



BRIEF REPORT

Beyond Psoriasis Area and Severity Index and Body Surface Area: An Italian Delphi Consensus on the Definition of Moderate Psoriasis

Luigi Gargiulo · Antonio Costanzo · Piergiorgio Malagoli · Martina Burlando · Angelo Valerio Marzano · Paolo Dapavo · Giampiero Girolomoni · Giovanni Pappagallo · Francesco Loconsole · Andrea Carugno · Stefano Piaserico · Matteo Megna · Anna Campanati · Andrea Conti · Anna Balato · Emanuele Trovato · Valentina Dini · Carlo Giovanni Carrera · Federico Bardazzi · Claudio Guarneri · Diego Orsini · Nicoletta Bernardini · Marina Venturini · Simone Ribero · Alessandra Narcisi

Received: April 10, 2026 / Accepted: May 15, 2026
© The Author(s) 2026

ABSTRACT

Introduction: Moderate psoriasis, despite its clinical relevance, remains inconsistently defined in current guidelines, leading to heterogeneous treatment decisions and variable access to systemic therapy. A unified, clinically meaningful definition is currently lacking. To

Doctor Paolo Dapavo sadly passed away before the publication of this work. We would like to acknowledge his invaluable contributions to this research.

L. Gargiulo (✉) · A. Costanzo · A. Narcisi
Dermatology Unit, IRCCS Humanitas Research Hospital, Rozzano, Milan, Italy
e-mail: luigi.gargiulo@humanitas.it

L. Gargiulo · A. Costanzo · A. Narcisi
Department of Biomedical Sciences, Humanitas University, Pieve Emanuele, Milan, Italy

P. Malagoli
Department of Dermatology, Dermatology Unit Azienda Ospedaliera San Donato Milanese, Milan, Italy

M. Burlando
Department of Dermatology, Dipartimento di Scienze Della Salute (DISSal), University of Genoa, IRCCS Ospedale Policlinico San Martino, Genoa, Italy

A. V. Marzano · C. G. Carrera
Dermatology Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy

establish a consensus-based, operational definition of moderate psoriasis, we conducted a two-round modified Delphi process involving expert dermatologists.

Methods: Fifteen Italian dermatologists with recognized expertise in psoriasis participated in a Delphi survey composed of 18 statements addressing clinical severity, quality of life, symptoms, involvement of special areas, and treatment response. Consensus was defined as a median score ≥ 7 with interquartile range (IQR) ≤ 2 , or $\geq 75\%$ of ratings ≥ 7 , on a scale going from 1 (completely disagree) to 10 (completely agree). Statements not reaching consensus in

A. V. Marzano
Department of Pathophysiology and Transplantation, Università Degli Studi di Milano, 20122 Milan, Italy

P. Dapavo · S. Ribero
Department of Biomedical Science and Human Oncology, Second Dermatologic Clinic, University of Turin, Turin, Italy

G. Girolomoni
Department of Medicine, Section of Dermatology and Venereology, University of Verona, Verona, Italy

G. Pappagallo
Scuola di Metodologia Della Ricerca Clinica, IRCCS "Sacro Cuore - Don Calabria", Negrar di Valpolicella, Verona, Italy

F. Loconsole
Department of Dermatology, University of Bari, Piazza Umberto I, 1, 70121 Bari, Italy

Round 1 were revised according to participants' comments and re-evaluated in Round 2.

Results: In Round 1, 12 of 18 statements reached consensus. Six statements required revision owing to ambiguity or insufficient operational clarity. After refinement, including clearer definitions of early and frequent relapses, specification of Dermatology Life Quality Index (DLQI) thresholds, and explicit mention of difficult-to-treat or highly visible areas, all six statements achieved consensus in Round 2. Ultimately, consensus was obtained for all 18 statements.

Conclusions: This Delphi process produced a comprehensive and clinically actionable definition of moderate psoriasis, emphasizing a multidimensional view of severity that extends beyond Psoriasis Area and Severity Index (PASI) or Body Surface Area (BSA). These consensus-based criteria may support earlier access to systemic therapies, including biologics and small molecules, and improve harmonization in both clinical practice and research.

Keywords: Biologics; Delphi consensus; Psoriasis; Real-world evidence; Small molecules

A. Carugno
Dermatology Unit, Department of Medicine
and Surgery, University of Insubria, Varese, Italy

S. Piaserico
Dermatology Unit, Department of Medicine,
University of Padua, Padua, Italy

M. Megna
Section of Dermatology, Department of Clinical
Medicine and Surgery, University of Naples Federico
II, Naples, Italy

A. Campanati
Department of Clinical and Molecular
Sciences-Dermatological Clinic, Università
Politecnica Delle Marche, Ancona, Italy

A. Conti
Unit of Dermatology, Infermi Hospital, AUSL
Romagna, Rimini, Italy

A. Balato
Dermatology Unit, University of Campania L.
Vanvitelli, Naples, Italy

E. Trovato
Unit of Dermatology, Department of Medical,
Surgical and Neurological Sciences, University
of Siena, Siena, Italy

Key Summary Points

Why carry out this study?

Moderate psoriasis lacks a clear and consistent definition in current guidelines, leading to variability in treatment decisions and access to systemic therapies.

Traditional clinical scores, such as PASI and BSA, often underestimate disease burden, particularly in patients with involvement of special areas or significant quality-of-life impairment.

What was learned from the study?

