

Association of EQ VAS with treatment benefits and patient-reported benefits in patients with moderate to severe psoriasis – data from the German national psoriasis registry PsoBest

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Objective

- To investigate the relationships between different levels of skin clearance and EuroQol Visual Analogue Scale (EQ VAS) and Patient Benefit Index (PBI) within first 12 months of systemic treatment, utilising data from German psoriasis registry PsoBest.
- To analyse how these outcomes relate to 12-month drug retention and health status.

Introduction

- Plaque psoriasis has a significant impact on health-related quality of life (HRQoL). EQ VAS is widely used health status measure in plaque psoriasis, while PBI assesses treatment benefits through patient-reported goal attainment scaling.^{1,2}
- Understanding how various levels of skin clearance relate to patient-reported benefits is key for capturing treatment effects on health status.

Materials and Methods

- This observational retrospective cohort study used data from the German psoriasis registry PsoBest.
- Eligible patients are adults with moderate to severe plaque psoriasis who started systemic treatment (index date) between January 1, 2008, and December 31, 2018, and had a routine visit after approximately 12 months.
- Primary analysis variables assessed at 12 months were change in EQ VAS (0–100; where higher scores indicate better health status) in relation to PBI (0–4; with 0 indicating no benefit and 4 indicating the highest possible benefit) and Psoriasis Area and Severity Index (PASI; 0–72, higher scores indicating severer plaque psoriasis).
- 12-month drug retention was assessed in relation to PBI, EQ VAS, and Dermatology Life Quality Index (DLQI).

Results

- A total of 3824 patients met inclusion criteria, with a mean age of 48.6 years and 40.3% being female.
- The distribution of patients in PASI and EQ VAS severity levels at baseline are given in **Figure 1**.
- Overall mean±SD improvement in EQ VAS was 18.2±29.1 at Month 12.
- Figure 2** presents EQ VAS improvements from baseline to 12 months in relation to PASI and PBI responses.
- Overall, 57.7% of patients improved by ≥10 units on EQ VAS at Month 12.
- Numerically higher proportion of patients had improvement in EQ VAS with higher PASI responses (**Figure 3A**) and PBI scores (**Figure 3B**).
- Significant 12-month drug retention was observed across PBI, DLQI, and EQ VAS categories, particularly with higher PBI, lower DLQI, and higher EQ VAS values (all p<0.001; **Figure 4**).
- Mean EQ VAS by PASI response across several subgroups is presented in **Figure 5**.
- Patients in the non-TNFi subgroup had better outcomes than those in the TNFi subgroup and those without history of psoriatic arthritis (PsA) had better outcomes versus those with PsA.

Conclusions

- Meaningful improvement in EQ VAS observed in the majority of plaque psoriasis patients after 12 months of systemic treatment.
- EQ VAS improvements was highest with complete skin clearance (PASI 100) and highest PBI levels (PBI 3.5 to 4).
- Increased drug retention related to higher PBI scores and improved health status, emphasize their relevance to patients.

