Exploring the value of achieving complete or near complete skin clearance in patients with a history of moderate-severe psoriasis: A real-world survey in Europe

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Key Takeaways

✓ PsO patients who achieved complete/near-complete skin clearance (absolute PASI ≤2) experienced lower disease burden, including fewer PsO symptoms, fewer body areas affected (overall and special sites), and had a better health-related quality of life than those who achieved absolute PASI >2.

✓ The multidimensional value associated with achieving complete/near-complete skin clearance, especially in regard to quality of life, should be considered as a key treatment target when making therapeutic decisions in PsO.

Background

The Psoriasis Area and Severity Index (PASI) is a standard tool for assessing psoriasis severity[1]. It combines lesion characteristics, and the extent of body surface area affected to evaluate treatment response.

Achieving absolute PASI ≤2 (which corresponds to PASI 90 response, complete or near complete skin clearance), is a relevant treatment outcome for moderate-severe psoriasis (PsO), including treat-to-target approaches[2].

There is limited data which assesses the impact of achieving complete or near complete skin clearance on disease severity measures and quality of life in moderate-severe PsO patients in Europe.

Objectives

To describe the value of achieving complete or near complete skin clearance, this study compared characteristics of patients who achieved absolute complete or near complete skin clearance vs those who did not.

Methods

- Data were drawn from the Adelphi Real World PsO Disease Specific Programme™ (DSP), a cross-sectional survey, with retrospective data collection, of dermatologists and their consulting patients with PsO in France, Germany, Italy, Spain and the United Kingdom from December 2021 – March 2022.

- Dermatologists reported patient demographics and clinical characteristics (e.g., most common symptoms and body areas affected, body surface area (BSA), and Physician Global Assessment (PGA)). Patients were invited to voluntarily self-report their quality of life via the EuroQol Visual Analogue Scale (EQ-VAS)[3] and Dermatology Life Quality Index (DLQI)[4].

- Patients included in the analysis had a history of moderate-to-severe PsO (BSA >3 at any point post-diagnosis as reported by their physician). Patients were stratified by PASI at time of survey; achieved absolute PASI ≤2 vs. PASI >2.

Analysis

Numeric results were reported as mean ± standard deviation, categorical as relative frequency. To compare the two skin clearance groups, bivariate analyses were conducted using:
- t-test for numeric variables
- Fisher's exact test for categorical variables
- Mann-Whitney U test (non-parametric) for ordinal categorical variables
- p<0.05 indicates significance

Limitations

Participating patients may not reflect the PsO population as the DSP only includes patients who are consulting with their physician. Recall bias is a common limitation of surveys; however, physicians had the ability to refer to patients' medical records to help mitigate recall bias.
The BSA>3% criterion may under-capture cases with special area involvement or higher DLQI with BSA≤3%, and the sample's representation relies on patients with available BSA data.

