Guselkumab Demonstrates Effectiveness Regardless of Disease Duration: Week 76 Results from the Real-world G-EPOSS Study

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Introduction



- Psoriasis is a chronic systemic inflammatory disease associated with multiple comorbidities, including cardiovascular disease, diabetes, and psoriatic arthritis, which affect patients' quality of life (QoL)¹
- There is a relationship between duration of psoriasis and both response to treatment² and development of comorbidities³
- Early treatment leads to better clinical outcomes, as shown in the Phase IIIb GUIDE trial⁴
- Guselkumab is a p19 subunit-targeted interleukin (IL)-23 inhibitor with proven efficacy in patients with moderate-to-severe plaque psoriasis^{5,6}

Objective

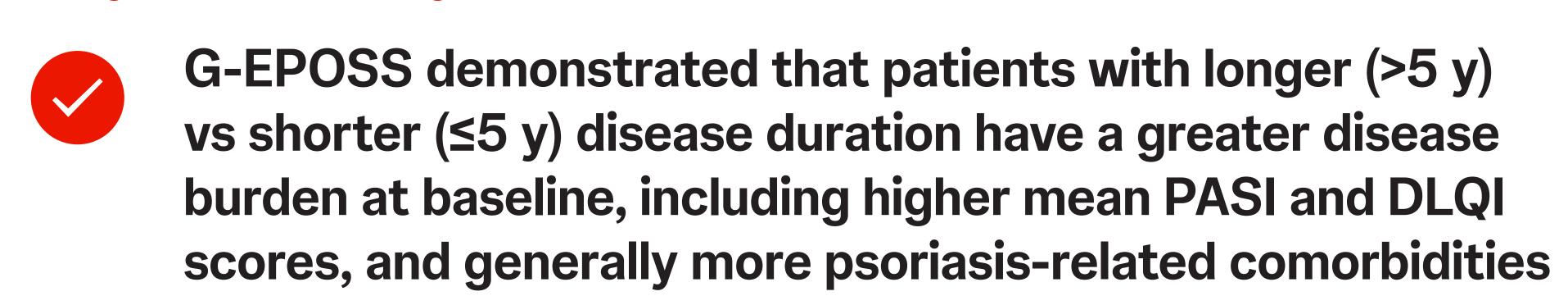


To examine skin and QoL outcomes following guselkumab treatment in the real-world G-EPOSS study based on disease duration using data from the final analysis at Week (W) 76

