

Guselkumab Shows Better Long-Term Effectiveness and Drug Survival Compared to Secukinumab Through 84 Weeks in Patients With Moderate-to-Severe Plaque Psoriasis: Results From the German Non-Interventional G-REAL Study

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Background

- Psoriasis (PsO) is a chronic immune-mediated disease characterized by erythematous, scaly plaques, driven by the interleukin (IL)-23/IL-17 inflammatory pathway¹
- Guselkumab (GUS), a selective p19 subunit-targeted IL-23 inhibitor, demonstrated superior long-term efficacy compared to secukinumab (SEC), an IL-17A inhibitor, in patients with PsO in the Phase 3 ECLIPSE trial²
- G-REAL is a prospective, non-interventional, multicenter study evaluating the long-term effectiveness of GUS and SEC and their impact on health-related quality of life (QoL) in patients with moderate-to-severe PsO across different treatment lines in routine practice in Germany

Objective

This analysis of the overall G-REAL patient population assessed effectiveness, patient-reported outcomes (PROs), and drug survival with GUS and SEC over 84 weeks (W)

Study Design & Analyses

- The G-REAL study included adults with moderate-to-severe PsO and baseline PASI >5 treated with GUS Q8W or SEC Q4W per routine care
- Data were collected at W0, W4, W12, W20, W28, W52, and W84
- A total of 669 patients were enrolled; 661 (GUS: 502; SEC: 159) had analyzable data at baseline and ≥1 post-baseline visit; patients were stratified by biologic treatment history: bionative (GUS: 259; SEC: 95) and ≥1 prior biologic (GUS: 243; SEC: 64)
- PASI/DLQI were analyzed using NRI after applying treatment failure rules^a
- Drug survival was analyzed using Kaplan-Meier methodology^b
- Nominal p-values are reported

^aPatients were considered treatment failures when (1) GUS or SEC was discontinued due to lack of effectiveness, loss of effectiveness, or an AE of psoriasis worsening, or (2) a new therapy other than the therapy at baseline was started. In the absence of confirmation of treatment discontinuation (including patients lost to follow-up), the time to event was censored on the last documented study date. **AE**=adverse event, **DLQI**=Dermatology Life Quality Index, **GUS**=guselkumab, **NRI**=non-responder imputation, **PASI**=Psoriasis Area and Severity Index, **PsO**=psoriasis, **Q4W**=every 4 weeks, **Q8W**=every 8 weeks, **SEC**=secukinumab, **W**=week.

Results

Baseline patient and disease characteristics were generally well balanced between treatment cohorts

