Assessing the Relationship Between Disease Severity and Patient-Reported Outcomes in Psoriasis Patients in the US

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Objective

To describe the relationship between disease severity (as measured by Body Surface Area [BSA]%) on patient-reported outcomes among US psoriasis (PsO) patients using the Adelphi PsO Disease Specific Programme (DSP).

Methods

This study is based on real world survey data obtained from US adult patients with a diagnosis of PsO and their treating dermatologists. Patients were invited to self-complete a form containing the EuroQol 5 dimensions (EQ-5D), Work Productivity Activity Impairment (WPAI) and the Dermatology Life Quality Index (DLQI) questionnaires and questions regarding their level of satisfaction with current treatment. Three groups of patients were identified based on physician reports of BSA% with PsO achieved with treatment at the time of completing the survey; BSA 0-2%= Mild, 3-10%= Moderate, >10%= Severe. Several factors including demographics, DLQI, WPAI and EQ-5D were compared across these patient groups. Patient groups were compared using analysis of variance and chi-square tests. Kruskal-Wallis, Fisher's Exact and Student's T-Test where used where appropriate.

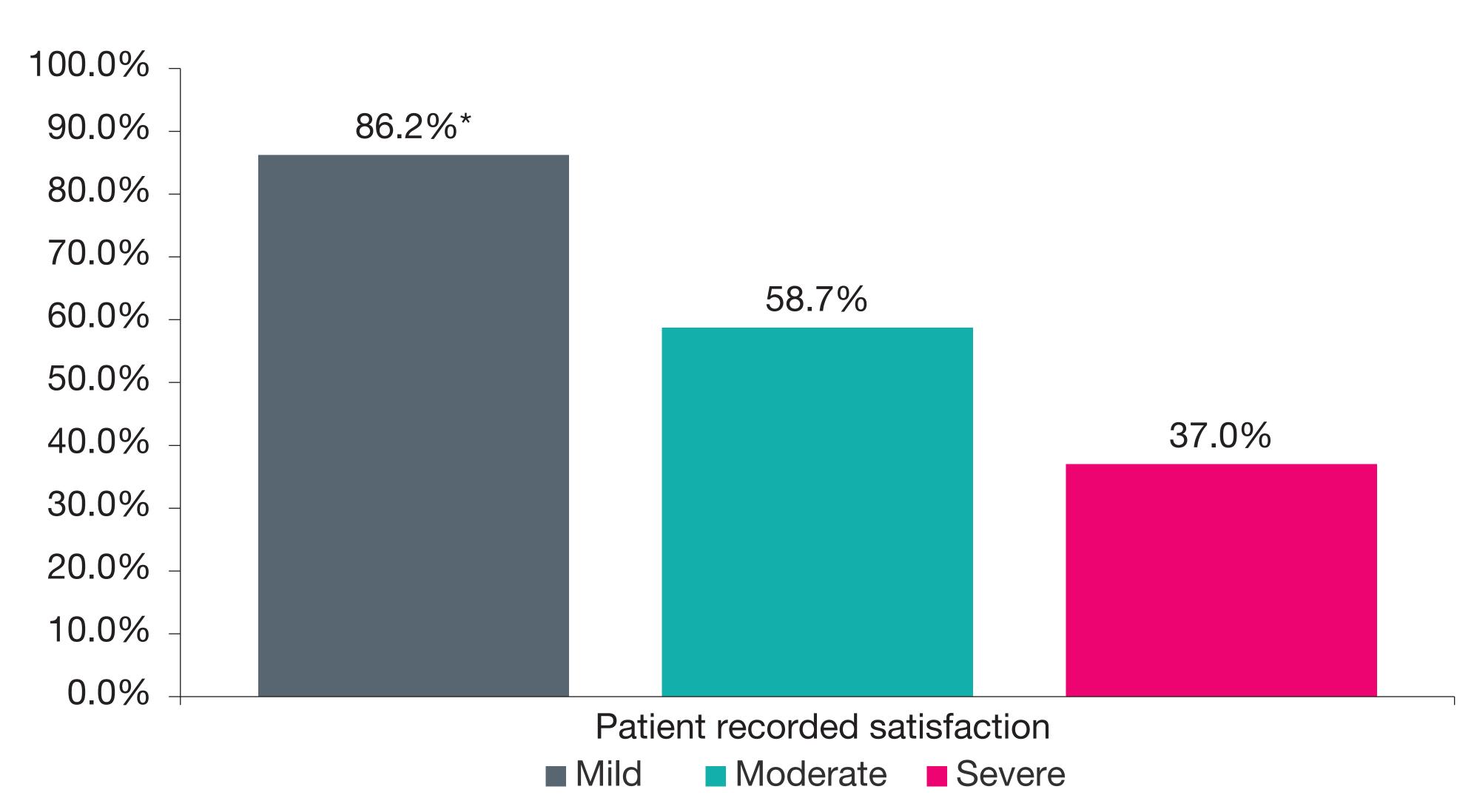
Results