This two-round modified Delphi consensus defined moderate psoriasis as a multidimensional construct integrating objective severity, symptoms, quality of life, special areas, and treatment response.

Moderate psoriasis cannot be identified solely by intermediate PASI or BSA values, but by the overall clinical and psychosocial impact of the disease.

The proposed framework supports earlier use of targeted systemic therapies, including biologics and small molecules, and may improve consistency in clinical practice.

V. Dini
Department of Dermatology, University of Pisa,
56126 Pisa, Italy

F. Bardazzi
Dermatology Unit, IRCCS University Hospital
of Bologna, Bologna, Italy

C. Guarneri
Department of Biomedical and Dental Sciences
and Morphofunctional Imaging, University
of Messina, Messina, Italy

D. Orsini
Departmental Faculty of Medicine, UniCamillus-
"Saint Camillus International University of Health
and Medical Sciences", Rome, Italy

N. Bernardini
Dermatology Unit "Daniele Innocenzi", Department
of Medical-Surgical Sciences and Bio-Technologies,
Sapienza University of Rome, Fiorini Hospital,
Terracina, Italy

M. Venturini
Dermatology Department, University of Brescia,
ASST Spedali Civili of Brescia, Brescia, Italy

INTRODUCTION

Psoriasis is a chronic, immune-mediated inflammatory disease that primarily affects the skin, with a global prevalence estimated at approximately 2–3% of the general population [1]. Lesions most commonly occur on the elbows, knees, scalp, and lumbosacral region, but the disease can involve any cutaneous site [1].

Certain locations, such as the scalp, face and neck, hands, nails, and genital area, are often referred to as special or sensitive areas, as their involvement can cause a disproportionate impact on patients' quality of life, even when the overall affected body surface area (BSA) is limited [2].

Treatment strategies for psoriasis depend largely on disease severity [2]. According to current guidelines, mild psoriasis is usually managed with topical therapies, such as topical corticosteroids (TCS) and vitamin D analogues, often in fixed combinations. Although TCS are typically the first-line treatment, they often prove inadequate for patients with involvement of sensitive or difficult-to-treat areas. Conversely, moderate-to-severe psoriasis generally requires systemic treatments, including conventional agents and innovative therapies, including biological drugs and small molecules [3–5].

The Italian Guidelines, in line with European recommendations, define eligibility for systemic therapy on the basis of the presence of a Psoriasis Area and Severity Index (PASI) > 10, or a Body Surface Area (BSA) > 10%, or a Dermatology Life Quality Index (DLQI) > 10 [3]. Additional criteria have been introduced to “upgrade” otherwise mild cases to a moderate-to-severe category, including the involvement of visible areas, extensive scalp psoriasis, genital disease, nail dystrophy affecting at least two fingernails, and recalcitrant plaques [3]. However, this approach has been increasingly criticized for its limited sensitivity to the real burden of disease and its binary view of severity [6].

In response to these limitations, the International Psoriasis Council (IPC) has recently challenged the traditional dichotomous classification of mild psoriasis versus moderate-to-severe

psoriasis. Through a modified Delphi consensus, the IPC proposed a simplified system distinguishing only between candidates for topical therapy and candidates for systemic therapy. According to this definition, patients should be considered candidates for systemic therapy if they meet at least one of the following criteria: (1) BSA > 10%, (2) involvement of special areas, or (3) failure of topical therapy [6].

Despite these efforts, no internationally accepted definition of moderate psoriasis exists [7]. This gap leads to inconsistent clinical decision-making and inequitable access to systemic therapy, underscoring the need for a pragmatic and clinically grounded definition. To address this unmet need, we conducted a modified Delphi consensus aimed at identifying and validating clinical, functional, and patient-reported criteria for the characterization of moderate psoriasis in real-world clinical practice.

METHODS

Study Design

The Delphi method is a structured, iterative process that gathers the opinions of experts through a series of anonymized voting rounds, aiming to achieve convergence of views on a specific topic. This approach is particularly suitable for areas in which evidence is limited or heterogeneous, and expert clinical judgment is needed to support standardization [7, 8].

This Delphi panel consisted of 15 Italian dermatologists with recognized experience in psoriasis management and clinical research, representing both academic and hospital-based settings across different regions of Italy. All panelists had authored peer-reviewed publications or participated in multicenter studies in the field of inflammatory skin diseases, and plaque psoriasis in particular.

To minimize potential bias, each participant was blinded to the responses of the others during the voting phase.

Development of Statements and the Voting Process

An initial list of 18 statements was developed by the scientific committee on the basis of a literature review of current psoriasis classification systems, treatment guidelines, and real-world evidence on disease burden and treatment outcomes. Statements covered clinical severity (PASI, BSA, PGA), difficult-to-treat areas, symptom burden, quality-of-life impairment, psychosocial impact, and comorbid conditions.

Each statement was formatted as an affirmative sentence to be rated on a 1–10 numeric agreement scale, where 1 indicated “strongly disagree” and 10 “strongly agree.”

Panelists independently rated each statement through an anonymized online form.

For each statement, both central tendency and dispersion were analyzed to evaluate the degree of consensus among participants. The Delphi technique was conducted according to established methodological standards [8, 9] and in line with previous consensus studies in dermatology [7, 10].

