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PeakPASI: A new measurement tool in psoriasis care

To the Editor: Psoriasis can impair happiness and quality of life,[1] with people with a longer disease duration and more severe psoriasis showing higher impairment.[2] The Psoriasis Area and Severity Index (PASI) is a commonly used measuring tool, but it represents only a snapshot of a single visit. Accordingly, important factors like treatment outcomes or the individual lifetime burden may not be fully reflected.[3,4] Thus, we suggest implementing a stable, long-term score and using the highest ever-documented PASI, the PeakPASI.[5]

To test its feasibility, a cross-sectional study including patients with psoriasis aged 18 years or older from 36 dermatologic settings was performed in Germany between September 2018 and November 2019. Dermatologists were asked to recruit patients consecutively with any severity and to report the PeakPASI documented in each patient's file. Additionally, patients answered questions on the Dermatological Life Quality Index (DLQI) and regarding happiness.[1] To assess differences in patients, 2 classifications were calculated: (1) PeakPASI of less than 10.0 versus 10.0 or greater and (2) PeakPASI of less than 13.6 versus 13.6 or greater, based on a median split.

Overall, 398 patients (mean age, 49.1 ± 14.5 y; 42.5% women) were included (Table I and Supplemental Table I; available via Mendeley at https://doi.org/10.17632/2jxyvxw6t8.3). At study examination, 302 patients had a higher PeakPASI than PASI. In both classifications, people with a higher PeakPASI were more likely to be male, to have a higher PASI, to receive systemic treatment, and to have previously received UV therapy (Table I and Supplemental Table II; available via Mendeley at https://doi.org/10.17632/2jxyvxw6t8.3). Additionally, people having a PeakPASI of 13.6 or greater had significantly higher DLQI and lower happiness (Fig 1).

The mean value of PeakPASI was twice as high as the mean PASI, indicating that the cumulative burden is likely to be higher than 1 snapshot at a specific moment could depict. The PeakPASI might also be important when thinking about future treatment options and their effectiveness, because people with a higher PeakPASI were more likely to have received a higher number of previous systemic treatments. Possible explanations for this might be that people with a certain PeakPASI value have delayed responses to treatment, need early changes of treatment more often, were off treatment when the PeakPASI was documented, or did not adhere to the prescribed treatment.

One limitation is that the PeakPASI is a rather theoretical approach. It is not routinely documented, and information about the real highest lifetime PASI may get lost as patients consult several physicians, which generally could be prevented by using electronic health records accessible to all treating physicians. In this pilot study, a few important factors were not considered: status of treatment when PeakPASI was measured, time since onset of psoriasis, time span between PASI and PeakPASI, time span during which PeakPASI was documented, intervals at which patients were seen, and duration of current treatment. Additionally, in some patients with generally mild psoriasis, a high PeakPASI might be measured during a severe flare, which would overestimate the effect.

Future research should examine factors such as the length of time after which a change of therapy was initiated and whether the PeakPASI is helpful in determining the need for more comprehensive therapies.

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Table I. Patient characteristics, separated by a PeakPASI of 10 or greater and by the median PeakPASI of 13.6 or greater

Characteristics	Total (N = 398)	PeakPASI of <10 (n = 92)	PeakPASI of ≥10 (n = 306)	PeakPASI of <13.6 (n = 197)	PeakPASI of ≥13.6 (n = 201)
Age, y, mean ± SD	49.1 ± 14.5	49.7 ± 14.7	48.9 ± 14.4	48.2 ± 14.1	50.0 ± 14.9
			P = .649		*P* = .213
Sex, n (%)					
Female	169 (42.5)	53 (57.6)	116 (37.9)	96 (48.7)	73 (36.3)
			P = .001		**P < .012**
Male	229 (57.5)	39 (42.4)	190 (62.1)	101 (51.3)	128 (63.7)
PASI					
Mean ± SD	7.3 ± 7.7	3.3 ± 2.6	8.5 ± 8.3	4.6 ± 4.0	9.9 ± 9.5
			P < .001		**P < .001**
Range	0-53.8	0.0-9.9	0.0-53.8	0.0-13.0	0.0-53.8
PeakPASI					
Mean ± SD	15.4 ± 9.2	5.8 ± 2.6	18.3 ± 8.4	9.0 ± 3.5	21.8 ± 9.2
			P = .001		**P < .001**
Range	0.1-53.8	0.1-9.9	10.0-53.8	0.1-13.5	13.6-53.8
DLQI,* mean ± SD	7.0 ± 6.8	6.3 ± 6.7	7.2 ± 6.8	6.1 ± 6.2	7.9 ± 7.3
			P = .341		**P = .010**
Happiness,† mean ± SD	6.9 ± 2.0	7.1 ± 1.9	6.8 ± 2.0	7.2 ± 1.9	6.6 ± 2.0
			P = .355		**P = .005**
Current UV therapy, n (%)	47 (11.8)	4 (4.3)	43 (14.1)	19 (9.6)	28 (13.9)
			P = .011		*P* = .185
Number of current systemic therapies, n (%)					
0	142 (35.7)	43 (46.7)	99 (32.4)	80 (40.6)	62 (30.8)
			P = .002		**P = .049**
1	256 (62.6)	49 (53.2)	207 (67.6)	117 (59.4)	139 (69.2)
Current conventional therapy, n (%)	98 (24.6)	17 (18.5)	81 (26.5)	45 (22.8)	53 (26.4)
			P = .119		*P* = .414
Current apremilast therapy, n (%)	16 (6.3)	3 (3.3)	13 (4.2)	7 (3.6)	9 (4.5)
			P = .672		
Current TNF-α therapy, n (%)	37 (9.3)	8 (8.7)	29 (9.5)	15 (7.6)	22 (10.9)
			P = .821		*P* = .253
Current IL-17 therapy, n (%)	69 (17.3)	18 (19.6)	51 (16.7)	34 (17.3)	35 (14.4)
			P = .520		*P* = .968
Current IL-23 therapy,‡ n (%)	30 (7.5)	5 (5.4)	25 (8.2)	15 (7.6)	15 (7.5)
			P = .384		*P* = .954
Other biologics,§ n (%)	12 (3.0)	1 (1.1)	11 (3.6)	5 (2.5)	7 (3.5)
			P = .217		*P* = .582
Previous UV therapy, n (%)	61 (15.3)	3 (3.3)	58 (19.0)	21 (10.7)	40 (19.9)
			P < .001		**P = .011**
Number of previous systemic therapies, n (%)					
0	193 (48.5)	49 (53.3)	144 (47.1)	107 (54.3)	86 (42.8)
			P = .287		**P = .015**
1	95 (23.9)	21 (22.8)	74 (24.2)	41 (20.8)	54 (26.9)
2	57 (14.3)	13 (14.1)	44 (14.4)	30 (15.2)	27 (13.4)
≥3	53 (13.4)	9 (9.8)	44 (14.4)	19 (9.6)	34 (17.0)