Summary

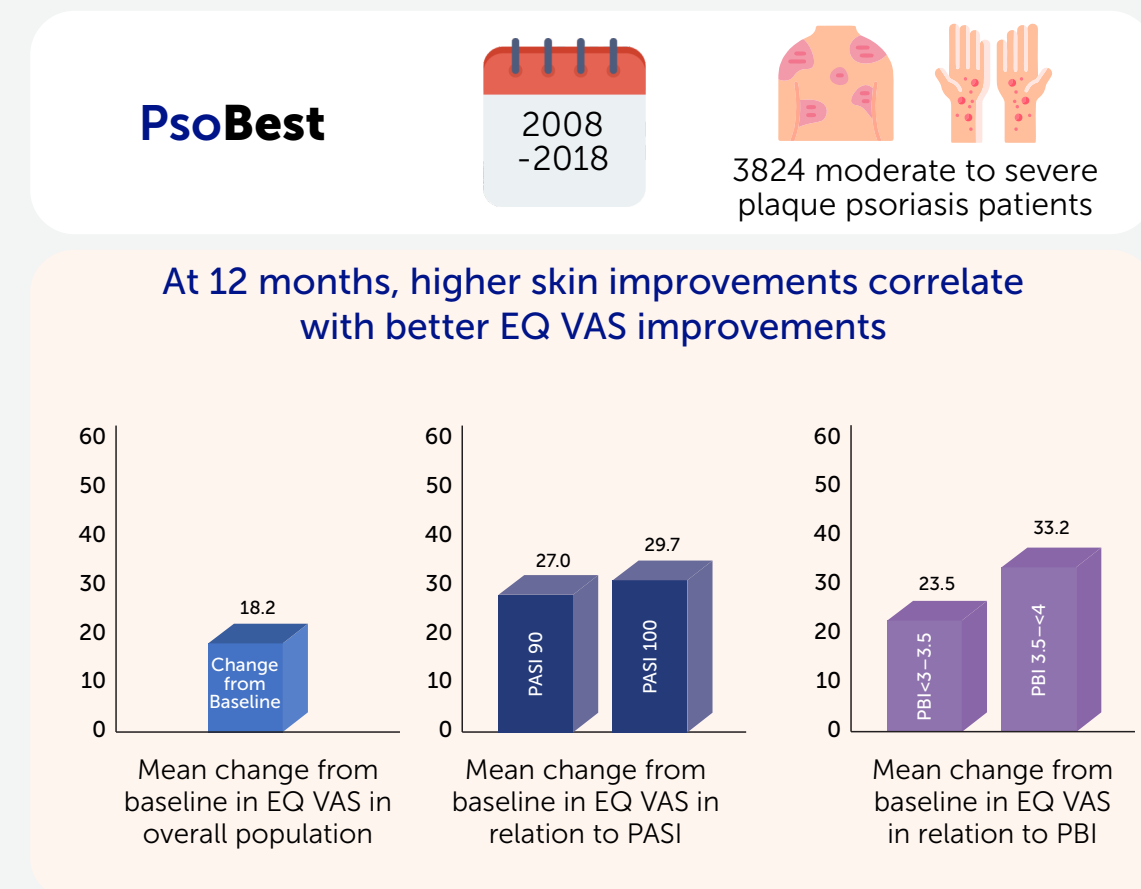
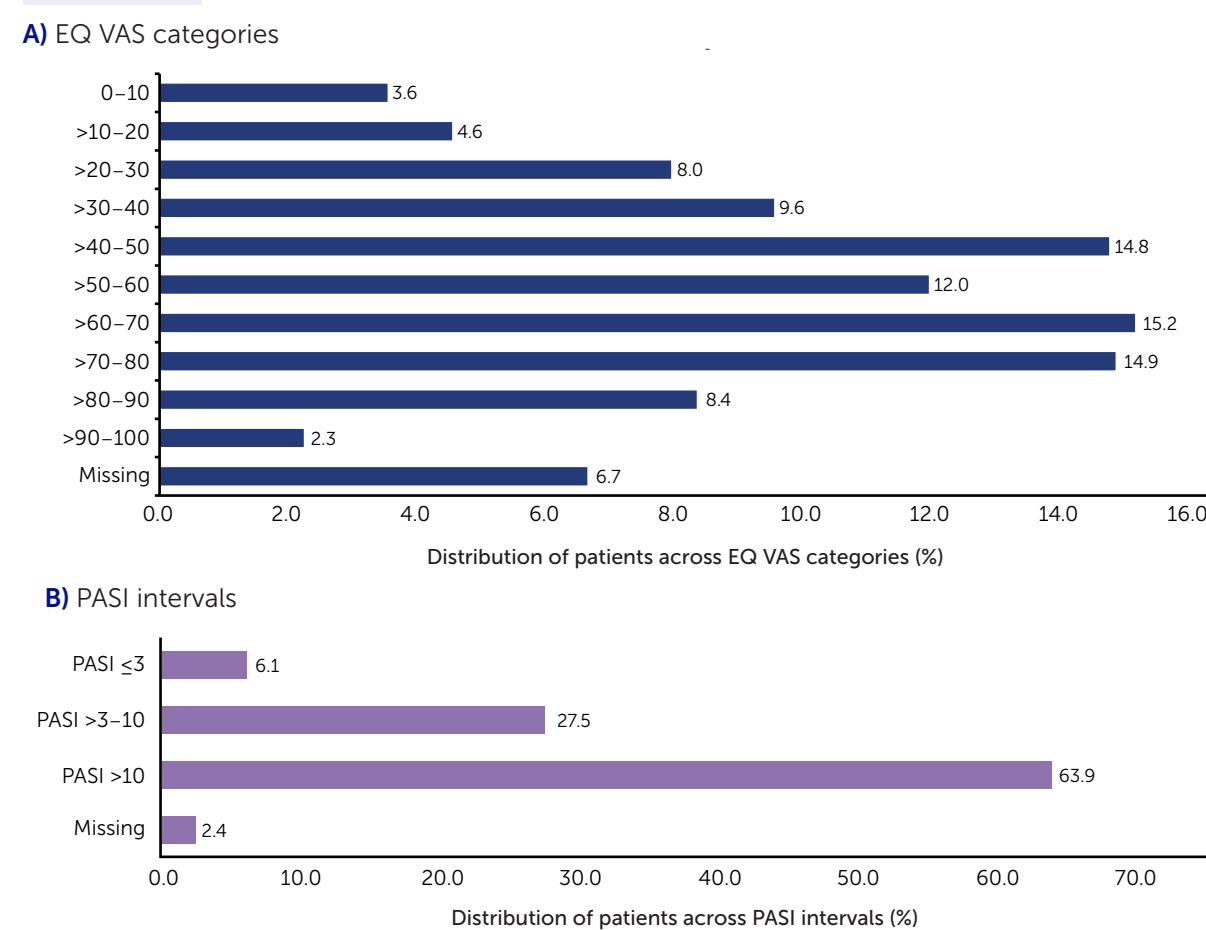