Two complementary definitions of consensus were applied:

1. Percentage-based criterion: consensus was reached when $\geq 75\%$ of panelists assigned a score ≥ 7 on the 1–10 scale.
2. Robust criterion: consensus was defined as a median score ≥ 7 combined with an interquartile range (IQR) ≤ 2 , ensuring that agreement was both high and consistent among respondents.

Statements meeting both criteria were considered to have reached a strong consensus.

Statements failing to meet either threshold were classified as “no consensus” and identified as potential candidates for revision in a subsequent Delphi round. Qualitative feedback from Round 1 was thematically analyzed and used to revise statements that did not reach consensus.

The survey was administered via a secure online platform (Google Forms).

Ethical Approval

Institutional review board approval was exempted for this study as its procedures did not include human subjects and did not deviate from good clinical practice. All the involved dermatologists gave their approval for the study to be published. All the dermatologists who were part of the consensus were involved in the writing and/or revision of the manuscript. All the dermatologists who participated in the consensus were aware of the objective of the study, and they all knew that the manuscript would be published. The participants gave written informed consent.

Statistical Analysis

Given the ordinal nature of Delphi data, non-parametric statistics (median and IQR) were used. Descriptive statistics were calculated for each statement, including the number of respondents, median, IQR, and percentage of ratings ≥ 7 . All analyses were performed using standard statistical software (Microsoft Excel and Python 3.11). Results are presented in tabular form, summarizing for each statement the median, IQR, percentage of high agreement, and whether the predefined consensus thresholds were achieved.

RESULTS

A total of 15 dermatologists completed both rounds of the Delphi process. During the first round, all 18 statements proposed for defining moderate psoriasis were evaluated according to the two prespecified consensus criteria (median ≥ 7 with IQR ≤ 2 , or $\geq 75\%$ of ratings ≥ 7). In total, 12 statements reached agreement, while 6 (numbers 1, 2, 3, 5, 9, and 16) fell below at least one of the thresholds (Table 1).

Lack of consensus in Round 1 was mainly attributable to wording ambiguity rather than genuine disagreement among experts. Panelists' comments highlighted several recurring issues:

the need to distinguish inadequate response to topical therapy from poor adherence; the potential overlap between systemic treatment failure and intrinsic disease severity; uncertainty about the use of subjective burden in the absence of validated tools; and the need to refine numerical thresholds for QoL impairment and the involvement of special areas.

These six statements were therefore revised to include clearer operational definitions, such as the timing of early relapse, the frequency of flares, the use of DLQI ≥ 10 or repeated scores > 5 , and the explicit mention of difficult-to-treat or sensitive areas. The revised statements were then resubmitted in Round 2 and received a remarkably high level of agreement. All six statements reached consensus, with median scores ranging from 7 to 9, narrow IQRs (1–2), and percentages of ratings ≥ 7 consistently above 80%. As a result, after the second round, consensus was ultimately achieved for all 18 statements (Table 2).

Synthesis of Expert Perspectives

Across both rounds, the panel consistently emphasized that moderate psoriasis cannot be identified solely by intermediate PASI or BSA values (Table 3). Instead, it emerges as a multidimensional construct integrating:

- limited but clinically meaningful objective involvement (e.g., PASI/BSA 3–10%);
- the presence of difficult-to-treat or highly visible areas;
- persistent symptoms such as itch or pain;
- a significant quality-of-life impact, particularly when DLQI ≥ 10 or repeatedly > 5 ;
- inadequate or unstable control with appropriate topical therapy;
- and the contextual severity added by systemic comorbidities.

The panel's feedback supports a model in which the functional and psychosocial burden of disease carries equal, if not greater, weight than traditional severity metrics. This echoes the evolving framework proposed by the International Psoriasis Council and is strongly aligned

with recent literature showing that patients with BSA 3–10% derive quality-of-life improvements comparable to those with more extensive involvement when treated with systemic therapy [6].

DISCUSSION

Moderate psoriasis remains a conceptually heterogeneous entity, and current severity classifications fail to capture its clinical and psychosocial complexity. This modified Delphi consensus sought to establish a clinically meaningful and patient-centered definition of moderate psoriasis, a category for which no standardized or internationally accepted criteria currently exist. The two-round structure of the process allowed not only the identification of areas of agreement but also the refinement of contentious concepts through iterative feedback. Figure 1 provides a visual synthesis of the multidimensional criteria we used to define moderate psoriasis.

Expert Perspectives and Interpretation of Statements

Agreement was strongest for statements emphasizing functional and psychosocial burden rather than purely quantitative severity scores. All participants recognized that involvement of special or visible areas, such as the scalp, face, genital region, or nails, can substantially impair daily life and justify systemic therapy even in patients with low PASI or BSA. This mirrors prior work from the International Psoriasis Council (IPC), which proposed a shift from numeric thresholds toward a treatment eligibility-based classification [6].