Results

Overall, 193 dermatologists reported data for 1203 patients (n=819 with PASI≤2, n=384 with PASI >2). For patients with PASI ≤2, mean age was 42.8 ± 13.8 years, 44% were female, 90% were White, mean time since diagnosis was 7.0 ± 8.5 years, mean time on current treatment was 1.5 ± 1.7 years, and 6% were not prescribed any treatment. For patients with PASI >2, this was 43.4 ± 14.6 years, 41% female, 92% White, 6.9 ± 8.0 years since diagnosis, 1.3 ± 2.5 years on current treatment and 3% were not prescribed any treatment.
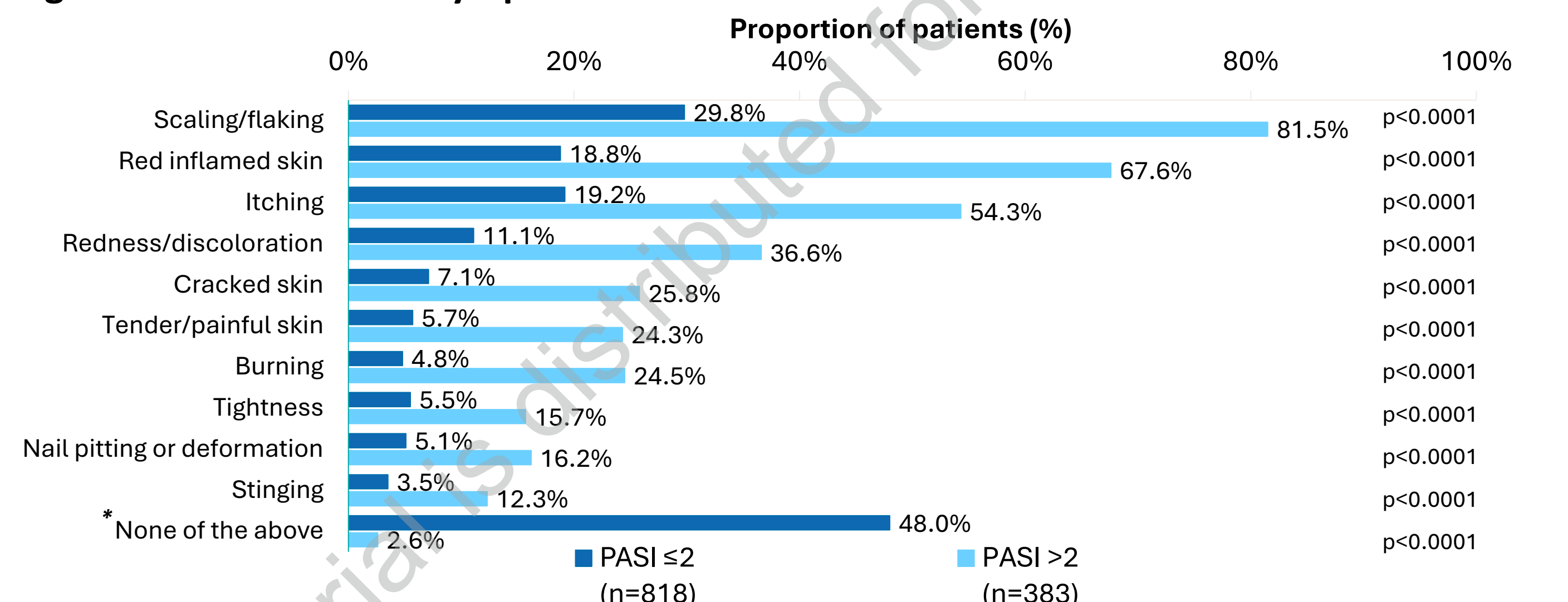
Table 1: Patient demographics

Baseline Characteristics	Overall (n=1203)	PASI ≤2 (n=819)	PASI >2 (n=384)	p-value
Age, years, mean (±SD)	43.0 (±14.1)	42.8 (±13.8)	43.4 (±14.6)	0.4461
Female, n (%)	520 (43.2)	364 (44.4)	156 (40.6)	0.2310
Race, White, n (%)	1087 (90.4)	735 (89.7)	352 (91.7)	0.3457
BMI, kg/m², mean (±SD)	26.0 (±6.5)	25.7 (±4.0)	26.5 (±9.9)	0.0395
Current smoker, n (%)	(n=1036) 267 (25.8)	(n=714) 175 (24.5)	(n=322) 92 (28.6)	0.3057
Employment, full-time, n (%)	748 (62.2)	515 (62.9)	233 (60.7)	0.8326
Time since diagnosis, years, mean (±SD)	(n=837) 6.9 (±8.3)	(n=584) 7.0 (±8.5)	(n=253) 6.9 (±8.0)	0.8922
Time since current regimen began, years, mean (±SD)	(n=1000) 1.5 (±2.0)	(n=686) 1.5 (±1.7)	(n=314) 1.3 (±2.5)	0.2220

PASI = Psoriasis Area Severity Index, **SD** = Standard deviation, **BMI** = Body mass index