Figure 1 Disease severity at baseline



DLQI: Dermatology Life Quality Index; EQ VAS: Euro Qol-visual analogue scale; HRQoL: health-related quality of life; PASI: Psoriasis Area and Severity Index; PBI: Patient Benefit Index; PsA: psoriatic arthritis; SD: standard deviation; TNFi: tumor necrosis factor inhibitor; Tx: treatment
 Institutions: University Medical Center Hamburg-Eppendorf, Hamburg, Germany; UCB Pharma, Monheim, Germany; UCB Pharma, Brussels, Belgium.
 References: 1. Obradors et al. Qual Life Res 2016;25(11):2739-2754; 2. Poor et al. Qual Life Res 2017;26(12): 3409-3419.
 AUTHOR CONTRIBUTIONS: Substantial contributions to study conception/design, or acquisition/analysis/interpretation of data: MA, TMJ, TH and FF; Drafting of the publication, or revising it critically for important intellectual content: MA, TMJ, TH and FF; Final approval of the publication: MA, TMJ, TH and FF. **Author Disclosures:** MA received consulting fees from AbbVie, Almirall, Amgen, Biogen, Boehringer Ingelheim, Celgene, Centocor, Eli Lilly, GSK, Hexal, Janssen, LEO Pharma, Medac, Merck, MSD, Mundipharma, Novartis, Pfizer, Sandoz, UCB Pharma, and Xenoport. TMJ: Nothing to declare. TH and FF are employees of UCB Pharma and hold share options. **Acknowledgements:** This study was funded by UCB Pharma. Medical writing support was provided by Enago Life Sciences, India.

