factors need to be considered when selecting a specific treatment, including age, quality of life, severity of psoriasis, location of psoriasis, type of psoriasis, tolerability, safety and patient preferences. The panel felt that there was little role for conventional systemic treatments in paediatric patients, noting that use is associated with unique challenges of conventional systemic therapies in the paediatric setting such as logistical burdens, need for carer support and time off school (or work for carer).[49] There was strong support for initiating targeted therapy first-line in patients with severe disease potential. The rationale for interceding early in the immunologic psoriatic process is driven by the desire to impede 'immunological scar' development to reduce long-term disease burden.[50] More research is needed, with current experience limited primarily because paediatric patients are not being treated early enough.

Paediatric patients with psoriasis are at increased risk of comorbidities including psoriatic arthritis,[51] metabolic syndrome (obesity, diabetes, hypertension, and dyslipidaemia)[7,52,53] and mental health issues (anxiety, depression).[6] Despite reaching consensus that the impact of comorbidities is an important consideration of disease control, group discussion highlighted the potential for ambiguity, stressing that it could wrongly imply that a treatment is not adequately controlling disease if it is not also limiting the impact of these comorbidities. The main limitation of this work was that it did not also encompass the management of specific comorbidities. There was unanimous consensus that a multidisciplinary team approach should be undertaken to manage paediatric patients with comorbidities. Clinicians should maintain a high index of suspicion for comorbidities to ensure appropriate management. Detailed reviews and screening recommendations in paediatric patients can be found elsewhere in the literature.[11,15,54,55]

Australian treatment goals have been established for of adults with moderate to severe psoriasis.[12,13] This is, to our knowledge, the first time that specific treatment targets have been expanded to account for the unique considerations for the management of paediatric and adolescent patients with psoriasis. While the assessment, classification and management of moderate to severe psoriasis in paediatric patients align with the metrics established for adults, it is vital that nuances in the transition from childhood to adolescence be taken into account. Future research should focus on psoriasis severity assessment scales specific to the paediatric setting.

AUTHOR CONTRIBUTIONS

Conceived the concept of this work and designed the study: Peter Foley, Christopher Baker. Involved in the conduct of the study and contributed to data collection: Peter Foley, Christopher Baker, Amelia James, David Orchard, Monisha Gupta, Patrick D Mahar, Nicholas Manuelpillai, Saxon D Smith, John C Su, Li-Chuen Wong, Gayle Fischer, Morton Rawlin, Gillian Marshman, Murray Turner, Emma King, Robyn Kennedy. Contributed to data analysis and/or interpretation of the results: Peter Foley, Christopher Baker, Amelia James, David Orchard, Monisha Gupta, Patrick D Mahar, Nicholas Manuelpillai, Saxon D Smith, John C Su, Li-Chuen Wong, Gayle Fischer, Morton Rawlin, Gillian Marshman, Murray Turner, Emma King, Robyn Kennedy. Manuscript writing and revision for intellectual content: Peter Foley, Christopher Baker, Amelia James, David Orchard, Monisha Gupta, Patrick D Mahar, Nicholas Manuelpillai, Saxon D Smith, John C Su, Li-Chuen Wong, Gayle Fischer, Morton Rawlin, Gillian Marshman, Murray Turner, Emma King, Robyn Kennedy. Approved the final version of the article: Peter Foley, Christopher Baker, Amelia James, David Orchard, Monisha Gupta, Patrick D Mahar, Nicholas Manuelpillai, Saxon D Smith, John C Su, Li-Chuen Wong, Gayle Fischer, Morton Rawlin,

Gillian Marshman, Murray Turner, Emma King, Robyn Kennedy. Guarantor of the article: Peter Foley.