- Of the 261 patients included; 132 had mild disease, 98 had moderate disease and 31 had severe disease activity at the time of completing the survey.
- All groups had a similar age [mean (M)±standard deviation (SD) for each]; mild 47.5±17.2, moderate 48.5±14.7, severe 49.0±16.4.
- Proportions of females was 50.8% [mild], 44.9% [moderate], 35.5% [severe].
- Of the mild patients 47% were prescribed a biologic at the time of completing the survey vs. 42.9% of moderate patients, and 67.7% of severe patients.
- At initiation of current biologic 89.3% of currently mild patients had a BSA% of moderate to severe
- At time of completing the survey, duration on a biologic in weeks was [M±SD] mild; 72.3±66.2, moderate 48.4±52.3, severe 34.4±59.6 (Table 1).

Table 1. Patient Demographics Currently **Currently Mild** (n=98)(n=132)(n=31)Mean Age (±SD) 49.0 (±16.4) 47.5 (±17.2) Patient Sex (%) 55.1 64.5 Proportion of patients on Biologics: n (%) Proportion patients moderate to severe BSA at 50 (89.3%) 42 (100%) 25 (100%) initiation of biologic: n (%) Duration on biologic in weeks (±SD) 48.4 (±52.3) 34.4 (±59.6) 72.3 (±66.2)

■ Patient-reported satisfaction with treatment was significantly higher for patients who achieved a BSA% consistent with mild disease after treatment 86.2% vs. both moderate disease 58.7% (p<0.001) and severe disease 37.0% (p<0.001) (Figure 1).