Figure 2A 12-Month mean (SD) change from baseline in EQ VAS in relation to PASI

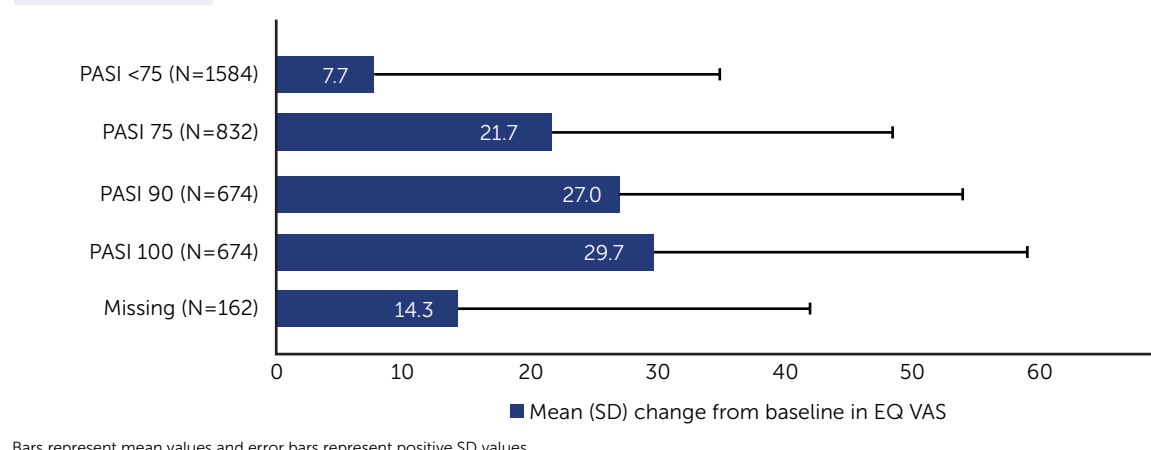


Figure 3 Substantial change from baseline in EQ VAS score of ≥10