AFFILIATIONS

[1]Skin Health Institute, Carlton, Victoria, Australia
[2]Department of Dermatology, St Vincent's Hospital Melbourne, Fitzroy, Victoria, Australia
[3]The University of Melbourne, Melbourne, Victoria, Australia
[4]Department of Dermatology, The Royal Children's Hospital, Parkville, Victoria, Australia
[5]Sydney Adventist Hospital Clinical School, ANU College of Health and Medicine, The Australian National University, Canberra, Australian Capital Territory, Australia
[6]The Dermatology and Skin Cancer Centre, St Leonards, New South Wales, Australia
[7]Department of Dermatology, Liverpool Hospital, Liverpool, New South Wales, Australia
[8]The Skin Hospital, Westmead, New South Wales, Australia
[9]The University of New South Wales, Sydney, New South Wales, Australia
[10]Western Sydney University, Sydney, New South Wales, Australia
[11]Barkers Road Dermatology, Kew, Victoria, Australia
[12]Royal Prince Alfred Hospital Medical Centre, Newtown, New South Wales, Australia
[13]Department of Dermatology, Children's Hospital, Westmead, New South Wales, Australia
[14]The University of Sydney, Camperdown, New South Wales, Australia
[15]Eastern Health, Melbourne, Victoria, Australia
[16]Murdoch Children's Research Institute, Parkville, Victoria, Australia
[17]Department of Dermatology, The Alfred Hospital, Melbourne, Victoria, Australia
[18]Department of Dermatology, Royal North Shore Hospital, St Leonards, New South Wales, Australia
[19]Dermatology Clinic, Flinders Medical Centre, Adelaide, South Australia, Australia
[20]Willan House Dermatology, Brighton, South Australia, Australia
[21]College of Medicine and Public Health, Flinders University, Bedford Park, South Australia, Australia
[22]Macedon Medical Centre, Templestowe Lower, Victoria, Australia
[23]Psoriasis Australia, Carlton, Victoria, Australia

ACKNOWLEDGEMENTS

The authors thank Annie Bygrave (Policy Manager, The Australasian College of Dermatologists, St Leonards, NSW, Australia) for logistical support. The authors thank Hazel Palmer MSc, ISMPP CMPP™ of Scriptix Pty Ltd, for providing administrative support, professional writing assistance and editorial support in the preparation of this manuscript in accordance with Good Publication Practice guidelines.

FUNDING INFORMATION

Logistical, editorial and professional medical writing support for this work was funded by The Australasian College of Dermatologists through an educational grant provided by Janssen Australia. The authors were responsible for all content, interpretation of the data, and the decision to publish the results; they received no honoraria related to the development of this manuscript and confirm independence from the funding source.