Conversely, disagreement was observed in statements linking disease severity to treatment adherence or prior failures. Some experts considered nonadherence a behavioral rather than disease-related factor (Statement 1), while others noted that difficulty maintaining control with topical therapy reflects the intrinsic chronicity and treatment fatigue typical of moderate disease. Similarly, statements attributing

Table 1 Summary of the first round of Delphi consensus process for statements regarding the definition of moderate psoriasis in clinical practice

N	Statement	Voters	Median	IQR	% ≥ 7	Consensus (median ≥ 7 and IQR ≤ 2)	Consensus (≥ 75% with ≥ 7)
1	Moderate psoriasis is characterized by a primary or secondary failure to achieve remission with topical therapy alone and/or by the inability to maintain remission with topical treatment, even owing to poor adherence	15	7	3	53,3	✗	✗
2	Patients with psoriasis who fail to regain adequate disease control shortly after discontinuation of topical therapy should be considered candidates for systemic treatment, regardless of the overall skin involvement	15	6,5	2	46,7	✗	✗
3	Patients with a history of failure with previous systemic treatments should be considered as having “moderate psoriasis,” irrespective of disease extent or localization	15	7	6,5	53,3	✗	✗
4	The patient’s perception of their own psoriasis should be considered as a key criterion in selecting a personalized therapy	15	9	1,75	93,3	✓	✓
5	Moderate psoriasis can also be subjectively defined on the basis of a significant impact on the patient’s lived experience, even without the use of specific scoring systems	15	7	4	53,3	✗	✗
6	The patient’s social life and profession strongly influence disease perception and should not be overlooked during data collection, as they can affect disease grading independently of extent and localization	15	8	1	86,7	✓	✓
7	The assessment of psoriasis impact on the patient’s quality of life is relevant in shaping therapeutic decisions	15	9	0,75	93,3	✓	✓
8	The impact of psoriatic disease on a patient’s quality of life can be measured using the Dermatology Life Quality Index (DLQI)	15	8	1	93,3	✓	✓
9	Patients with a DLQI score greater than 5 should be considered as having moderate psoriasis, even in the presence of limited skin involvement	15	7	2,75	73,3	✗	✗

Table 1 continued

N	Statement	Voters	Median	IQR	% ≥ 7	Consensus (median ≥ 7 and IQR ≤ 2)	Consensus (≥ 75% with ≥ 7)
10	Onset of psoriasis during adolescence or early adulthood influences choices and behaviors and may have a significant impact on the patient's lived experience	15	9	1	100	✓	✓
11	The duration of psoriasis history has a proportional impact on self-esteem, social relationships, work, and intimate life	15	9	0,75	93,3	✓	✓
12	Patients with a PASI score between 3 and 5 who fail to achieve disease control within 2 years from onset may be considered as having moderate psoriasis	15	8	1,75	80	✓	✓
13	A PASI score between 3 and 10 in patients who did not respond to topical therapies and experience a high impact on quality of life contributes to the definition of moderate psoriasis	15	8,5	1	93,3	✓	✓
14	A Physician's Global Assessment (PGA) score of 2 in patients unresponsive to topical therapy and with a high impact on quality of life contributes to the definition of moderate psoriasis	15	8	1	93,3	✓	✓
15	A body surface area (BSA) involvement between 3 and 10% in patients who did not respond to topical therapies and report a high impact on quality of life contributes to the definition of moderate psoriasis	14	8	1	92,9	✓	✓
16	Moderate involvement of visible and socially impactful areas, such as the head/neck, genital region, nail apparatus, palms/soles, and pretibial areas, contributes to the definition of moderate psoriasis	15	9	2,5	73,3	✗	✗
17	The coexistence of other immune-mediated inflammatory diseases (e.g., psoriatic arthritis, inflammatory bowel disease, uveitis) in a patient with psoriasis requires systemic therapy, regardless of the extent of skin involvement	15	9	0	86,6	✓	✓
18	The presence of symptoms, such as itching and pain, which significantly impact quality of life, upgrades the severity of psoriasis to a moderate level even in otherwise mild forms	15	9	1	100	✓	✓

All panelists voted on every statement, except for Statement number 15, which was not voted by one participant

Table 2. Summary of the second round of the Delphi consensus process

N	Statement	Voters	Median	IQR	% ≥ 7	Consensus (median ≥ 7 and IQR ≤ 2)	Consensus (≥ 75% with ≥ 7)
1	Patients who are unable to achieve or maintain adequate disease control with topical therapy alone, despite good adherence (≥ 80%) and appropriate treatment duration (4–8 weeks), may be considered as having moderate psoriasis	15	7	2	86,7	✓	✓
2	Patients who experience early relapse (within 4 weeks) or frequent relapses (≥ 2 in 6 months or ≥ 3 in 12 months) after appropriate topical therapy may be considered as having moderate psoriasis and candidates for systemic treatment	15	8	2	93,3	✓	✓
3	Patients who have shown inadequate or partial response, or secondary loss of efficacy, to at least one systemic therapy, provided that disease extent remains limited but functional/psychosocial impact is relevant, may be considered as having moderate psoriasis	15	9	1	80	✓	✓
5	The patient's perception of psoriasis burden, captured through validated PROs, such as DLQI, itch, or pain scores, may contribute to the definition of moderate psoriasis, even when objective involvement is limited	15	9	2	93,3	✓	✓
9	A DLQI ≥ 10, or > 5 on two consecutive assessments, indicates a relevant QoL impact that should contribute, together with clinical parameters, to defining moderate psoriasis even when skin involvement is limited	15	8	1	86,7	✓	✓
16	Involvement of difficult-to-treat or highly visible areas, such as scalp, face/neck, genital region, nails, or palms/soles, especially when associated with functional limitation or psychosocial distress, contributes to defining moderate psoriasis	15	9	1	93,3	✓	✓

The six statements that did not reach a strong agreement in the first round were rephrased according to the panelists' suggestions. All six rephrased statements were approved by the majority of the panelists

“moderate” status solely to previous systemic therapy failure (Statement 3) were seen as potentially conflating refractoriness with severity, highlighting the need for distinct conceptual categories. These diverging opinions underscore

the multifactorial nature of psoriasis severity, where biological activity, treatment responsiveness, and psychosocial adaptation interact dynamically.