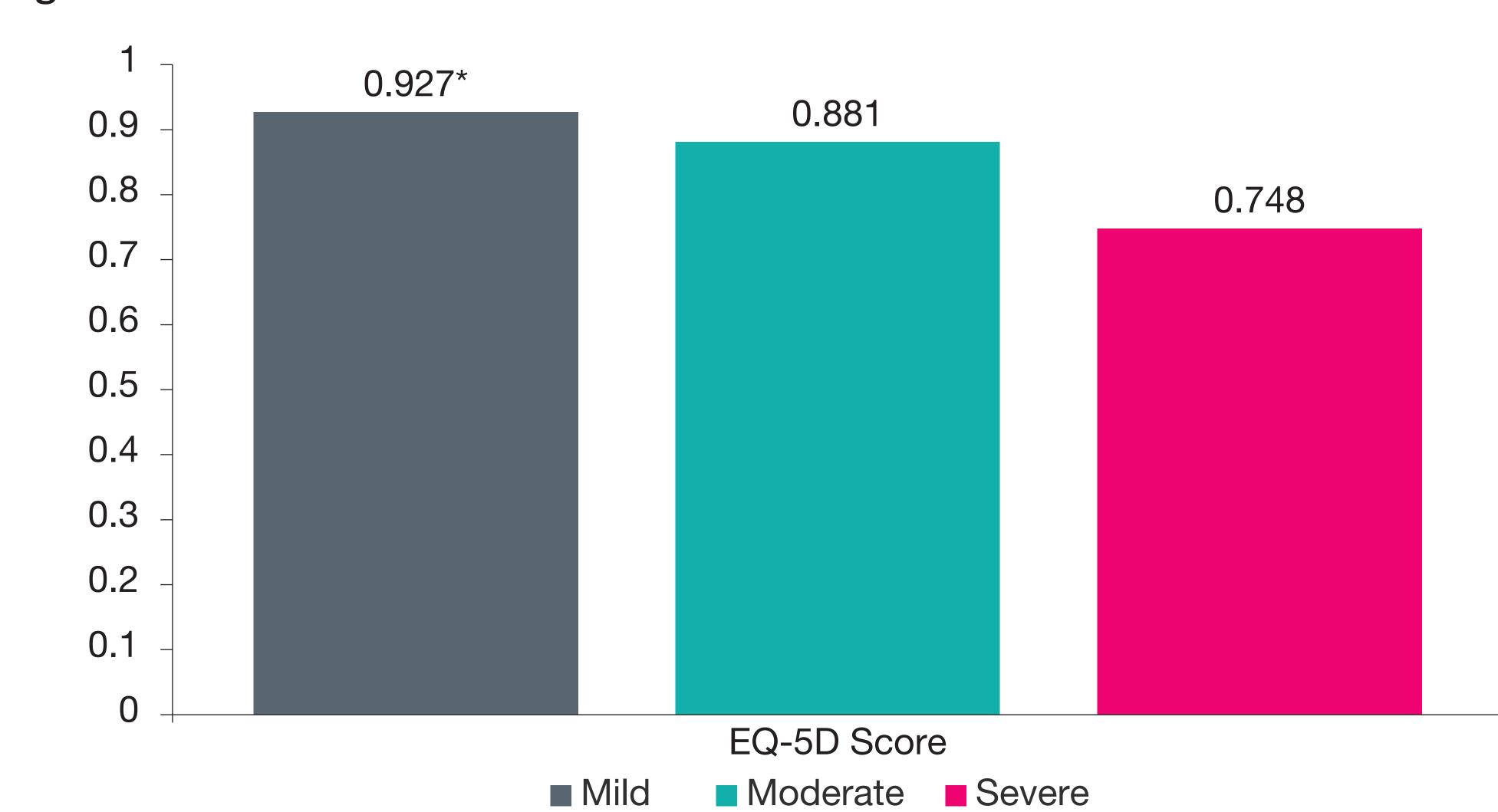
Figure 1. Patient Recorded Satisfaction with Treatment