Patients with PASI ≤2 less commonly experienced scaling/flaking (30% vs 82%; p<0.0001), red inflamed skin (19% vs 68%; p<0.0001) and itching (19% vs 54%; p<0.0001) as well as less frequent coverage of the scalp (21% vs 50%; p<0.0001), face (6% vs 18%; p<0.0001) and groin or genitals (6% vs 18%; p<0.0001) as compared to patients with PASI ≤2, who more commonly had no symptoms (48% vs 3%; p<0.0001) and no body areas affected (46% vs 2%; p<0.0001) compared to patients with PASI >2.
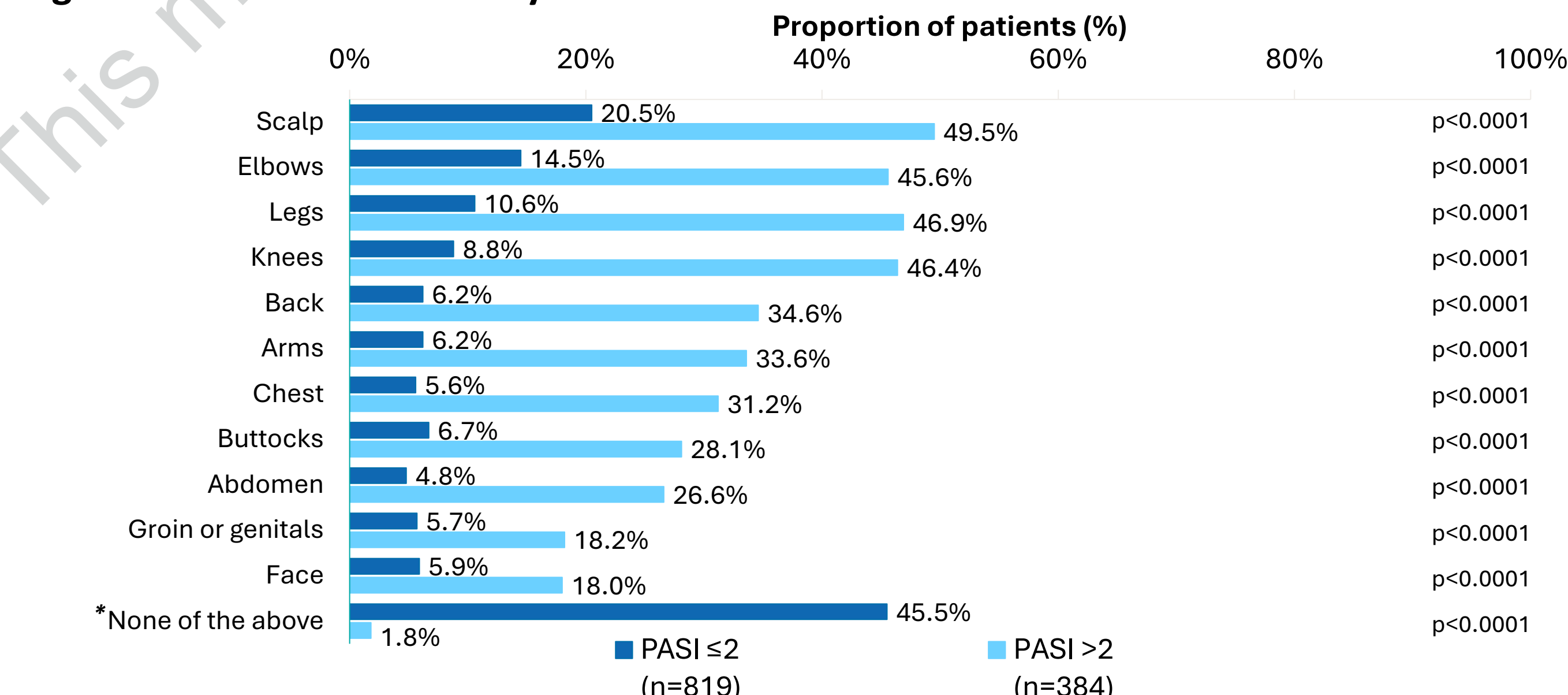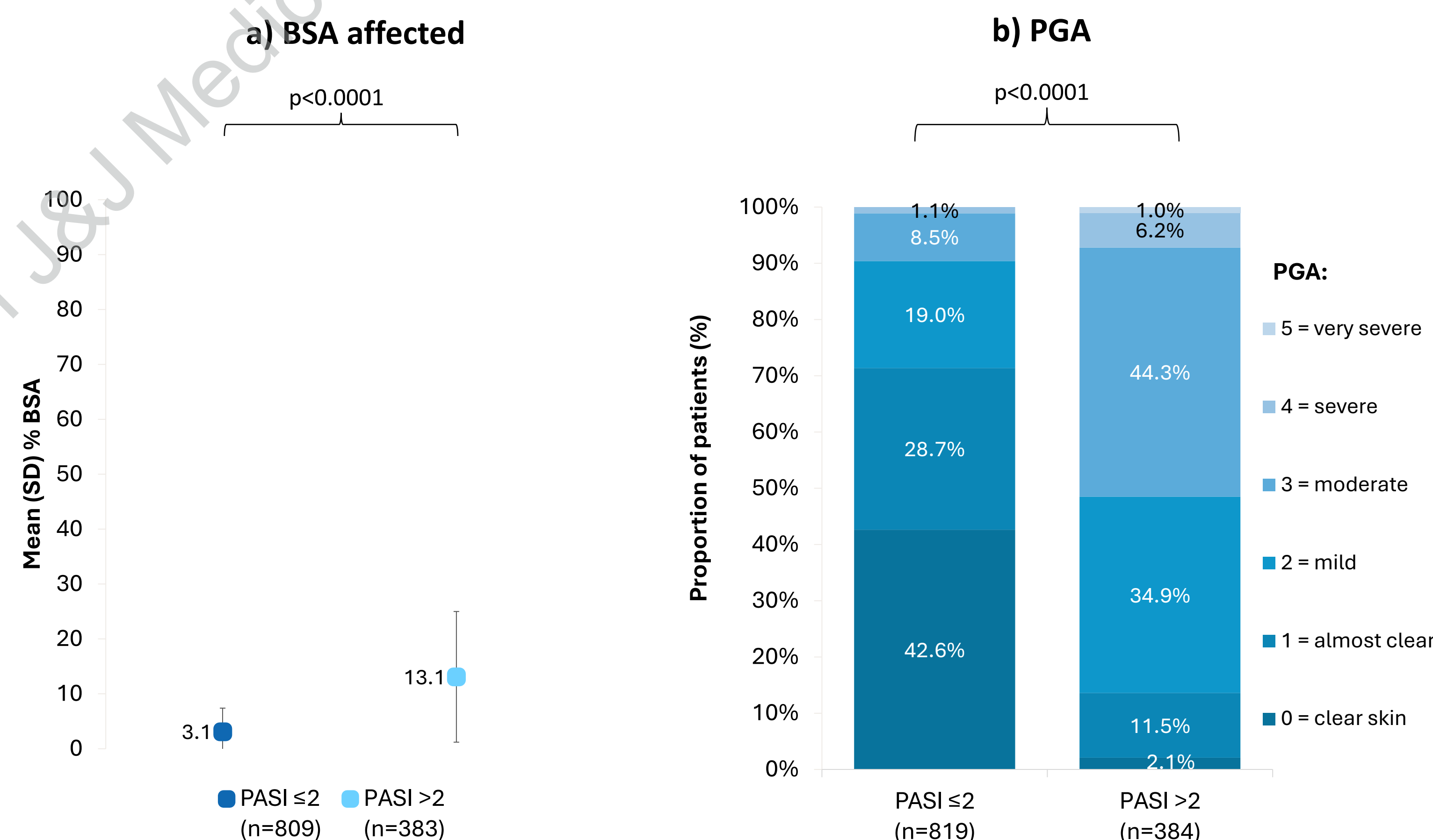
Figure 1: Most common symptoms