CONFLICT OF INTEREST STATEMENT

The following authors have been an investigator, speaker, advisor, consultant, and/or having received travel grants from the following companies. Peter Foley: AbbVie, Akaal, Amgen, Apogee, Arcutis, Argenx, Aslan, AstraZeneca, Bristol-Meyers Squibb, Boehringer Ingelheim, Botanix, Celgene, Celtaxsys, CSL, Cutanea, Dermira, EVELO Biosciences, Galderma, Genentech, Genesis Care, GSK, Hexima, Incyte, Janssen, Kymab, Leo Pharma, Lilly, Mayne Pharma, MedImmune, Melaseq/Geneseq, Merck, Novartis, Pfizer, Regeneron Pharmaceuticals Inc, Reistone, Roche, Sanofi, Sun Pharma, Takeda, Teva, UCB Pharma, Valeant and Wintermute. Patrick D Mahar: Novartis, AstraZeneca, Abbvie, Pfizer, Bristol-Meyers Squibb, Eli Lilly and Company and Boehringer Ingelheim. Dr Mahar is a former employee of, and owns equity in, Eli Lilly and Company. Patrick Mahar is an Editorial Board member of the *Australasian Journal of Dermatology* and a co-author of this article. To minimise bias, they were excluded from all editorial decision-making related to the acceptance of this article for publication. Saxon D Smith: Abbvie, UCB, Sanofi Genzyme, Novartis, Eli Lilly and Company, Bristol-Myers Squibb, Pfizer, Leo Pharma and Amgen. Monisha Gupta: None. Monisha Gupta is an Editorial Board member of the *Australasian Journal of Dermatology* and a co-author of this article. To minimise bias, they were excluded from all editorial decision-making related to the acceptance of this article for publication. Nicholas Manuelpillai: Abbvie, Aslan, AstraZeneca, Boehringer Ingelheim, Bristol-Myers Squibb, Dermia, Eli Lilly and Company, Galderma, Janssen, LEO, Pfizer, Reistone Biopharma, Sanofi, Sun Pharma and UCB. David Orchard: Novartis. David Orchard is an Editorial Board member of the *Australasian Journal of Dermatology* and a co-author of this article. To minimise bias, they were excluded from all editorial decision-making related to the acceptance of this article for publication. Li-Chuen Wong: Abbvie, Sanofi Genzyme, Eli Lilly. John C Su: Abbvie, Amgen, ASLAN, AstraZeneca, Bioderma, Bristol Myers Squibb, Eli Lilly, Galderma, Janssen, LEO Pharma, L'Oreal, Novartis, Pfizer Inc., Pierre Fabre and Sanofi. Amelia James: None. Gayle Fischer: Novartis, Eli Lilly, Abbvie. Gillian Marshman: Australasian Medical Dermatology Group. Morton Rawlin: None. Murray Turner: AbbVie, Bristol-Meyers Squibb, Janssen. Emma King: None. Robyn Kennedy: None. Christopher Baker: Amgen, Abbvie, Bristol-Meyers Squibb, Genesis Care,

Janssen, Novartis, Sun Pharma, and UCB. Dr Baker currently serves as a member on the Australian Medical Association's Federal Council.

DATA AVAILABILITY STATEMENT

Not applicable.

ETHICS APPROVAL

Not applicable.

INFORMED CONSENT

Not applicable.

ANIMAL RIGHTS

Not applicable.

TRANSPARENCY DECLARATION

Peter Foley (the manuscript's guarantor) affirms that the manuscript is an honest, accurate and transparent account of the study being reported; that no important aspects of the study have been omitted and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

GUARANTOR OF THE ARTICLE

Name: Peter Foley.

Affiliation: Skin Health Institute, Carlton, VIC.

ORCID

Peter Foley https://orcid.org/0000-0001-5891-5607
Patrick D. Mahar https://orcid.org/0000-0002-9976-2691
Saxon D. Smith https://orcid.org/0000-0003-0995-4372
Monisha Gupta https://orcid.org/0000-0002-1819-7054
Nicholas Manuelpillai https://orcid.org/0000-0002-4043-1281
David Orchard https://orcid.org/0000-0001-6656-6283
Li-Chuen Wong https://orcid.org/0000-0001-7819-6603
John C. Su https://orcid.org/0000-0002-4021-5423
Amelia James https://orcid.org/0000-0002-7822-1183
Gayle Fischer https://orcid.org/0000-0002-6382-2576
Gillian Marshman https://orcid.org/0000-0002-8399-5095
Morton Rawlin https://orcid.org/0000-0003-2128-2417
Murray Turner https://orcid.org/0009-0006-5295-3585
Emma King https://orcid.org/0000-0001-5705-709X
Robyn Kennedy https://orcid.org/0009-0007-8720-1815
Christopher Baker https://orcid.org/0009-0003-0144-2927