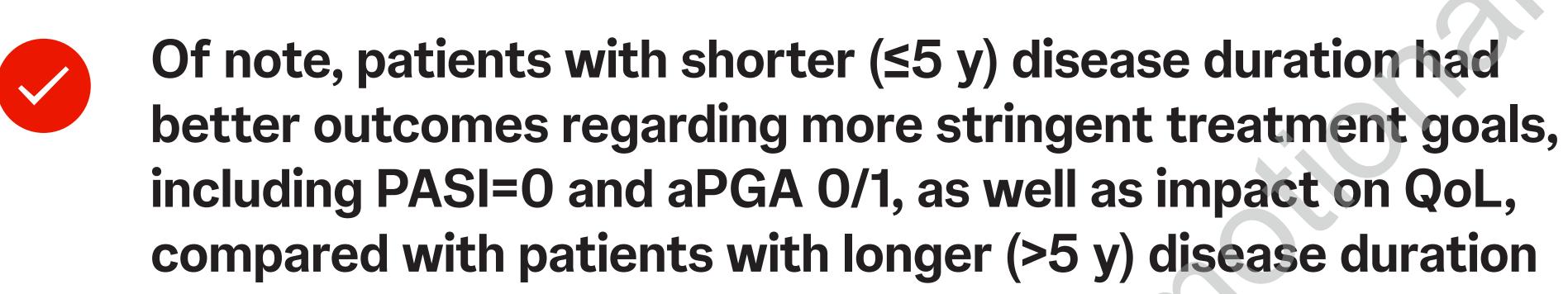
Methods

- G-EPOSS is a prospective, non-interventional, multicenter German study that evaluated guselkumab effectiveness and impact on QoL and sexual impairment in patients with moderate-to-severe psoriasis. A total of 304 patients were enrolled across 44 sites
- Patients (with Psoriasis Area Severity Index [PASI] score >3) received guselkumab
 100 mg at W0, W4, and every 8 weeks thereafter until study end at W76 according to routine clinical practice
- W76 assessments (as-observed analyses) by disease duration (≤2 years [y], >2-5 y,
 >5-10 y and >10 y) include:
- Proportions of patients achieving PASI ≤3 and PASI=0
- Anogenital Physician's Global Assessment (aPGA), grading the patient's anogenital psoriasis as clear (0), almost clear (1), mild (2), moderate (3), or severe (4)
- Dermatology Life Quality Index (DLQI), comprising 10 questions that evaluate the impact of skin disease on the patient's life during the previous week, providing a total score from 0 (no effect on QoL) to 30 (extremely large effect on QoL)

Key Takeaways







Small sample size (n=16) for the ≤2 y subgroup is a limitation of these analyses

These data demonstrate that guselkumab treatment is effective for patients with moderate-to-severe psoriasis in routine clinical practice, regardless of disease duration. Complementing data from the GUIDE clinical trial, real-world data from G-EPOSS show that treatment early in the course of psoriasis may result in higher clinical response rates for the most stringent treatment goals, and better QoL patient-reported outcomes

Results

Patients with longer (>5 y) vs shorter (≤5 y) disease duration had higher burden of disease at baseline

- A total of 295 patients received ≥1 dose of guselkumab and had a post-baseline PASI measurement. Disease duration data were available for 294 of these patients (**Table 1**)
- At baseline, patients with longer (>5–10 y/>10 y) vs shorter (≤2 y/>2–5 y) disease duration had:
 Higher mean PASI score (15.5/15.8 vs 13.9/13.9; Figure 1a)
 Higher mean DLQI score (10.9/11.7 vs 9.9/10.2; Figure 1b)
 A greater likelihood of prior biologic use (14.6%/35.3% vs 0.0%/11.6%; Figure 1c)
- In general, higher proportions of patients with longer (>5–10 y/>10 y) vs shorter (≤2 y/>2–5 y) disease duration self-reported having psoriasis-related comorbidities at baseline (**Table 2**)
- Overall, the proportions of patients with these psoriasis-related comorbidities remained stable during guselkumab treatment for all disease duration subgroups

Table 1. Demographics and baseline characteristics, by disease duration

Demographic/characteristic	Disease duration (N=294)				
	≤2 y n=16	> 2–5 y n=43	> 5–10 y n=48	> 10 y n=187	
Mean age, years (SD)	40.5 (11.2)	39.7 (14.4)	41.4 (17.6)	48.6 (13.1)	
Male/Female, n (%)	9 (56.3)/7 (43.8)	22 (51.2)/21 (48.8)	28 (58.3)/20 (41.7)	112 (59.9)/75 (40.1)	
Mean BMI, kg/m² (SD) ^b	27.2 (3.9)	28.7 (7.7)	28.3 (6.6)	29.3 (5.7)	
Mean age at first diagnosis, y (SD)	39.5 (11.3)	36.2 (14.2)	33.8 (17.5)	24.0 (14.1)	
Mean duration of psoriasis, y (SD)	1.0 (0.5)	3.5 (0.9)	7.7 (1.5)	24.6 (11.7)	
Mean aPGA (SD)°	3.0 (0.7)	3.1 (0.9)	2.6 (0.8)	2.7 (0.9)	
Number of prior biologics, n (%)					
0	16 (100.0)	38 (88.4)	41 (85.4)	121 (64.7)	
1	0 (0.0)	2 (4.7)	4 (8.3)	37 (19.8)	
≥2	0 (0.0)	3 (7.0)	3 (6.3)	29 (15.5)	

^aPsoriasis-related comorbidities present in ≥10% of any subgroup are included; ^bData available for n=14 (≤2 years), n=41 (>2–5 years), n=48 (>5–10 years), and n=182 (>10 years) patients; ^cIn patients with aPGA ≥1 at baseline; data available for n=10 (≤2 years), n=20 (>2–5 years), n=31 (>5–10 years), and n=104 (>10 years). **aPGA**=anogenital Physician's Global Assessment, **BMI**=body mass index, **SD**=standadeviation, **y**=year.

