Exploring the value of total/near total skin clearance in patients with a history of moderate-severe psoriasis

Oluwakayode Adejoro[1], Aaron Keal[2], Emily Goddard[2], Bruno Kranz[2], James Hetherington[2]

[1]Johnson & Johnsons, Horsham, PA, USA; [2]Adelphi Real World, Bollington, UK

Poster number CO192

BACKGROUND & OBJECTIVES

The Physician Global Assessment (PGA) is a validated tool, commonly used to assess a patient's overall severity of psoriasis (PsO), without taking body surface area (BSA) into account, at a given point in time[1].

Multiple versions of the PGA exist, with the most used versions providing a subjective measurement of the clinical signs of PsO; plaque elevation, scaling and erythema, across the entire body[2]. Using the given definitions, a patient's disease severity is rated using a five-to-six-point scale from 'clear' (0) to 'severe' (4) or 'very severe' (5)[3].

Studies have demonstrated the importance of achieving a low PGA score/achieving skin clearance for patients with PsO, with skin clearance improving patient-reported signs and symptoms of PsO, and patient health-related quality of life[4] (HRQoL) .

By demonstrating the humanistic value i.e., HRQoL of PsO skin clearance in the real-world, the importance of earlier intervention in routine clinical practice will be highlighted.

The study aimed to compare characteristics of patients with a history of moderate-severe PsO who achieved complete/near-complete skin clearance versus those who did not, and describe the real-world value of achieving complete/near-complete skin clearance in PsO.

METHODS

- Data were drawn from the Adelphi Real World PsO Disease Specific Programme™ (DSP), a cross-sectional survey with elements of retrospective data collection of dermatologists and their consulting patients with PsO in the United States conducted between December 2021 – March 2022. The DSP methodology has previously been published[5,6], validated[7], and demonstrated to be representative and consistent over time[8].
- Dermatologists reported patient demographics, disease characteristics and treatment satisfaction at time of survey whilst patients completed the following Patient Reported Outcome Measures (PROMs):
  - **Visual Analogue Scale (VAS)** – Patients self rated their health on a visual analogue scale from 0 (the worst health you can imagine) to 100 (the best health you can imagine). A lower score indicates greater impact of disease;
  - **Dermatology Life Quality Index (DLQI)** – Uses a scoring system from 0 (no impairment) to 30 (maximum impairment) to assess the impact of the disease on the patients HRQoL. A greater score indicates a greater impairment to the patient's HRQoL;
  - **Work Productivity and Activity Index (WPAI)** – Completed by patients who are in employment to quantify how their disease impacts their work life. A greater score signifies a greater impairment.
- Patients included in this analysis had a history of moderate-severe PsO (defined as BSA >3% at any point recorded since diagnosis).
- Two groups of patients were identified based on PGA score at the time of survey; achieved skin clearance (PGA≤1) and did not achieve skin clearance (PGA>1).
- Continuous outcomes are reported as mean (standard deviation, SD) and compared using Student's t-test. Ordinal and categorical outcomes are presented as absolute (n) and relative frequencies (%) and compared using Mann-Whitney U test and Fisher's Exact test, respectively, with $p<0.05$ indicating a significant difference.

CONCLUSIONS

- **Patients with PsO who achieved complete/near-complete skin clearance had lower disease burden (fewer body areas affected and PsO symptoms), and better HRQoL than those who did not.**
- **The value of achieving complete/near-complete skin clearance shows the importance of reaching a PGA score ≤1 early in a patient's treatment journey so the patient can experience the benefits to their HRQoL.**
- **Future research is warranted to investigate how different treatment interventions can help patients to achieve skin clearance.**