Symptom	PASI ≤2	PASI >2	p-value
Scaling/flaking	29.8%	81.5%	p<0.0001
Red inflamed skin	18.8%	67.6%	p<0.0001
Itching	19.2%	54.3%	p<0.0001
Redness/discoloration	11.1%	36.6%	p<0.0001
Cracked skin	7.1%	25.8%	p<0.0001
Tender/painful skin	5.7%	24.3%	p<0.0001
Burning	4.8%	24.5%	p<0.0001
Tightness	5.5%	15.7%	p<0.0001
Nail pitting or deformation	5.1%	16.2%	p<0.0001
Stinging	3.5%	12.3%	p<0.0001
*None of the above	48.0%	2.6%	p<0.0001

PASI ≤2 (n=818), PASI >2 (n=383)

* Full list provided was Bleeding, Onycholysis, Muscle weakness, Tiredness/fatigue, Temperature/fever, Weight loss, Redness and pain of the eye, Poor circulation, Dehydration, Abdominal pain, Abdominal cramp.
PASI = Psoriasis Area Severity Index

Figure 2: Most common body areas affected

Body area	PASI ≤2	PASI >2	p-value
Scalp	20.5%	49.5%	p<0.0001
Elbows	14.5%	45.6%	p<0.0001
Legs	10.6%	46.9%	p<0.0001
Knees	8.8%	46.4%	p<0.0001
Back	6.2%	34.6%	p<0.0001
Arms	6.2%	33.4%	p<0.0001
Chest	5.6%	31.2%	p<0.0001
Buttocks	6.7%	28.1%	p<0.0001
Abdomen	4.8%	26.6%	p<0.0001
Groin or genitals	5.7%	18.2%	p<0.0001
Face	5.9%	18.0%	p<0.0001
*None of the above	45.5%	1.8%	p<0.0001

PASI ≤2 (n=819), PASI >2 (n=384)

* Full list provided was: Neck, Soles of feet, Toes, Other areas of feet, Elbows, Palms of hands, Backs of hands, Fingers, Nails
PASI = Psoriasis Area Severity Index

