

**The significance of the Lattice-System Physician's Global Assessment as a research tool for measuring mild-to-moderate psoriasis**

Svendsen, Mathias Tiedemann; Andersen, Klaus Ejner

*Published in:*  
Journal of the American Academy of Dermatology

*DOI:*  
[10.1016/j.jaad.2021.02.020](https://doi.org/10.1016/j.jaad.2021.02.020)

*Publication date:*  
2022

*Document version:*  
Accepted manuscript

*Document license:*  
CC BY-NC-ND

*Citation for pulished version (APA):*  
Svendsen, M. T., & Andersen, K. E. (2022). The significance of the Lattice-System Physician's Global Assessment as a research tool for measuring mild-to-moderate psoriasis. *Journal of the American Academy of Dermatology*, 86(3), e111-e112. <https://doi.org/10.1016/j.jaad.2021.02.020>

Go to publication entry in University of Southern Denmark's Research Portal

**Terms of use**

This work is brought to you by the University of Southern Denmark.  
Unless otherwise specified it has been shared according to the terms for self-archiving.  
If no other license is stated, these terms apply:

- You may download this work for personal use only.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying this open access version

If you believe that this document breaches copyright please contact us providing details and we will investigate your claim.  
Please direct all enquiries to [puresupport@bib.sdu.dk](mailto:puresupport@bib.sdu.dk)

1 **Journal:** Journal of the American Academy of Dermatology  
2  
3 **Title:** Don't forget the Lattice-System Physician's Global Assessment as one of the research tools  
4 for measuring severity of mild-to-moderate psoriasis  
5  
6 **Type of manuscript:** Notes and Comments  
7  
8 **Section:** Notes and comments section  
9  
10 **Affiliation:** Department of Dermatology and Allergy Centre, Odense University Hospital, Odense C  
11  
12 Mathias Tiedemann Svendsen, MD, PhD<sup>1,2</sup> & Klaus Ejner Andersen, MD, DMSc<sup>2</sup>  
13  
14 <sup>1</sup>Department of Dermatology and Allergy Centre, Odense University Hospital, <sup>2</sup>Department of  
15 Clinical Research, University of Southern Denmark, Odense, Denmark  
16  
17 **Corresponding author**  
18 Mathias Tiedemann Svendsen  
19 Department of Dermatology and Allergy Centre  
20 Odense University Hospital  
21 Kløvervænget 15  
22 DK-5000 Odense C  
23 Denmark  
24 mtsvendsen@health.sdu.dk  
25  
26 **Funding Source:** None  
27  
28 **Conflicts of Interests:** MTS and KEA have received research funds from LEO Pharma. The views  
29 and opinions expressed herein are those of the authors.  
30  
31 **Keywords:** Lattice-System Physician's Global Assessment, clinical trial, severity measurement,  
32 psoriasis  
33  
34  
35  
36  
37 Manuscript word counts: 456  
38 References: 5

**Don't forget the Lattice-System Physician's Global Assessment as one of the research tools for measuring severity of mild-to-moderate psoriasis**

*Dear Editor,*

The introduction of new and promising methods for monitoring the outcome of psoriasis in patients with mild-to-moderate psoriasis is of great interest for clinicians and researchers. Recently, *Gold et al.* compared the Physician's Global Assessment and body surface area (PGAxBSA) with Psoriasis Area and Severity Index (PASI) [1] and recommended introducing the PGAxBSA. Further, *Taliercio et al.* reported high correlation between the Overall Physician Global Assessment (OPGA) with the plaque PGA (PPGA)xBSA and suggested the OPGA as single assessment tool for daily clinical use [2]. Being regular users of the Lattice-System Physician's Global Assessment (LS-PGA) at our clinical trial unit [3], we suggest researchers to consider use of the LS-PGA for monitoring patients with mild-to-moderate psoriasis, so its use is not lost in the mist of oblivion.

Dermatological research trials investigating treatment efficacy in patients with mild-to-moderate psoriasis apply various measurement methods to monitor the outcome in each patient [4]. Each method has strengths and limitations. PASI is the standard method for monitoring severity of psoriasis in clinical trials and the Simplified PASI is more practical for use in the dermatology clinic. However, these scores are non-linear with little response distribution, resulting in low sensitivity to change in mild psoriasis. The Psoriasis Assessment Severity Score (PASS) has a longer scale and is more sensitive to change but is not validated and has been sparsely used. Further, the Physicians Global Assessment (PGA) is easier to perform, but lacks clear definitions thus having low score reproducibility.

The LS-PGA has the strength of being a standardized and validated research method appropriate for assessing the severity of psoriasis in patients with mild-to-moderate disease activity

[5]. It integrates ranges of BSA, and the overall plaque morphology given infiltration more weight compared with scaling and erythema, why it has high score for content validity. Further, the LS-PGA scores high on test-retest reliability and inter-rater reliability [4]. Its user-friendliness is overall comparable to the other aforementioned tools available for examining and scoring psoriasis patients. However, a thorough instruction and supervision of the assessor is necessary when a research trial is initiated.

Using the LS-PGA, the assessor generates a score (1-8) for severity of psoriasis in three simple steps: First, the assessor estimates BSA. Then, the assessor measures thickness, erythema and scale from a representative sample of plaque quality. Finally, the assessor inserts the BSA score and plaque quality into a lattice, which generates the final score.

In conclusion, the LS-PGA is one of the many validated and reliable monitoring instruments available for dermatologists who conduct clinical treatment trials in psoriasis patients with mild-to-moderate disease.

Sincerely,

Mathias Tiedemann Svendsen & Klaus Ejner Andersen

#### References:

1. Gold LS, Hansen JB, Patel D, et al. PGAXBSA composite versus PASI: Comparison across disease severities and as therapeutic response measure for Cal/BD foam in plaque psoriasis. *Journal of the American Academy of Dermatology*. 2020 Jul;83(1):131-138.
2. Taliercio V, Langner AU, Secrest AM, Duffin KC, Assessing psoriasis severity: psychometric validation of overall physician global assessment (OPGA), *Journal of the American Academy of Dermatology* (2021), doi: <https://doi.org/10.1016/j.jaad.2021.01.014>.

- 90 3. Svendsen MT, Andersen F, Andersen KH, et al. A smartphone application supporting  
91 patients with psoriasis improves adherence to topical treatment: a randomized controlled  
92 trial. *The British journal of dermatology*. 2018 Nov;179(5):1062-1071.
- 93 4. Spuls PI, Lecluse LA, Poulsen M-LNF et al. How Good Are Clinical Severity and Outcome  
94 Measures for psoriasis?: Quantitative Evaluation in a Systematic Review. *J Invest Dermatol*  
95 2010 Apr;130(4):933-43.
- 96 5. Langley RG, Ellis CN. Evaluating psoriasis with Psoriasis Area and Severity Index,  
97 Psoriasis Global Assessment, and Lattice System Physician's Global Assessment. *J Am*  
98 *Acad Dermatol*. 2004 Oct;51(4):563-9.