Table 3 Summary of consensus-based criteria defining moderate psoriasis

Domain	Key criteria
Objective severity	PASI 3–10, BSA 3–10
Special areas involvement	Scalp, face/neck, genital, nails, palmoplantar
Symptoms	Itch, pain
Impairment of quality of life	DLQI ≥ 10 or persistent DLQI > 5
Treatment response	Inadequate control with topical therapy, early or frequent relapse

PASI Psoriasis Area and Severy Index, *BSA* body surface area, *DLQI* Dermatology Life Quality Index

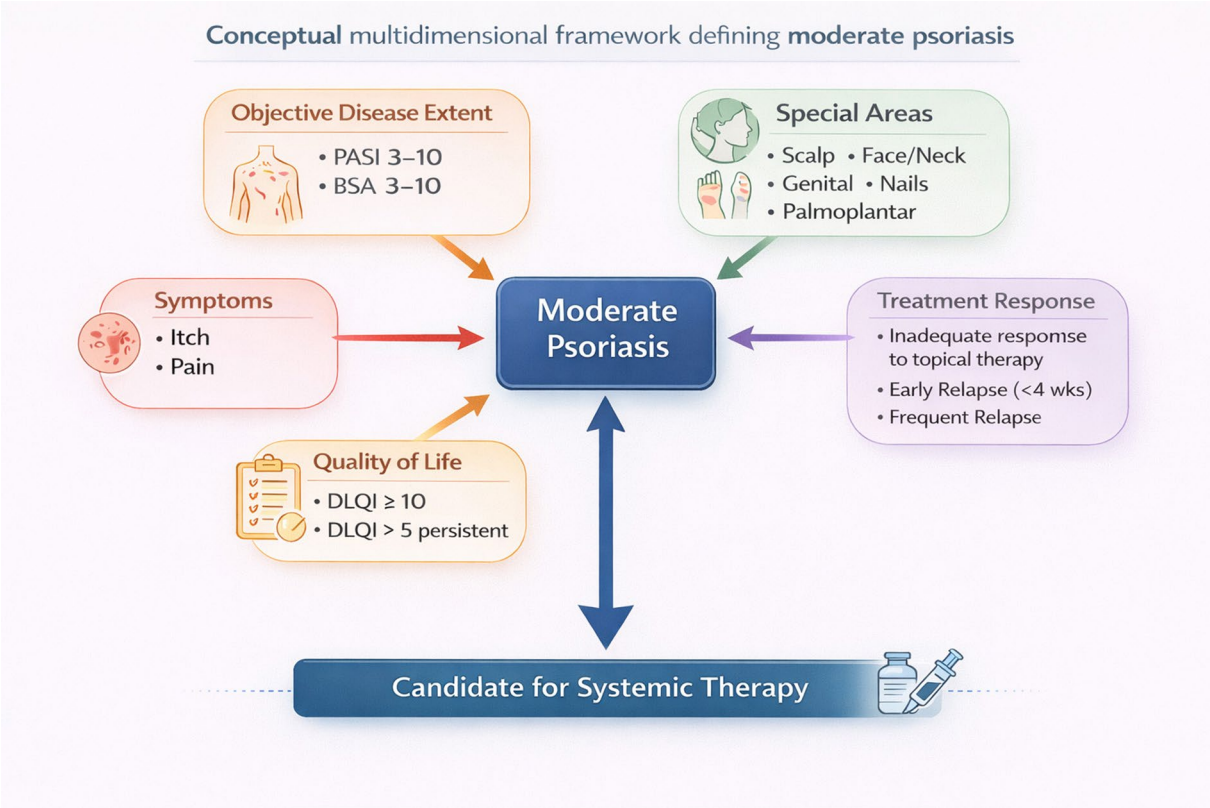


Fig. 1 Conceptual multidimensional framework defining moderate psoriasis according to the Delphi consensus. Moderate psoriasis is defined through the integration of multiple domains including objective disease extent (PASI and BSA), involvement of special areas, symptom burden, quality-of-life impairment, and response to topical therapy.

The coexistence of these elements identifies patients who may be candidates for systemic treatment despite not fulfilling traditional severity thresholds. *PASI* Psoriasis Area and Severy Index, *BSA* body surface area, *DLQI* Dermatology Life Quality Index

Several participants emphasized that the patient's perception of disease plays a decisive role in therapy selection (Statements 4–7). Comments often stressed the importance of shared decision-making, especially when psychosocial distress, occupational limitations, or social withdrawal are present despite limited BSA. Such perspectives align with recent evidence showing that subjective disease burden can outweigh objective measures when assessing overall severity [6, 11]. The high level of consensus on these items supports a paradigm in which moderate psoriasis is characterized not merely by intermediate severity scores, but by a clinically meaningful impact on life quality and functionality.

Interestingly, comments on statements addressing comorbid immune-mediated diseases (Statement 17) revealed unanimous agreement that coexisting psoriatic arthritis or inflammatory bowel disease necessitates systemic therapy, even with minimal skin involvement. This view reinforces the growing perception of psoriasis as a systemic condition rather than a localized skin disease.