Figure 1. Baseline (a) mean PASI, (b) mean DLQI, and (c) prior biologic use, by disease duration

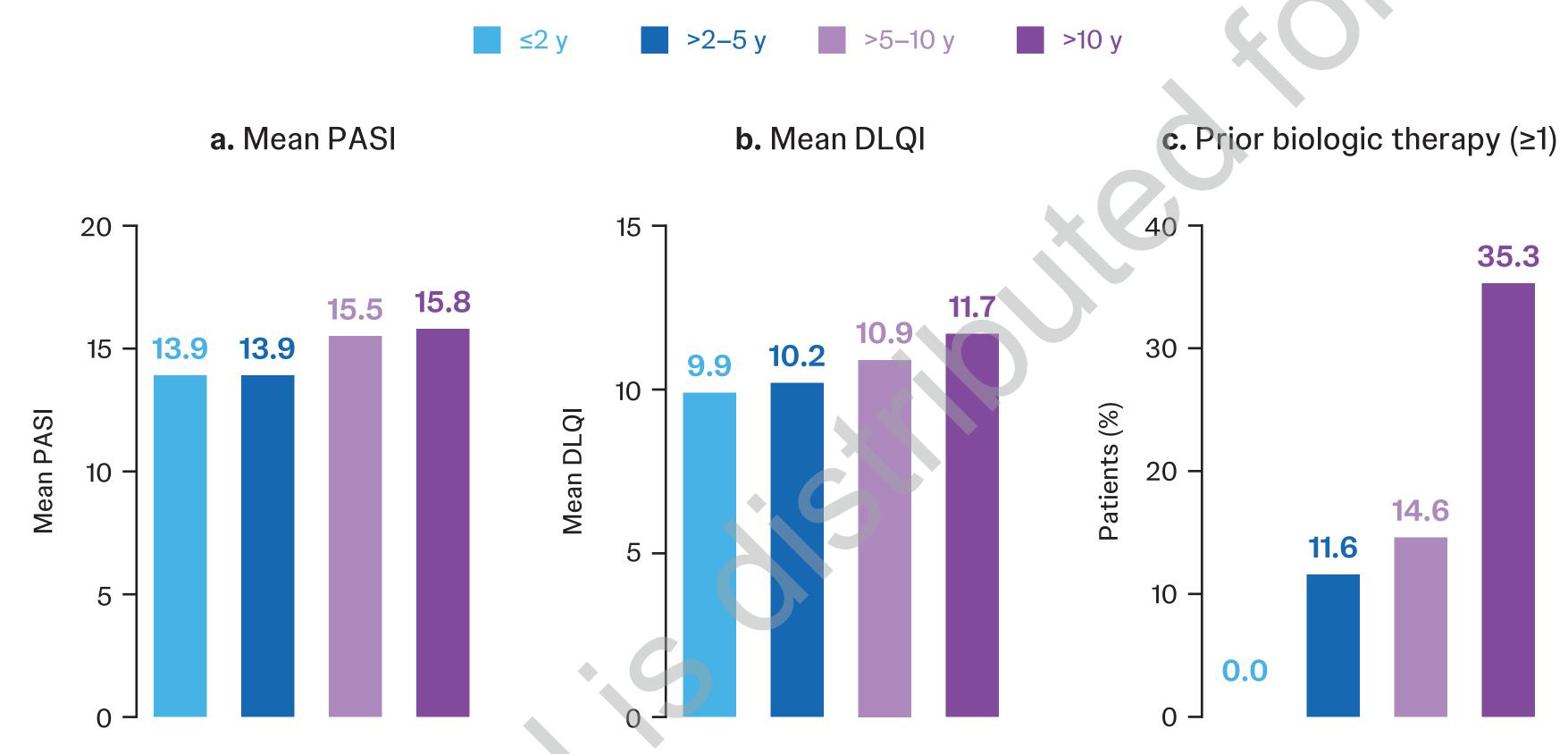


Table 2. Psoriasis-related comorbidities at baseline, by disease duration

DLQI=Dermatology Life Quality Index, **PASI**=Psoriasis Area and Severity Index, **y**=years.