*Denotes statistical significance

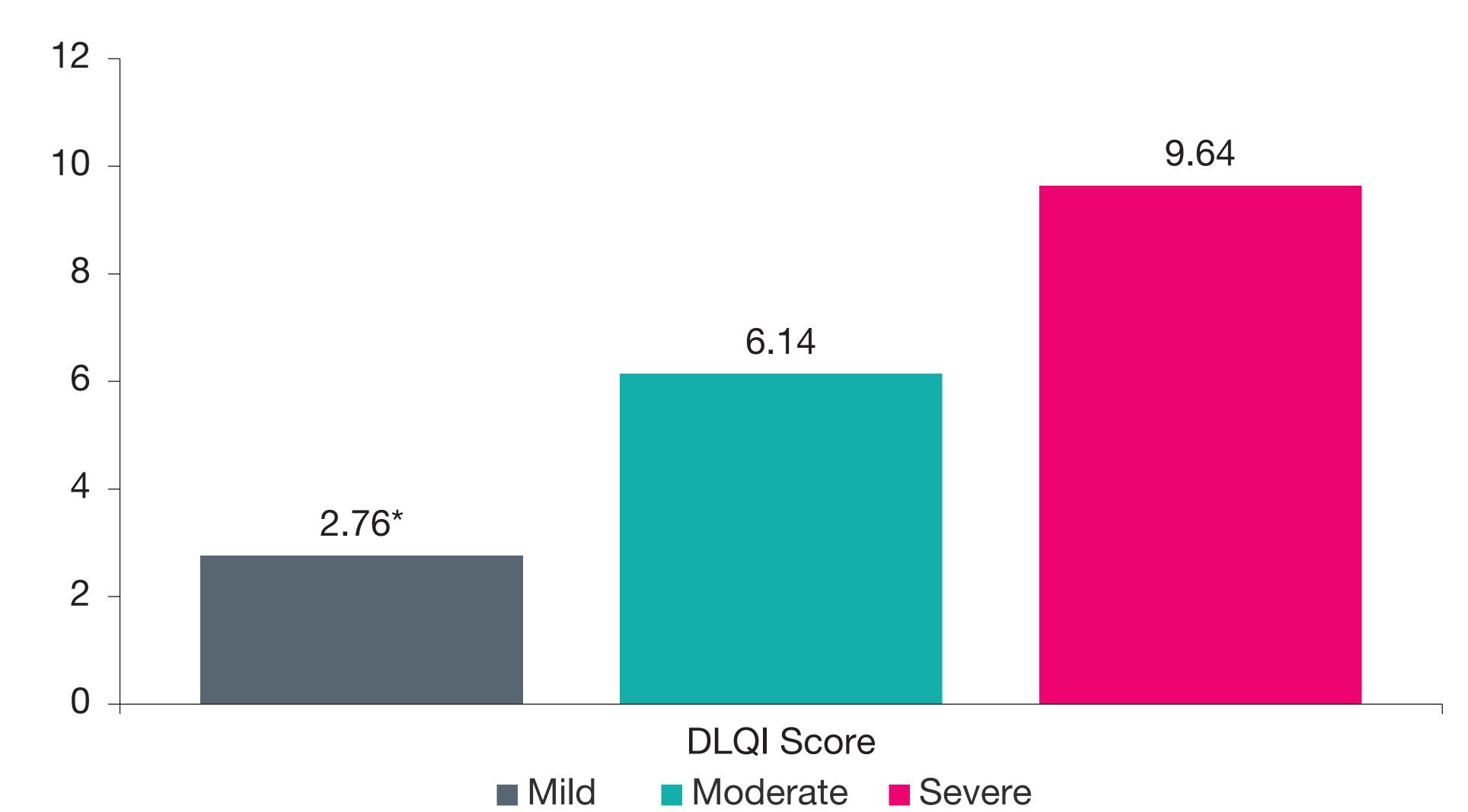
■ Mean EQ-5D score was significantly greater for patients who achieved a BSA% consistent with mild disease after treatment 0.927 vs. both moderate disease 0.881 (p<0.013) and severe disease 0.748 (p<0.001) (Figure 2).

Figure 2. EQ-5D Score



■ Mean DLQI score was significantly better for patients who achieved a BSA% consistent with mild disease after treatment 2.76 vs. both moderate disease 6.14 (p<0.001) and severe disease 9.64 (p<0.001) (Figure 3).