Refinement Through the SECOND Delphi Round

In the first round, most statements addressing quality of life, symptom burden, psychosocial impact, and difficult-to-treat areas achieved strong agreement. By contrast, six statements failed to meet consensus, largely owing to conceptual ambiguity. These primarily involved the interpretation of inadequate response to topical therapy (Statements 1 and 2), the distinction between treatment refractoriness and intrinsic severity (Statement 3), the exclusively subjective assessment of disease burden (Statement 5), the DLQI threshold proposed to reclassify mild disease (Statement 9), and the definition of “moderate” involvement of special areas (Statement 16).

The qualitative comments from Round 1 were instrumental in reshaping these statements. Panelists emphasized the need to distinguish behavioral factors (e.g., poor adherence) from true disease severity, to integrate patient-reported outcomes with objective parameters

rather than use them in isolation, and to adopt operational definitions (e.g., timing of relapse, number of flares, DLQI thresholds) that reflect everyday clinical practice.

Following revision, all six statements reached a clear consensus in Round 2, confirming that the refined formulations aligned more closely with real-world clinical reasoning. This second-round convergence reinforces the robustness of the final set of criteria and demonstrates that disagreement in Round 1 stemmed more from wording, not from true conceptual discord among experts.

Context Within the Current Literature

Our findings strongly converge with the evolving framework proposed by the International Psoriasis Council (IPC) and are supported by recent real-world evidence [6]. In a large CorEvitas registry analysis, Strober et al. compared outcomes of patients with moderate (BSA 3–10%) and severe (BSA > 10%) psoriasis treated with risankizumab [12]. Remarkably, both groups achieved comparable improvements in skin clearance and in quality of life, as measured by the Dermatology Life Quality Index (DLQI) [12].

This observation reinforces the idea that patients traditionally labeled as “moderate” experience a disease burden disproportionate to their objective skin involvement, and that effective systemic treatment can produce substantial QoL gains similar to those seen in more extensive disease [12, 13].

From a clinical standpoint, these findings underscore that the impact of psoriasis on daily functioning and psychological well-being should weigh as heavily as lesion extent in defining disease severity and guiding treatment choice. Failing to recognize this could lead to undertreatment of a population that can achieve significant benefit from timely systemic intervention [13]. Importantly, this evolving perspective also supports the use of targeted systemic therapies, including biologics and small molecules, in selected patients with moderate psoriasis whose disease burden remains inadequately controlled with topical therapy.

As a matter of fact in the past years, Horner et al. [14] and Armstrong et al. [15] confirmed that patients with limited but high-impact disease derive notable psychosocial and symptomatic improvement when treated systemically, supporting a multidimensional definition of severity that includes patient-reported outcomes and life impact alongside PASI and BSA.

From a health policy perspective, the absence of a clear operational definition of moderate psoriasis contributes to inequalities in access to systemic therapy across countries. Recent EADV and IPC working groups have called for harmonized criteria that incorporate patient-reported outcomes, involvement of special areas, and treatment refractoriness [16, 17], all elements that were also validated by our Delphi panel. We strongly believe that our recommendations emphasize both the importance of subjective symptoms and involvement of sensitive areas, intending to further promote access to innovative treatments, also for patients with more limited PASI and BSA. In addition, compared with the IPC definition, which focuses mostly on treatment eligibility, we believe that our model provides a more practical definition of moderate psoriasis by integrating specific clinical and patient-reported outcomes that could be easily incorporated into real-world clinical practice (Table 3).

Limitations and Future Directions

A key strength of this study lies in the high level of expertise and engagement of the participating dermatologists, who collectively contributed decades of clinical experience and a detailed understanding of psoriasis across different care settings. The two-round structure enabled the identification and correction of conceptual ambiguities, allowing the panel to converge toward a set of operational criteria with strong clinical relevance. Another strength is the explicit integration of both objective and patient-reported domains, reflecting the multidimensional nature of moderate psoriasis. Moreover, the criteria proposed here are simple enough to be implemented in routine practice and may

support more timely identification of patients who would benefit from systemic therapy.

However, some limitations must be acknowledged. Delphi studies inherently rely on expert opinion, and the perspectives captured here, while valuable, may not fully represent the diversity of clinical practices beyond the Italian context. The absence of patient input may also limit the breadth of viewpoints, particularly regarding lived experience and perceived burden. Finally, while operational definitions were refined to enhance clarity, further validation through prospective real-world studies will be necessary to determine the applicability and impact of these criteria in different healthcare environments.

CONCLUSIONS

This Delphi consensus provides a coherent and clinically meaningful framework for defining moderate psoriasis, a category that has long lacked operational clarity. By integrating objective severity, symptom burden, quality of life, involvement of special areas, and responsiveness to topical therapy, the final criteria reflect the true complexity of the condition. The full agreement reached across two rounds underscores the robustness of the proposed definitions. These criteria may help standardize clinical decision-making, facilitate earlier access to targeted systemic therapies, including biologics and small molecules, and guide future research. Further validation in real-world populations will be important to confirm their generalizability.

ACKNOWLEDGEMENTS

We would like to acknowledge Doctor Paolo Dapavo, who sadly passed away before the publication of this work, for his invaluable contributions to this research. He will be greatly missed.