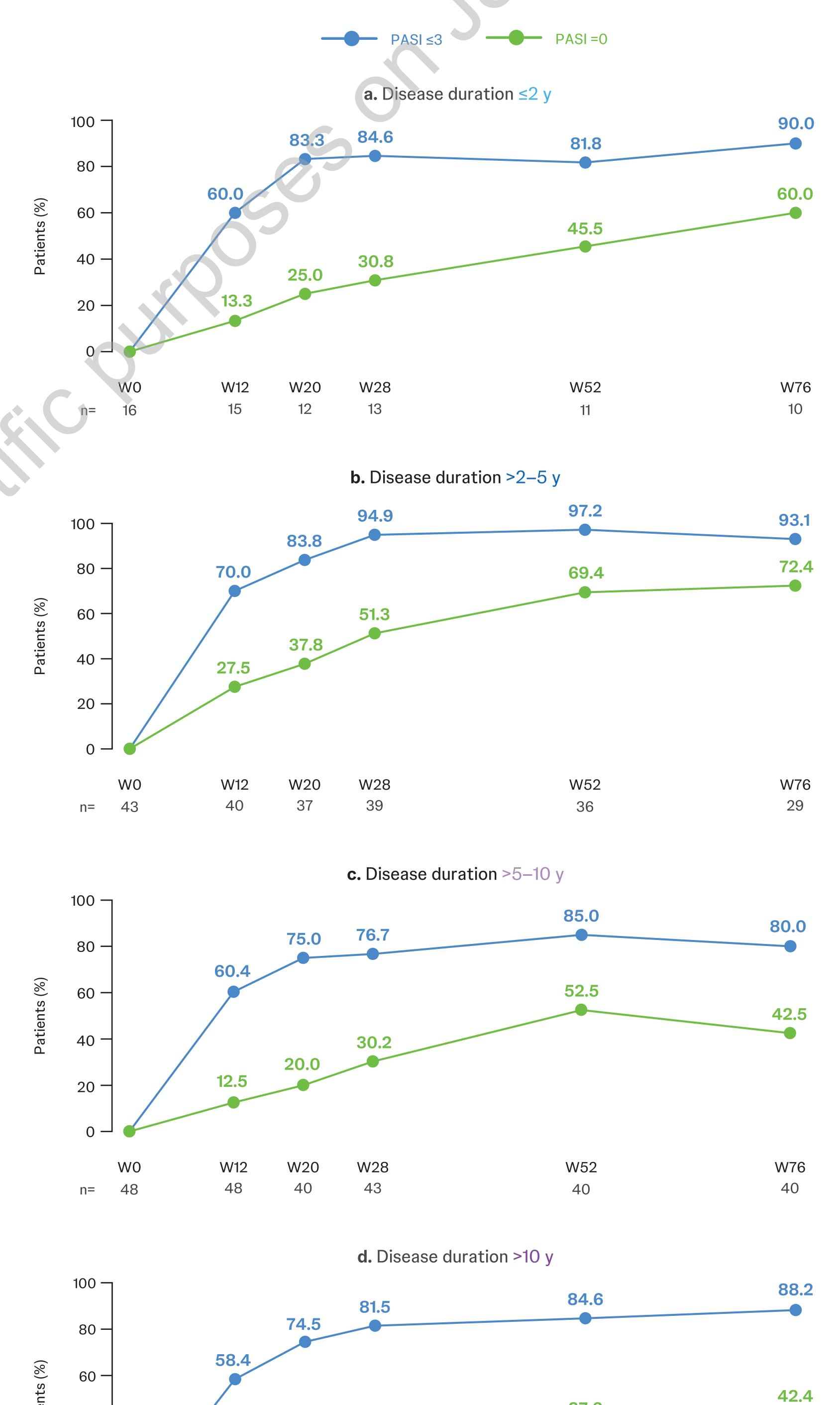
Psoriasis-related comorbidity, ^{a,b} n (%)	Disease duration (N=294)				
	≤2 y n=16	> 2–5 y n=43	> 5–10 y n=48	> 10 y n=187	
Alcohol abuse	2 (12.5)	2 (4.7)	3 (6.3)	6 (3.2)	
Depression	1 (6.3)	2 (4.7)	7 (14.6)	17 (9.1)	
Diabetes mellitus	1 (6.3)	2 (4.7)	2 (4.2)	21 (11.2)	
Hypertension	2 (12.5)	4 (9.3)	10 (20.8)	57 (30.5)	
Nicotine abuse	2 (12.5)	12 (27.9)	7 (14.6)	28 (15.0)	
Obesity	1 (6.3)	10 (23.3)	5 (10.4)	23 (12.3)	
Psoriatic arthritis	3 (18.8)	8 (18.6)	6 (12.5)	58 (31.0)	