Patients with PASI ≤2 had lower mean BSA affected (3.1% ± 4.3% vs 13.1% ± 11.9%; p<0.0001) and lower physicians' global assessment (PGA) score (43% PGA=0 vs 2% PGA=0, p<0.0001) compared to patients with PASI >2.
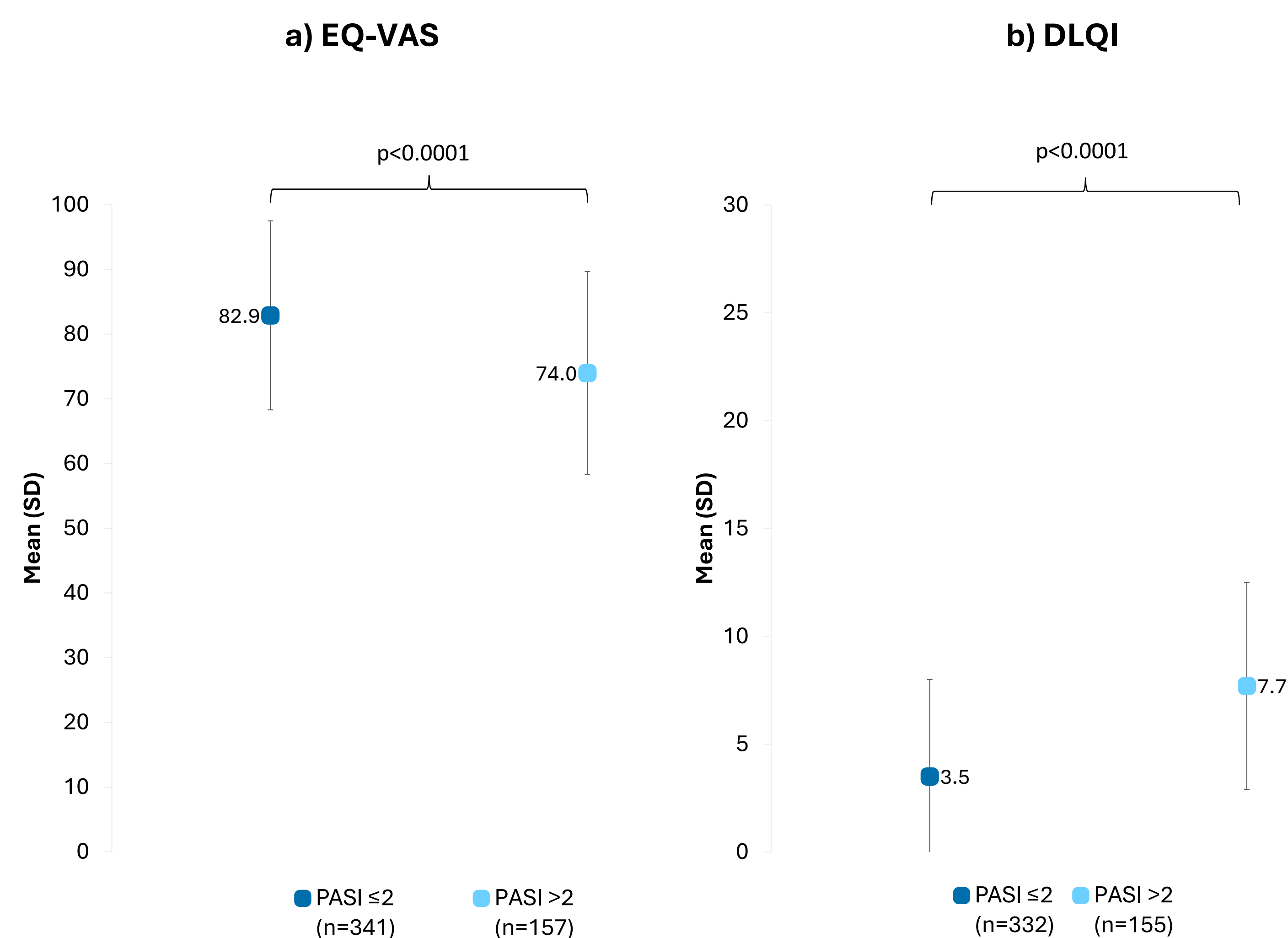
Figure 3: Physician-reported disease severity measures

a) BSA affected
p<0.0001
PASI ≤2 (n=809): 3.1
PASI >2 (n=383): 13.1

b) PGA
p<0.0001

PGA:
- 5 = very severe
- 4 = severe
- 3 = moderate
- 2 = mild
- 1 = almost clear
- 0 = clear skin

PASI ≤2 (n=819): 1.1%, 8.5%, 19.0%, 28.7%, 42.6%
PASI >2 (n=384): 1.0%, 6.2%, 44.3%, 34.9%, 11.5%, 2.1%

BSA = Body surface area, **PGA** = Physician global assessment, **PASI** = Psoriasis Area Severity Index

Patients with PASI ≤2 had a higher mean EQ-VAS score (82.9 ± 14.6 vs 74.0 ± 15.7; p<0.0001), and lower mean DLQI (3.5 ± 4.5 vs 7.7 ± 4.8; p<0.0001), indicating lower burden of disease.

Figure 4: Patient-reported outcomes

a) EQ-VAS
p<0.0001
PASI ≤2 (n=341): 82.9
PASI >2 (n=157): 74.0

b) DLQI
p<0.0001
PASI ≤2 (n=332): 3.5
PASI >2 (n=155): 7.7

EQ-VAS = Visual Analogue Scale, **DLQI** = Dermatology Life Quality Index **PASI** = Psoriasis Area Severity Index