Author Contributions. All authors contributed to the conception and design of the study. Material preparation and data analysis

were conducted by Luigi Gargiulo, Antonio Costanzo, Piergiorgio Malagoli, Martina Burlando, Angelo Valerio Marzano, Paolo Dapavo, Giampiero Girolomoni, and Giovanni Pappagallo. Data collection was performed by Francesco Loconsole, Andrea Carugno, Stefano Piaserico, Matteo Megna, Anna Campanati, Andrea Conti, Anna Balato, Emanuele Trovato, Valentina Dini, Carlo Giovanni Carrera, Federico Bardazzi, Claudio Guarneri, Diego Orsini, Nicoletta Bernardini, and Marina Venturini. The first draft of the manuscript was written by Luigi Gargiulo, and all authors commented on previous versions of the manuscript. Alessandra Narcisi and Simone Ribero performed the review and the editing of the final draft of the manuscript. Alessandra Narcisi, Simone Ribero, Antonio Costanzo, Piergiorgio Malagoli, and Angelo V. Marzano supervised the study. All authors read and approved the final manuscript. Doctor Luigi Gargiulo, as corresponding author, attests that to the best of their knowledge, Dr Dapavo met the definition of authorship, and all the other authors agree.

Funding. No funding or sponsorship was received for this study or publication of this article.

Data Availability. Additional data supporting the findings of this manuscript are available to the corresponding author upon reasonable request.

Declarations

Conflict of interest. Luigi Gargiulo has been a consultant and/or speaker and has served as an advisory board member for AbbVie, Almirall, Amgen, BMS, Eli Lilly, Galderma, Johnson and Johnson, Incyte, LEO Pharma, Novartis, Pierre Fabre, Pfizer, Sanofi, and UCB Pharma. Antonio Costanzo has served as an advisory board member, consultant, and has received fees and speaker's honoraria or has participated in clinical trials for AbbVie, Almirall, Biogen, Leo Pharma, Eli Lilly, Janssen, Novartis, Pfizer, Sanofi Genzyme, and UCB Pharma. Angelo V. Marzano has conflict of interest with AbbVie, Boehringer Ingelheim, Bristol Myers, Squibb,

Incyte, Leopharma, Novartis, Pfizer, Sanofi and UCB. Piergiorgio Malagoli has been a speaker for AbbVie, Eli Lilly, Novartis, Janssen-Cilag, Celgene, Leo Pharma, and Almirall. Anna Balato has received honoraria for participation in advisory boards, meetings, or as a speaker for AbbVie, Celgene, Janssen-Cilag, Eli Lilly, Novartis Pharma, Pfizer, Sanofi-Genzyme, and UCB Pharma. Federico Bardazzi has been a consultant adviser and clinical study investigator for Eli Lilly, AbbVie, Novartis, Leo Pharma, Sandoz, Bristol Myers, Abiogen-Pharma, Celgene, and Janssen. Martina Burlando has acted as a speaker and consultant for AbbVie, Janssen, Amgen, Novartis, Eli Lilly, and UCB Pharma. Carlo G. Carrera has served as a board participant or speaker for AbbVie, Eli Lilly, Janssen, Novartis, Celgene, Almirall, and Leo Pharma. Andrea Carugno has been a consultant and/or speaker for AbbVie, Leo Pharma, Eli Lilly, Novartis, Janssen-Cilag, Amgen, Almirall, UCB Pharma, and Boehringer Ingelheim. Paolo Dapavo has been a speaker for Novartis, AbbVie, Sanofi, UCB, Janssen, Eli Lilly, and Leo Pharma. Anna Campanati has served as a speaker, consultant, or advisory board member for AbbVie, Almirall, Amgen, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, Galderma, Incyte, Leo Pharma, Merck Sharp & Dohme, Janssen-Cilag, Novartis, Pfizer, Regeneron, Sanofi-Aventis, and UCB Pharma. Claudio Guarneri has been a scientific consultant, speaker, and clinical study investigator for AbbVie, Celgene, Janssen, Eli Lilly, Novartis, Pfizer, Sanofi, Almirall, and Leo Pharma. Emanuele Trovato is involved in an intermittent project focused on consulting and/or advisory relationships and/or travel-congress support with Eli Lilly, Novartis, Janssen-Cilag, AbbVie, and Almirall. Marina Venturini served as a speaker or advisory board member for AbbVie, Almirall, Amgen, Eli Lilly, Galderma, Leo Pharma, Novartis, Pierre Fabre, and UCB Pharma. Francesco Loconsole served on advisory boards and/or received honoraria for lectures from AbbVie, Janssen-Cilag, Novartis, Lilly, Sanofi. Matteo Megna acted as a speaker or consultant for AbbVie, Eli Lilly, Janssen, Leo Pharma, and Novartis. Diego Orsini has been a speaker and/or consultant for AbbVie, Leo Pharma, UCB, Bristol-Myers Squibb, and

Boehringer Ingelheim. Simone Ribero has served as an advisory board member and/or consultant and has received fees and speaker's honoraria or has participated in clinical studies for AbbVie, Almirall, Leo Pharma, Eli Lilly, Novartis, Pfizer, and Sanofi Genzyme. Alessandra Narcisi has served on advisory boards, received honoraria for lectures, and research grants from Almirall, AbbVie, Leo Pharma, Celgene, Eli Lilly, Janssen, Novartis, Sanofi Genzyme, Amgen, and Boehringer Ingelheim. Giampiero Girolomoni, Giovanni Pappagallo, Stefano Piaserico, Andrea Conti, Valentina Dini and Nicoletta Bernardini have nothing to disclose. Anna Campanati and Diego Orsini are Editorial Board members of *Dermatology and Therapy*. Anna Campanati and Diego Orsini were not involved in the selection of peer reviewers for the manuscript nor any of the subsequent editorial decisions.