^aPsoriasis-related comorbidities present in ≥10% of any subgroup are included; ^bThe 2015 German National Conference on Healthcare in Psoriasis identified 12 conditions as associated with psoriasis: alcohol abuse, diabetes mellitus, depression, dyslipidemia, chronic inflammatory bowel disease, hypertension, malignant lymphoma, metabolic syndrome, nicotine abuse, non-alcoholic steatohepatitis, obesity, and psoriatic arthritis. y=years.

Patients with shorter (≤5 y) vs longer (>5 y) disease duration showed higher response rates at W76, particularly for PASI=0

- Improvements in disease severity were observed across all disease duration subgroups over
 ~1.5 y of guselkumab treatment
- Mean PASI score improved across all disease duration subgroups (≤2 y/>2-5 y/>5-10 y/>10 y) from baseline (13.9/13.9/15.5/15.8) to W76 (0.9/0.6/1.4/1.3; data not shown)
- The proportions of patients achieving PASI ≤3 or PASI=0 increased from baseline to W76 across all disease duration subgroups (Figure 2)
- At W76, patients with shorter (≤2 y/>2-5 y; **Figure 2a and Figure 2b**) vs longer (>5-10 y/>10 y; **Figure 2c and Figure 2d**) disease duration showed significantly higher probability of achieving PASI=0, the most stringent endpoint representing completely clear skin (≤5 y: 69.2% [n=27/39] vs >5 y: 42.4% [n=78/184]; P=0.0026 [nominal P value; Fisher's exact test])