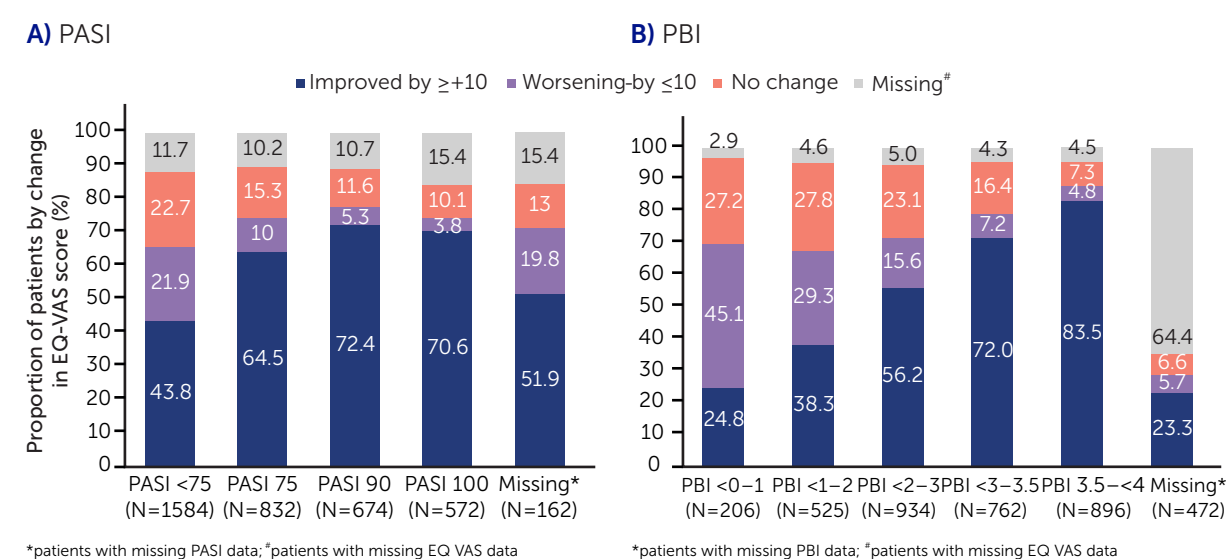


Figure 4 12-Month drug retention estimates

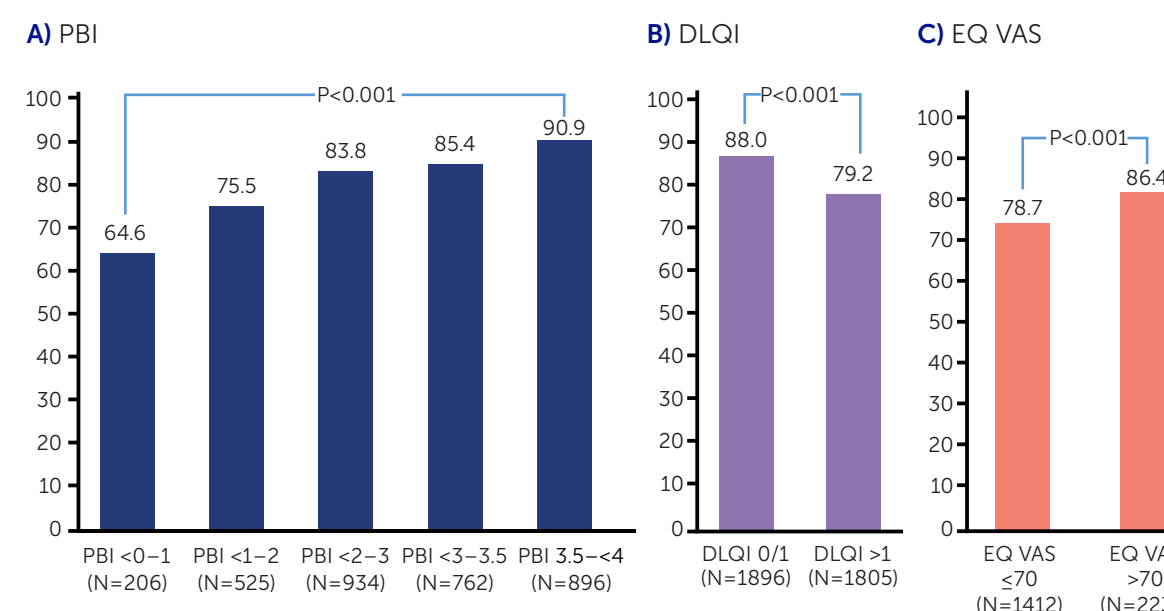


Figure 2B 12-Month mean (SD) change from baseline in EQ VAS in relation to PBI