REFERENCES

1. Seyger MMB, Augustin M, Sticherling M, Bachhuber T, Fang J, Hetherington J, et al. Physician-reported clinical unmet needs, Burden and treatment patterns of Paediatric psoriasis patients: a US and EU real-world evidence study. Acta Derm Venereol. 2022;102:adv00660. https://doi.org/10.2340/actadv.v101.981
2. Bronckers IM, Paller AS, van Geel MJ, van de Kerkhof PC, Seyger MM. Psoriasis in children and adolescents: diagnosis, management and comorbidities. Paediatr Drugs. 2015;17(5):373–84. https://doi.org/10.1007/s40272-015-0137-1
3. Hamm H, Höger PH. Psoriasis in children and adolescents: short update and guideline-based treatment. Dermatologie (Heidelb). 2023;74:340–9. https://doi.org/10.1007/s00105-023-05132-7
4. Burden-Teh E, Thomas KS, Gran S, Murphy R. Development of clinical diagnostic criteria for plaque psoriasis in children: an electronic Delphi consensus study with the international psoriasis council. Br J Dermatol. 2019;181(4):856–7. https://doi.org/10.1111/bjd.17994
5. Burden-Teh E, Murphy R, Gran S, Nijsten T, Hughes C, Abdul-Wahab A, et al. Identifying the best predictive diagnostic criteria for psoriasis in children (<18 years): a UK multicentre case–control diagnostic accuracy study (DIPSOC study). Br J Dermatol. 2022;186(2):341–51. https://doi.org/10.1111/bjd.20689
6. Edson-Heredia E, Anderson S, Guo J, Zhu B, Malatestinic WN, Wine-Lee L, et al. Real-world claims analyses of comorbidity burden, treatment pattern, healthcare resource utilization, and costs in pediatric psoriasis. Adv Ther. 2021;38(7):3948–61. https://doi.org/10.1007/s12325-021-01795-7
7. Phan K, Lee G, Fischer G. Pediatric psoriasis and association with cardiovascular and metabolic comorbidities: systematic review and meta-analysis. Pediatr Dermatol. 2020;37(4):661–9. https://doi.org/10.1111/pde.14208
8. Mahar PD, Robertson SJ, Orchard D, Baker C, Foley P. Paediatric indications and dosing guidance for advanced targeted treatments in Australia. Australas J Dermatol. 2024;1–5. https://doi.org/10.1111/ajd.14230
9. Yen H, Huang CH, Huang IH, Hung WK, Su HJ, Yen H, et al. Systematic review and critical appraisal of psoriasis clinical practice guidelines: a global guidelines in dermatology mapping project (GUIDEMAP)*. Br J Dermatol. 2022;187(2):178–87. https://doi.org/10.1111/bjd.21047
10. Lansang P, Bergman JN, Fiorillo L, Joseph M, Lara-Corrales I, Marcoux D, et al. Management of pediatric plaque psoriasis using biologics. J Am Acad Dermatol. 2020;82(1):213–21. https://doi.org/10.1016/j.jaad.2019.05.056
11. Peris K, Fortina AB, Bianchi L, Fabbrocini G, Gisondi P, Balato A, et al. Update on the management of pediatric psoriasis: an Italian consensus. Dermatol Ther. 2022;12(8):1753–75. https://doi.org/10.1007/s13555-022-00758-2
12. Baker C, Mack A, Cooper A, Fischer G, Shumack S, Sidhu S, et al. Treatment goals for moderate to severe psoriasis: an Australian consensus. Australas J Dermatol. 2013;54(2):148–54. https://doi.org/10.1111/ajd.12014
13. Foley P, Gebauer K, Sullivan J, McMeniman E, Shumack S, Ng J, et al. Australian consensus: treatment goals for moderate to severe psoriasis in the era of targeted therapies - adult patients. Australas J Dermatol. 2023;64(4):476–87. https://doi.org/10.1111/ajd.14138
14. Fortina AB, Bardazzi F, Berti S, Carnevale C, Di Lernia V, El Hachem M, et al. Treatment of severe psoriasis in children: recommendations of an Italian expert group. Eur J Pediatr. 2017;176(10):1339–54. https://doi.org/10.1007/s00431-017-2985-x