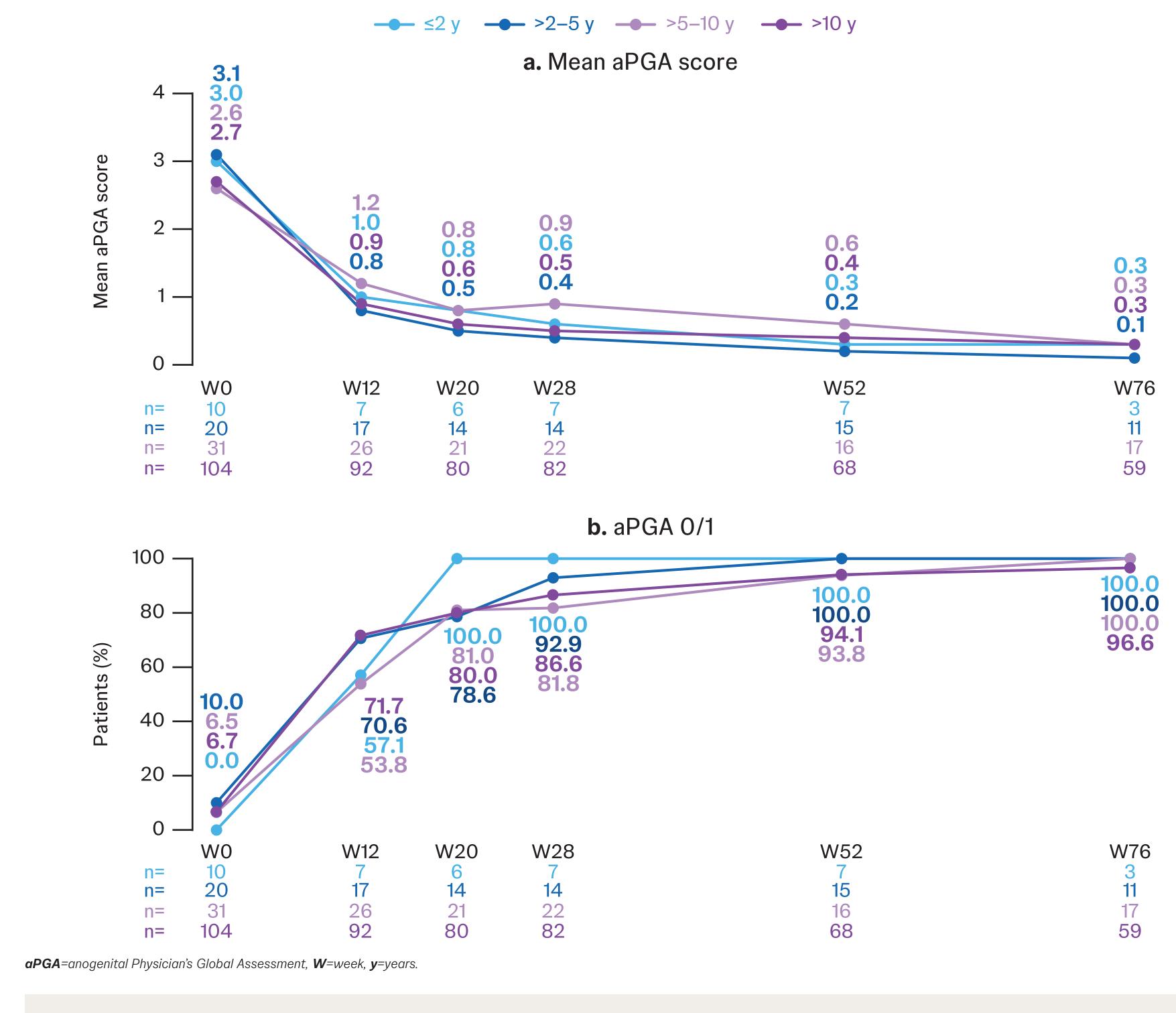
Figure 2. Proportion of patients with PASI ≤3 or PASI=0 over time, by disease duration



While most patients achieved aPGA 0/1 by W76, shorter disease duration (≤5 y) favored earlier achievement of clear or almost clear anogenital skin

- Among patients with anogenital psoriasis (aPGA ≥1) at baseline, mean aPGA scores were comparable across disease duration subgroups (3.0/3.1/2.6/2.7) and improved to a similar degree by W76 (0.3/0.1/0.3/0.3) of guselkumab treatment, respectively (**Figure 3a**)
- aPGA 0/1 was achieved earlier in patients with shorter disease duration: aPGA 0/1 was achieved by 100.0% of patients with disease durations of <2 y at W20, >2-5 y at W52 and >5-10 y at W76, and 96.6% of patients with a disease duration of >10 y at W76 (**Figure 3b**)