RESULTS

Table 1. Patient Demographics

	Overall (n=501)	PGA≤1 (n=177)	PGA>1 (n=324)	p-value
Age (years), mean (SD)	43.5 (15.3)	45.1 (15.9)	42.6 (14.9)	0.0855
Female, n (%)	255 (50.9)	92 (52.0)	163 (50.3)	0.8573
BMI, mean (SD), kg/m²	27.2 (4.5)	26.3 (4.8)	27.6 (4.3)	0.0021
Current smoker, n (%), [n]	22 (5.0), [441]	8 (5.2), [153]	14 (4.9), [288]	0.0607
Race/ethnicity, n (%)				
White/Caucasian	396 (79.0)	138 (78.0)	258 (79.6)	0.0886
African American	39 (7.8)	16 (9.0)	23 (7.1)	
Hispanic/Latino	27 (5.4)	12 (6.8)	15 (4.6)	
Mixed race	16 (3.2)	1 (0.6)	15 (4.6)	
Asian (other)	9 (1.8)	4 (2.3)	5 (1.5)	
Other[a]	14 (2.8)	6 (3.4)	8 (2.5)	
Working full-time, n (%)	356 (71.1)	118 (66.7)	238 (73.5)	0.6127
Physician judged severity at data capture, n (%)				
Mild	335 (66.9)	171 (96.6)	164 (50.6)	<0.0001
Moderate	146 (29.1)	4 (2.3)	142 (43.8)	
Severe	20 (4.0)	2 (1.1)	18 (5.6)	
Time since diagnosis (years), mean (SD), [n]	3.8 (5.0), [n=346]	4.5 (6.4), [n=103]	3.6 (4.2), [n=243]	0.0905
Time since current regimen began (years), mean (SD), [n]	1.7 (1.7), [n=426]	2.0 (2.0), [n=156]	1.5 (1.5), [n=270]	0.0037
Physician reported treatment satisfaction, n(%)				
Very satisfied	173 (35.4)	121 (68.4)	52 (16.7)	<0.0001
Satisfied	284 (58.1)	55 (31.1)	229 (73.4)	
Dissatisfied	27 (5.5)	1 (0.6)	26 (8.3)	
Very dissatisfied	5 (1.0)	0 (0.0)	5 (1.6)	

[a] Other includes Asian-Indian Subcontinent, South-East Asian and Middle Eastern

Results

- Overall, 501 patients with PsO were selected for analysis; n=177 (35%) with PGA≤1 and n=324 (65%) with PGA>1.

In patients with a reported PGA≤1 at the time of data capture, we observed:

- Significantly lower Psoriasis Area and Severity Index (PASI) scores ($p<0.0001$; Figure 1) and BSA ($p<0.0001$; Figure 2).
- Fewer reported body areas affected (Figure 3).
- Significantly better HRQoL as evidenced by greater VAS scores and lower DLQI and WPAI: Percent overall work impairment scores (Figure 4; all $p<0.0001$).
- Fewer experienced symptoms overall and less commonly experienced scaling/flaking, red inflamed skin, itching and cracked skin (Figure 5; all $p<0.0001$).

compared to patients with a reported PGA>1 at data collection.

Figure 1. PASI score at time of data capture

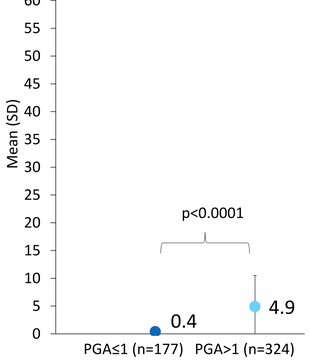


Figure 2. BSA score at time of data capture

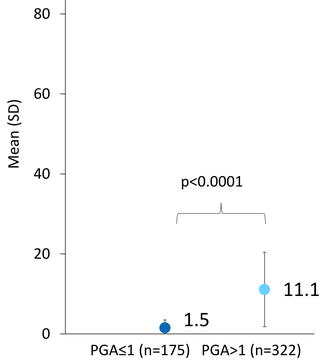


Figure 3. Top 10 body areas affected at time of data capture

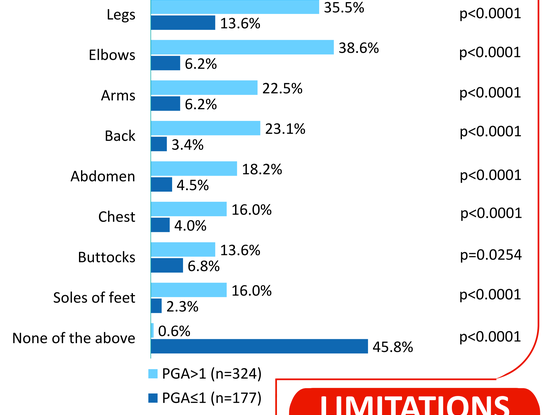


Figure 4. Patient-Reported PsO impact on Quality of Life, Work Productivity and Activity at time of data capture