15. Menter A, Cordoro KM, Davis DMR, Kroshinsky D, Paller AS, Armstrong AW, et al. Joint American Academy of Dermatology-National Psoriasis Foundation guidelines of care for the management and treatment of psoriasis in pediatric patients. J Am Acad Dermatol. 2020;82(1):161–201. https://doi.org/10.1016/j.jaad.2019.08.049
16. Katakam BK, Munisamy M, Rao TN, Chiramel MJ, Panda M, Gupta S, et al. recommendations for management of childhood psoriasis. Indian Dermatol Online J. 2021;12(Suppl 1):S71–s85. https://doi.org/10.4103/idoj.IDOJ_965_20
17. Eisert L, Augustin M, Bach S, Dittmann M, Eiler R, Fölster-Holst R, et al. S2k guidelines for the treatment of psoriasis in children and adolescents - short version part 2. J Dtsch Dermatol Ges. 2019;17(9):959–73. https://doi.org/10.1111/ddg.13936
18. Eisert L, Augustin M, Bach S, Dittmann M, Eiler R, Fölster-Holst R, et al. S2k guidelines for the treatment of psoriasis in children and adolescents - short version part 1. J Dtsch Dermatol Ges. 2019;17(8):856–70. https://doi.org/10.1111/ddg.13907
19. Strober B, Ryan C, van de Kerkhof P, van der Walt J, Kimball AB, Barker J, et al. Recategorization of psoriasis severity: Delphi consensus from the international psoriasis council. J Am Acad Dermatol. 2020;82(1):117–22. https://doi.org/10.1016/j.jaad.2019.08.026
20. Gisondi P, Talamonti M, Chiricozzi A, Piaserico S, Amerio P, Balato A, et al. Treat-to-target approach for the management of patients with moderate-to-severe plaque psoriasis: consensus recommendations. Dermatol Ther. 2021;11(1):235–52. https://doi.org/10.1007/s13555-020-00475-8
21. Salgado-Boquete L, Carrascosa JM, Llamas-Velasco M, Ruiz-Villaverde R, de la Cueva P, Belinchón I. A new classification of the severity of psoriasis: What's moderate psoriasis? Life. 2021;11(7):627. https://doi.org/10.3390/life11070627
22. Smith CH, Yiu ZZN, Bale T, Burden AD, Coates LC, Edwards W, et al. British Association of Dermatologists guidelines for biologic therapy for psoriasis 2020: a rapid update. Br J Dermatol. 2020;183(4):628–37. https://doi.org/10.1111/bjd.19039
23. Nast A, Smith C, Spuls PI, Avila Valle G, Bata-Csörgö Z, Boonen H, et al. EuroGuiDerm guideline on the systemic treatment of psoriasis vulgaris - part 1: treatment and monitoring recommendations. J Eur Acad Dermatol Venereol. 2020;34(11):2461–98. https://doi.org/10.1111/jdv.16915
24. Amatore F, Villani AP, Tauber M, Viguier M, Guillot B. French guidelines on the use of systemic treatments for moderate-to-severe psoriasis in adults. J Eur Acad Dermatol Venereol. 2019;33(3):464–83. https://doi.org/10.1111/jdv.15340
25. Daudén E, Puig L, Ferrándiz C, Sánchez-Carazo JL, Hernanz-Hermosa JM. Consensus document on the evaluation and treatment of moderate-to-severe psoriasis: psoriasis Group of the Spanish Academy of dermatology and venereology. J Eur Acad Dermatol Venereol. 2016;30(Suppl 2):1–18. https://doi.org/10.1111/jdv.13542
26. Mrowietz U, Kragballe K, Reich K, Spuls P, Griffiths CE, Nast A, et al. Definition of treatment goals for moderate to severe psoriasis: a European consensus. Arch Dermatol Res. 2011;303(1):1–10. https://doi.org/10.1007/s00403-010-1080-1
27. Belinchón Romero I, Dauden E, Ferrándiz Foraster C, González-Cantero Á, Carrascosa Carrillo JM. Therapeutic goals and treatment response evaluation in moderate to severe psoriasis: an experts opinion document. Ann Med. 2021;53(1):1727–36. https://doi.org/10.1080/07853890.2021.1986637