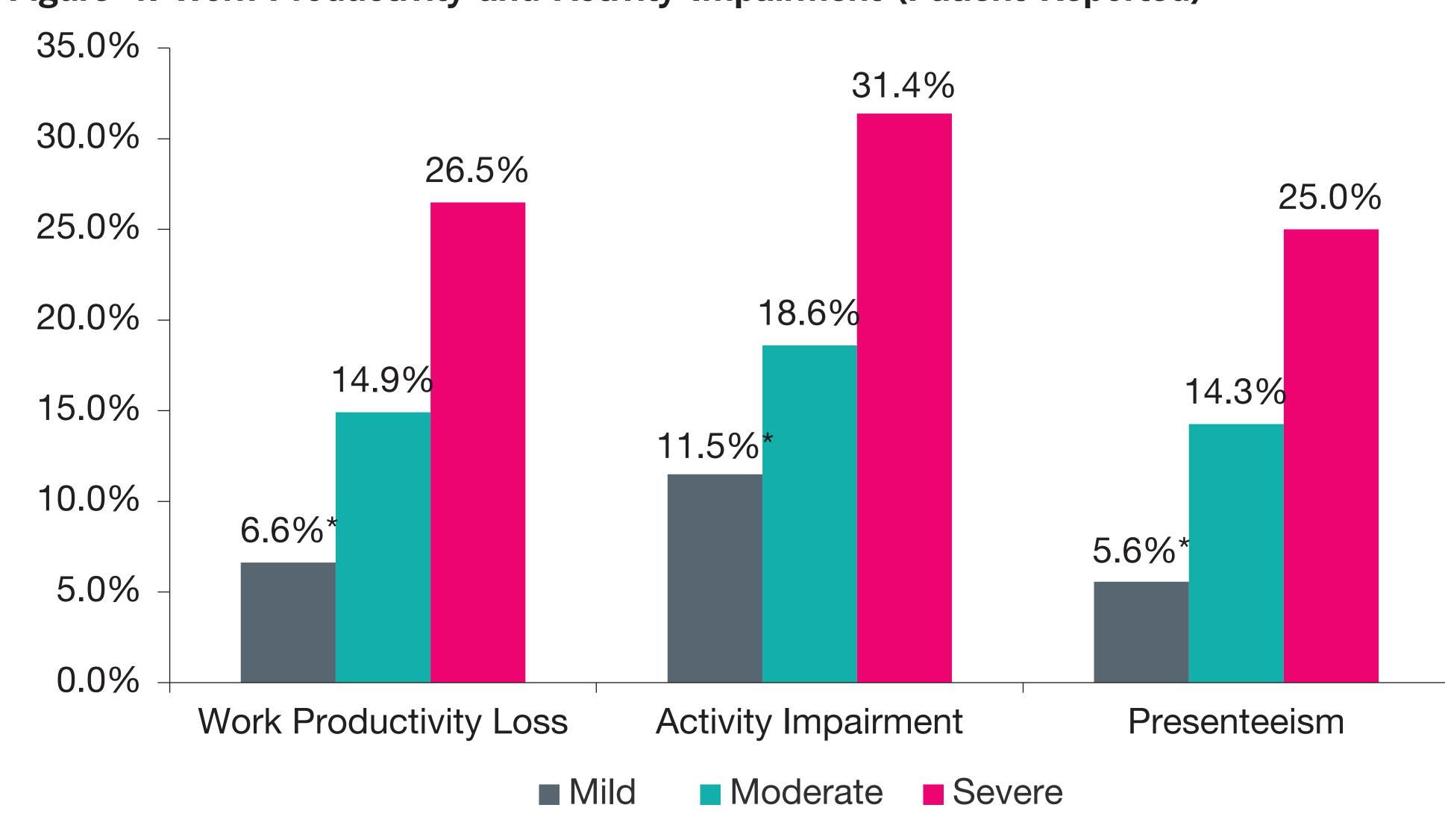
Figure 3. DLQI Score



*Denotes statistical significance

■ Work Productivity Loss was lower for patients who had a BSA% consistent with mild disease after treatment 6.6% vs both, moderate disease 14.9% (p<0.008) and severe disease 26.5% (p=0.001), with activity impairment lower for patients who had a BSA% consistent with mild disease after treatment 11.5% vs. both moderate disease 18.6% (p<0.013) and severe disease 31.4% (p<0.001). Presenteeism was lower for patients who had a BSA% consistent with mild disease after treatment 5.6% vs. both moderate disease 14.3% (p<0.002) and severe disease 25.0% (p<0.001) (Figure 4).

Figure 4. Work Productivity and Activity Impairment (Patient Reported)



*Denotes statistical significance

Conclusions

- Patients with plaque PsO who achieved a lower severity consistent with mild disease after treatment (as measured by BSA% affected), had higher levels of self-reported satisfaction with treatment, less productivity loss, and a better QoL than patients with higher disease severity.
- Plaque PsO patients who achieved a lower severity consistent with mild disease after treatment were also more likely to have a longer duration of biologic treatment, suggesting that biologics have a positive impact on real-world patient reported outcomes.

References

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*Denotes statistical significance