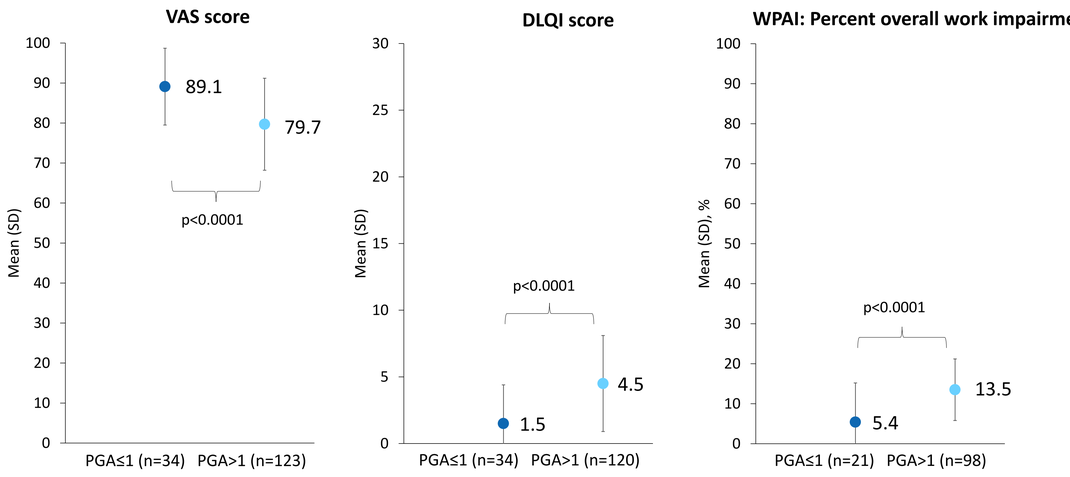
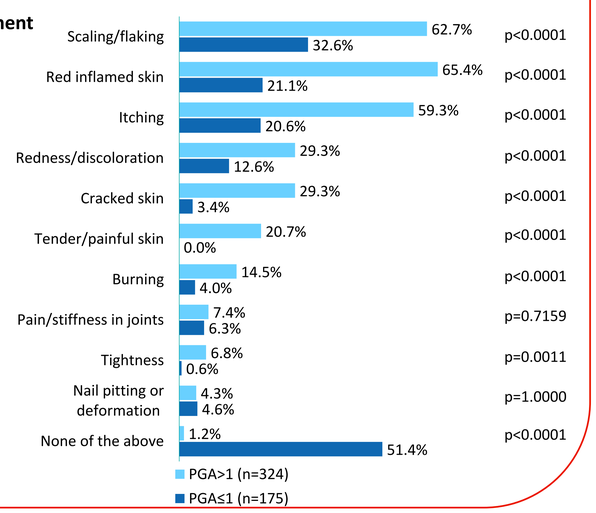


Figure 5. Top 10 symptoms present at time of data capture



LIMITATIONS

- This sample is likely only representative of the dermatologist consulting patient population.
- Recall bias is a common limitation of surveys; however, physicians were encouraged to refer to the patient medical record to help mitigate recall bias.

REFERENCES

1. Wu A, et al. (2020). Dermatol Ther. 10(5):1155–1163.
2. Callis Duffin K, et al. (2019). BMC Dermatol. 19(8):1–2
3. Mahil SK, et al. (2020). BJD. 182(5):1158–1166.
4. Blauvelt A, et al. (2020). J Drugs Dermatol. 19(5):487–92
5. Anderson P, et al. (2008). Curr Med Res Opin. 24(11):3063–3072.
6. Anderson P, et al. (2023). Curr Med Res Opin. 39(12):1707–15.
7. Babineaux SM, et al. (2016). BMJ Open. 6(8):e010352.
8. Higgins V, et al. (2016). Diabetes Metab Syndr Obes. 9:371-80.