28. Mahil SK, Wilson N, Dand N, Reynolds NJ, Griffiths CEM, Emsley R, et al. Psoriasis treat to target: defining outcomes in psoriasis using data from a real-world, population-based cohort study (the British Association of Dermatologists biologics and immunomodulators register, BADBIR). Br J Dermatol. 2020;182(5):1158–66. https://doi.org/10.1111/bjd.18333
29. Waters A, Sandhu D, Beattie P, Ezughah F, Lewis-Jones S. Severity stratification of Children's Dermatology Life Quality Index (CDLQI) scores. Br J Dermatol. 2010;163:121.
30. Lewis-Jones MS, Finlay AY, Dykes PJ. The Infants' dermatitis quality of life index. Br J Dermatol. 2001;144(1):104–10. https://doi.org/10.1046/j.1365-2133.2001.03960.x
31. Randa H, Khoury LR, Grønborg TK, Lomholt JJ, Skov L, Zachariae R. Development and preliminary validation of the adolescent psoriasis quality of life instrument: a disease-specific measure of quality of life in adolescents with psoriasis. Br J Dermatol. 2020;183(1):96–104. https://doi.org/10.1111/bjd.18719
32. Elgamal EAE, Aboelwafa HO, Ibrahim AAM, Elshafey MEM. Quality of life in mothers of children with psoriasis. J Cosmet Dermatol. 2023;22:2560–4. https://doi.org/10.1111/jocd.15737
33. Viswanathan HN, Chau D, Milmont CE, Yang W, Erondu N, Revicki DA, et al. Total skin clearance results in improvements in health-related quality of life and reduced symptom severity among patients with moderate to severe psoriasis. J Dermatolog Treat. 2015;26(3):235–9. https://doi.org/10.3109/09546634.2014.943687
34. Tollefson MM. Diagnosis and management of psoriasis in children. Pediatr Clin N Am. 2014;61(2):261–77. https://doi.org/10.1016/j.pcl.2013.11.003
35. Pinson R, Sotoodian B, Fiorillo L. Psoriasis in children. Psoriasis (Auckl). 2016;6:121–9. https://doi.org/10.2147/ptt.S87650
36. Boniol M, Verriest J-P, Pedeux R, Doré J-F. Proportion of skin surface area of children and young adults from 2 to 18 years old. J Invest Dermatol. 2008;128(2):461–4. https://doi.org/10.1038/sj.jid.5701032
37. Zhou S, Yao Z. Roles of infection in psoriasis. Int J Mol Sci. 2022;23(13):6955. https://doi.org/10.3390/ijms23136955
38. Atalay S, van den Reek JMPA, den Broeder AA, van Vugt LJ, Otero ME, Njoo MD, et al. Comparison of tightly controlled dose reduction of biologics with usual care for patients with psoriasis: a randomized clinical trial. JAMA Dermatol. 2020;156(4):393–400. https://doi.org/10.1001/jamadermatol.2019.4897
39. Mahé E. Optimal management of plaque psoriasis in adolescents: current perspectives. Psoriasis. 2020;10:45–56. https://doi.org/10.2147/PTT.S222729
40. Basra MKA, Sue-Ho R, Finlay AY. The family dermatology life quality index: measuring the secondary impact of skin disease. Br J Dermatol. 2007;156(3):528–38. https://doi.org/10.1111/j.1365-2133.2006.07617.x
41. Lawson V, Lewis-Jones MS, Finlay AY, Reid P, Owens RG. The family impact of childhood atopic dermatitis: the dermatitis family impact questionnaire. Br J Dermatol. 1998;138(1):107–13. https://doi.org/10.1046/j.1365-2133.1998.02034.x
42. Basra MKA, Zammit AM, Kamudoni P, Eghlileb AM, Finlay AY, Salek MS. PFI-14©: a Rasch analysis refinement of the psoriasis family index. Dermatology. 2015;231(1):15–23. https://doi.org/10.1159/000379748