Bold indicates statistical significance.

DLQI, Dermatologic Life Quality Index; *IL*, interleukin; *PASI*, Psoriasis Area and Severity Index; *PeakPASI*, highest ever documented Psoriasis Area and Severity Index; *SD*, standard deviation; *TNF*, tumor necrosis factor; *UV*, ultraviolet.

*On the DLQI, higher values represent a lower perceived quality of life.

†Heuristic happiness: higher values represent a higher happiness.

‡Ustekinumab was included into the category of IL-23 therapies.

§Includes, for example, patients who are part of a double-blind trial.

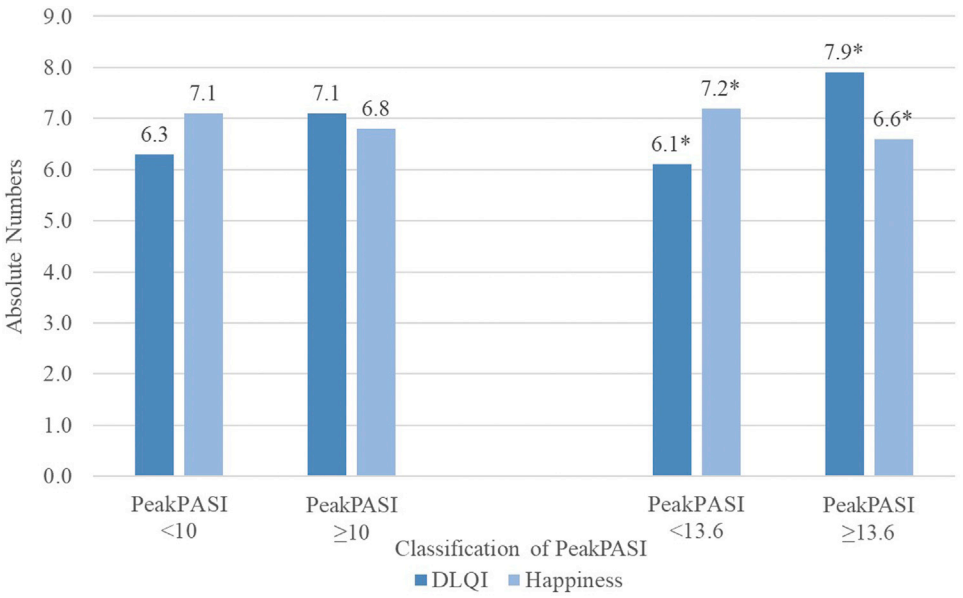

Fig 1. Psoriasis. The DLQI (higher values represent a lower perceived quality of life) and happiness (higher values mean higher happiness) in the study population classified by 2 PeakPASI (the highest ever-documented PASI) thresholds. *Significant at $\alpha < .005$. *DLQI*, Dermatology Life Quality Index; *PASI*, Psoriasis Area and Severity Index.

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Cutaneous signs and risk factors for ocular melanoma

To the Editor: Ocular melanoma makes up <5% of all melanomas and can be subdivided into uveal (choroid, ciliary body, iris), conjunctival, eyelid, and orbital melanoma.[1,2] Uveal melanoma is the most common type (83%) of ocular melanoma and is associated with high mortality rates.[1]

Although ophthalmologists are primarily responsible for diagnosing and managing ocular melanoma, dermatologists can play a role in early