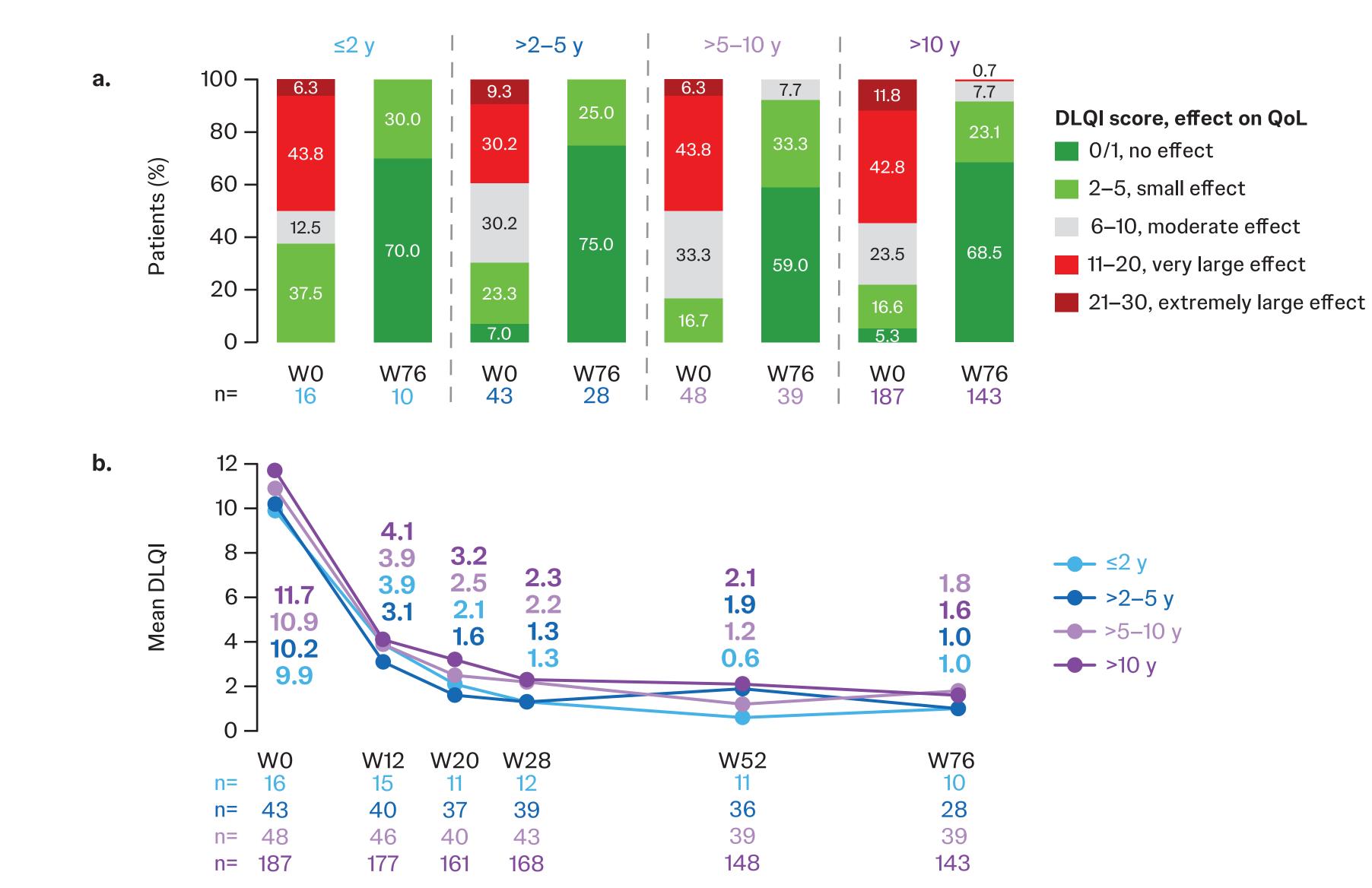
Figure 3. (a) Mean aPGA score and (b) aPGA response over time, by disease duration



QoL improved across all disease duration subgroups during guselkumab treatment

- From baseline to W76, substantial improvement in QoL was observed in all disease duration subgroups
- 100% of patients with shorter disease duration (<5 y) reported a small or no effect of psoriasis on QoL at W76; rates were slightly lower for those with longer disease duration (DLQI 0-5: 100.0%/100.0%/92.3%/91.6%; **Figure 4a**)
- Among patients with longer disease duration (>5 y), 7.7% reported a moderate effect (DLQI 6–10) of psoriasis on QoL at W76, compared with 0% of patients with shorter disease duration (<5 y; Figure 4a)
- Mean DLQI score improved in all disease duration subgroups ($\leq 2 \text{ y/} \geq 2-5 \text{ y/} \geq 5-10 \text{ y/} \geq 10 \text{ y/} \geq 10 \text{ y/} \leq 10 \text{ y/} \geq 10 \text{ y/}$

Figure 4. (a) DLQI severity banding and (b) mean DLQI score over time, by disease duration



DLQI=Dermatology Life Quality Index, **QoL**=quality of life, **W**=week, **y**=years.

PASI=Psoriasis Area and Severity Index, **W**=week, **y**=years.

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