43. Gonzalez J, Cunningham K, Perlmutter J, Gottlieb A. Systematic review of health-related quality of life in adolescents with psoriasis. Dermatology. 2016;232(5):541–9. https://doi.org/10.1159/000450826
44. van Geel MJ, Maatkamp M, Oostveen AM, de Jong EM, Finlay AY, van de Kerkhof PC, et al. Comparison of the dermatology life quality index and the children's dermatology life quality index in assessment of quality of life in patients with psoriasis aged 16–17 years. Br J Dermatol. 2016;174(1):152–7. https://doi.org/10.1111/bjd.14163
45. Smidt AC, Lai JS, Cella D, Patel S, Mancini AJ, Chamlin SL. Development and validation of Skindex-teen, a quality-of-life instrument for adolescents with skin disease. Arch Dermatol. 2010;146(8):865–9. https://doi.org/10.1001/archdermatol.2010.161
46. Basra MKA, Salek MS, Fenech D, Finlay AY. Conceptualization, development and validation of T-QoL© (Teenagers' quality of life): a patient-focused measure to assess quality of life of adolescents with skin diseases. Br J Dermatol. 2018;178(1):161–75. https://doi.org/10.1111/bjd.15853
47. Lavaud J, Mahé E. Proactive treatment in childhood psoriasis. Ann Dermatol Venereol. 2020;147(1):29–35. https://doi.org/10.1016/j.annder.2019.07.005
48. Mahé E, Amy De La Bretêque M, Phan C. Perspectives on the pharmacological management of psoriasis in pediatric and adolescent patients. Expert Rev Clin Pharmacol. 2021;14(7):807–19. https://doi.org/10.1080/17512433.2021.1911641
49. Sun HY, Phan K, Paller AS, Sebaratnam DF. Biologics for pediatric psoriasis: a systematic review and meta-analysis. Pediatr Dermatol. 2022;39(1):42–8. https://doi.org/10.1111/pde.14870
50. D'Adamio S, Silvaggio D, Massaro A, Lombardo P, Bianchi L, Talamonti M, et al. Pharmacotherapeutic management of psoriasis in adolescents and children. Expert Opin Pharmacother. 2019;20(14):1777–85. https://doi.org/10.1080/14656566.2019.1636032
51. Brunello F, Tirelli F, Pegoraro L, Dell'Apa F, Alfisi A, Calzamatta G, et al. New insights on juvenile psoriatic arthritis. Front Pediatr. 2022;10:884727. https://doi.org/10.3389/fped.2022.884727
52. Marani A, Rizzetto G, Radi G, Molinelli E, Capodaglio I, Offidani A, et al. Metabolic comorbidities and cardiovascular disease in pediatric psoriasis: a narrative review. Healthcare (Basel). 2022;10(7):1190. https://doi.org/10.3390/healthcare10071190
53. Cho SI, Kim YE, Jo SJ. Association of metabolic comorbidities with pediatric psoriasis: a systematic review and meta-analysis. Ann Dermatol. 2021;33(3):203–13. https://doi.org/10.5021/ad.2021.33.3.203
54. Kang BY, O'Haver J, Andrews ID. Pediatric psoriasis comorbidities: screening recommendations for the primary care provider. J Pediatr Health Care. 2021;35(3):337–50. https://doi.org/10.1016/j.pedhc.2020.12.006
55. Osier E, Wang AS, Tollefson MM, Cordoro KM, Daniels SR, Eichenfield A, et al. Pediatric psoriasis comorbidity screening guidelines. JAMA Dermatol. 2017;153(7):698–704. https://doi.org/10.1001/jamadermatol.2017.0499

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Foley P, Mahar PD, Smith SD, Gupta M, Manuelpillai N, Orchard D, et al. Australian consensus: Treatment goals for moderate to severe psoriasis in the era of targeted therapies – Considerations for paediatric patients. Australas J Dermatol. 2024;00:1–11. https://doi.org/10.1111/ajd.14303