Ethical approval. Institutional review board approval was exempted for this study as its procedures did not include human subjects and did not deviate from good clinical practice. All the involved dermatologists gave their approval for the study to be published. All the dermatologists who were part of the consensus were involved in the writing and/or revision of the manuscript. All the dermatologists who participated in the consensus were aware of the objective of the study, and they all knew that the manuscript would be published. The participants gave written informed consent.

Open Access. This article is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License, which permits any non-commercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds

the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc/4.0/>.

REFERENCES

1. Parisi R, Iskandar IYK, Kontopantelis E, et al. National, regional, and worldwide epidemiology of psoriasis: systematic analysis and modelling study. *BMJ*. 2020;369:m1590.
2. Elmetts CA, Korman NJ, Prater EF, et al. Joint AAD-NPF guidelines of care for the management and treatment of psoriasis with topical therapy and alternative medicine modalities for psoriasis severity measures. *J Am Acad Dermatol*. 2021;84(2):432–70.
3. Gisondi P, Fargnoli MC, Amerio P, et al. Italian adaptation of EuroGuiDerm guideline on the systemic treatment of chronic plaque psoriasis. *Ital J Dermatol Venerol*. 2022;157(Suppl. 1 to No. 1):1–78.
4. Nast A, Smith C, Spuls PI, et al. EuroGuiDerm guideline on the systemic treatment of *Psoriasis vulgaris* - Part 1: treatment and monitoring recommendations. *J Eur Acad Dermatol Venerol*. 2020;34(11):2461–98.
5. Mrowietz U, Kragballe K, Reich K, et al. Definition of treatment goals for moderate to severe psoriasis: a European consensus. *Arch Dermatol Res*. 2011;303(1):1–10.
6. Strober B, ryan C, van de Kerkhof P, van der Walt J, Kimball aB, Barker J, et al.; International Psoriasis Council Board members and Councilors. recategorization of psoriasis severity: Delphi consensus from the International Psoriasis Council. *J am acad Dermatol* 2020;82:117–22.
7. Richard MA, Aubin F, Beneton N, et al. Moderate psoriasis in clinical practice: French expert consensus using a modified Delphi method. *Adv Ther*. 2022;39(11):5203–15.
8. Hasson F, Keeney S, McKenna H. Research guidelines for the Delphi survey technique. *J Adv Nurs*. 2000;32(4):1008–15.
9. Diamond IR, Grant RC, Feldman BM, et al. Defining consensus: a systematic review recommends methodologic criteria for reporting of Delphi studies. *J Clin Epidemiol*. 2014;67(4):401–9. <https://doi.org/10.1016/j.jclinepi.2013.12.002>.

10. Gargiulo L, Ibba L, Malagoli P, et al. Management of patients affected by moderate-to-severe atopic dermatitis with JAK inhibitors in real-world clinical practice: an Italian Delphi consensus. *Dermatol Ther (Heidelb)*. 2024;14(4):919–32. <https://doi.org/10.1007/s13555-024-01135-x>.
11. Golbari NM, van der Walt JM, Blauvelt A, Ryan C, van de Kerkhof P, Kimball AB. Psoriasis severity: commonly used clinical thresholds may not adequately convey patient impact. *J Eur Acad Dermatol Venereol*. 2021;35(2):417–21. <https://doi.org/10.1111/jdv.16966>.
12. Strober B, Patel M, Kaldas MI, et al. Real-world skin clearance and quality of life with risankizumab in patients with psoriasis with moderate skin involvement and those eligible for systemic therapy per International Psoriasis Council classification. *Dermatol Ther (Heidelb)*. 2025;15(9):2409–21. <https://doi.org/10.1007/s13555-025-01474-3>.
13. Carretero G, Puig L, Carrascosa JM, et al. Redefining the therapeutic objective in psoriatic patients candidates for biological therapy. *J Dermatolog Treat*. 2018;29(4):334–46. <https://doi.org/10.1080/09546634.2017.1395794>.
14. Horner ME, Orroth KK, Ma J, Duan Y, Cordey M. Redefining disease severity with special area involvement and reflecting on treatment patterns in a real-world psoriasis population. *Dermatol Ther (Heidelb)*. 2024;14(1):187–99. <https://doi.org/10.1007/s13555-023-01065-0>.
15. Armstrong A, Strober B, Gisondi P, et al. Benefits of earlier apremilast initiation in patients with psoriasis and limited skin involvement: results from a real-world retrospective study. *Dermatol Ther (Heidelb)*. 2025;15(10):2911–23. <https://doi.org/10.1007/s13555-025-01466-3>.
16. Armstrong AW, Gondo GC, Merola JF, et al. Defining on-treatment remission in plaque psoriasis: a consensus statement from the National Psoriasis Foundation. *JAMA Dermatol*. 2025;161(8):863–9. <https://doi.org/10.1001/jamadermatol.2025.1625>.
17. Costanzo A, Bardazzi F, Burlando M, et al. Toward the definition of moderate psoriasis: an expert opinion. *J Dermatolog Treat*. 2026;37(1):2626219. <https://doi.org/10.1080/09546634.2026.2626219>.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.