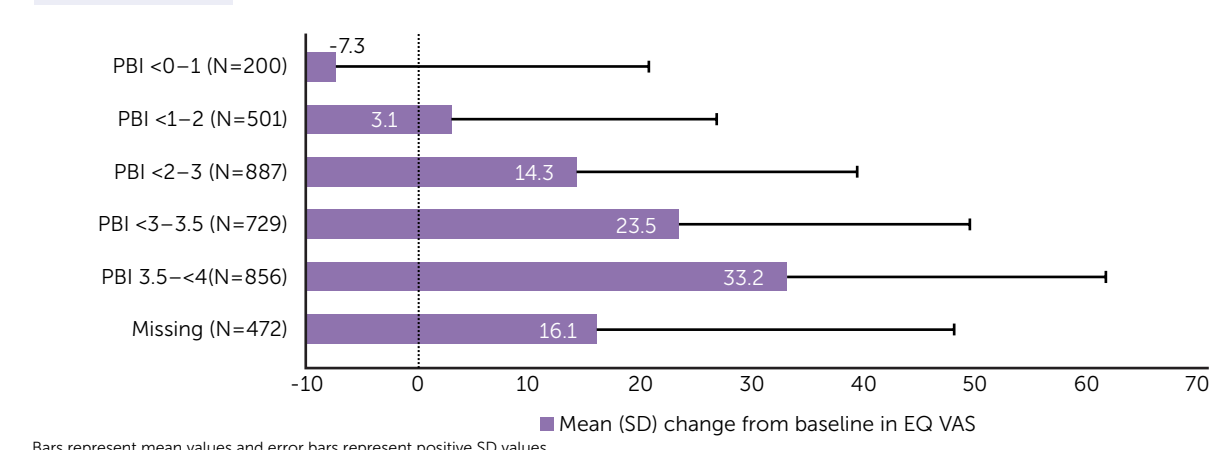
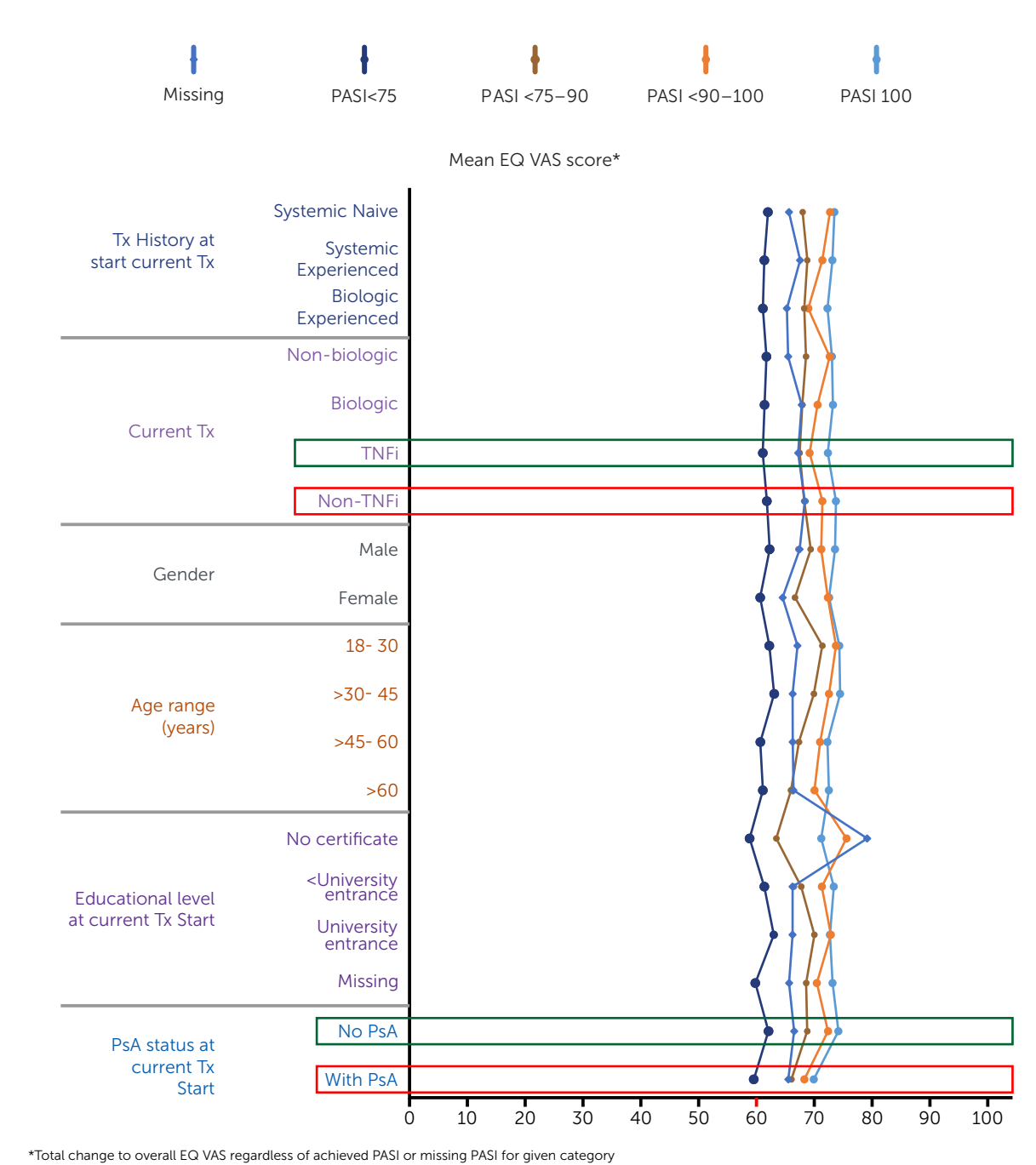


Figure 5 Mean EQ VAS by various subgroups



*Total change to overall EQ VAS regardless of achieved PASI or missing PASI for given category