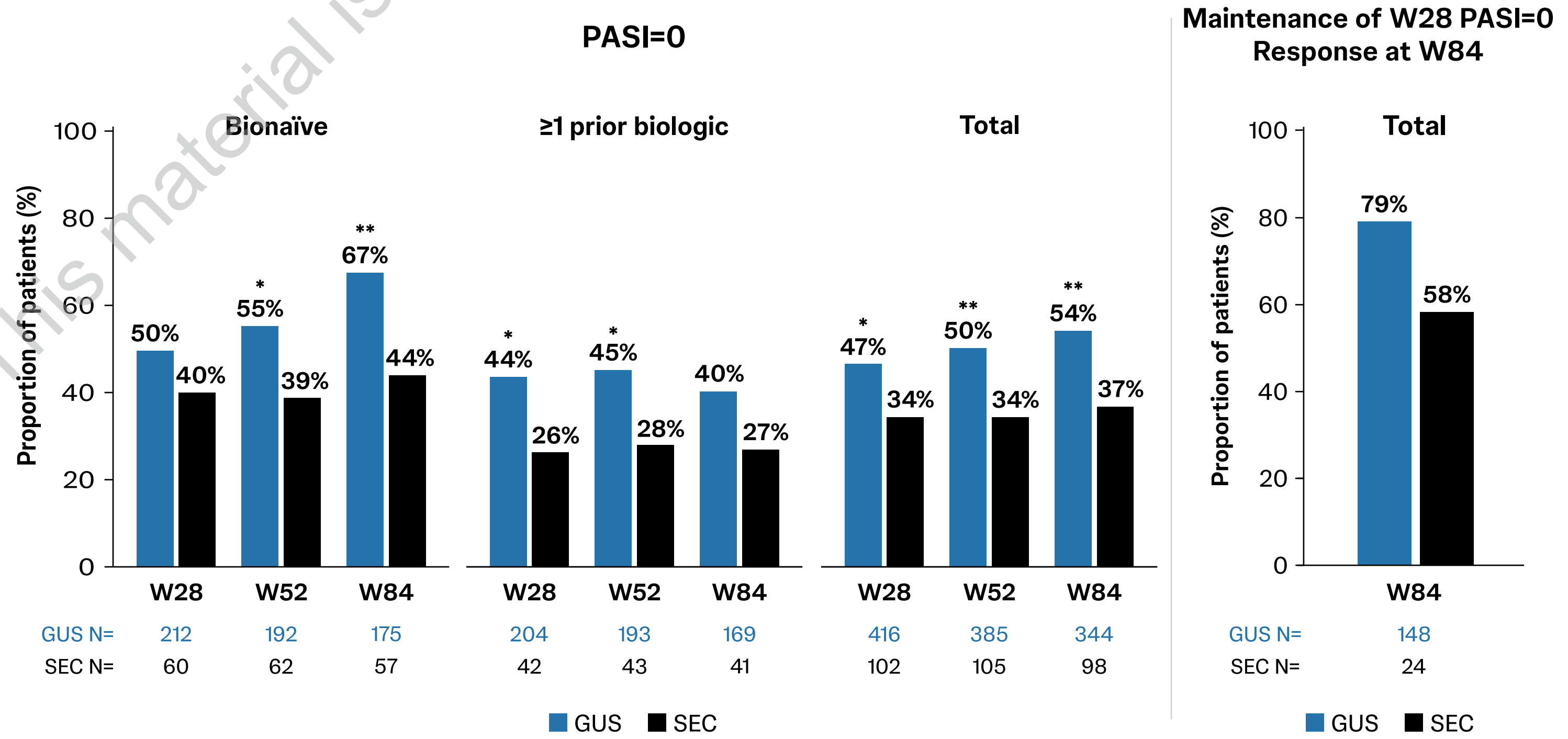
- PsA and depression were less prevalent in the GUS cohort

Baseline Characteristics of Full G-REAL Study Population		GUS (N=502)	SEC (N=159)
Demographics			
	Mean age, years (SD)	47.5 (14.1)	48.3 (13.2)
	Male, n (%)	306 (61.0)	103 (64.8)
	Mean BMI, kg/m ² (SD)	29.2 (6.2)	29.6 (6.1)
Disease Characteristics			
	Mean PsO duration, years (SD)	16.4 (12.8) ^a	15.0 (13.9)
	Mean DLQI (0-30) (SD)	14.0 (7.5) ^b	14.1 (7.9) ^b
	Mean PASI (0-72) (SD)	15.1 (8.5)	14.3 (7.3)
Concomitant Diseases ^d , n (%)			
	Hypertension	142 (28.3)	42 (26.4)
	PsA	121 (24.1)	49 (30.8)
	Hyperlipidemia	58 (11.6)	17 (10.7)
	Diabetes	48 (9.6)	18 (11.3)
	Depression	31 (6.2)	18 (11.3)
Prior csDMARDs Use, n (%)			
	Methotrexate	205 (40.8)	67 (42.1)
	Cyclosporine	30 (6.0)	7 (4.4)

^aN=501; ^bN=490; ^cN=152; ^dTop 5 most frequent concomitant diseases are shown. **BMI**=body mass index, **csDMARD**=conventional synthetic disease-modifying antirheumatic drug, **DLQI**=Dermatology Life Quality Index, **GUS**=guselkumab, **PASI**=Psoriasis Area and Severity Index, **PsA**=psoriatic arthritis, **PsO**=psoriasis, **SEC**=secukinumab, **SD**=standard deviation.

GUS demonstrated higher rates of complete skin clearance versus SEC through W84 across treatment lines

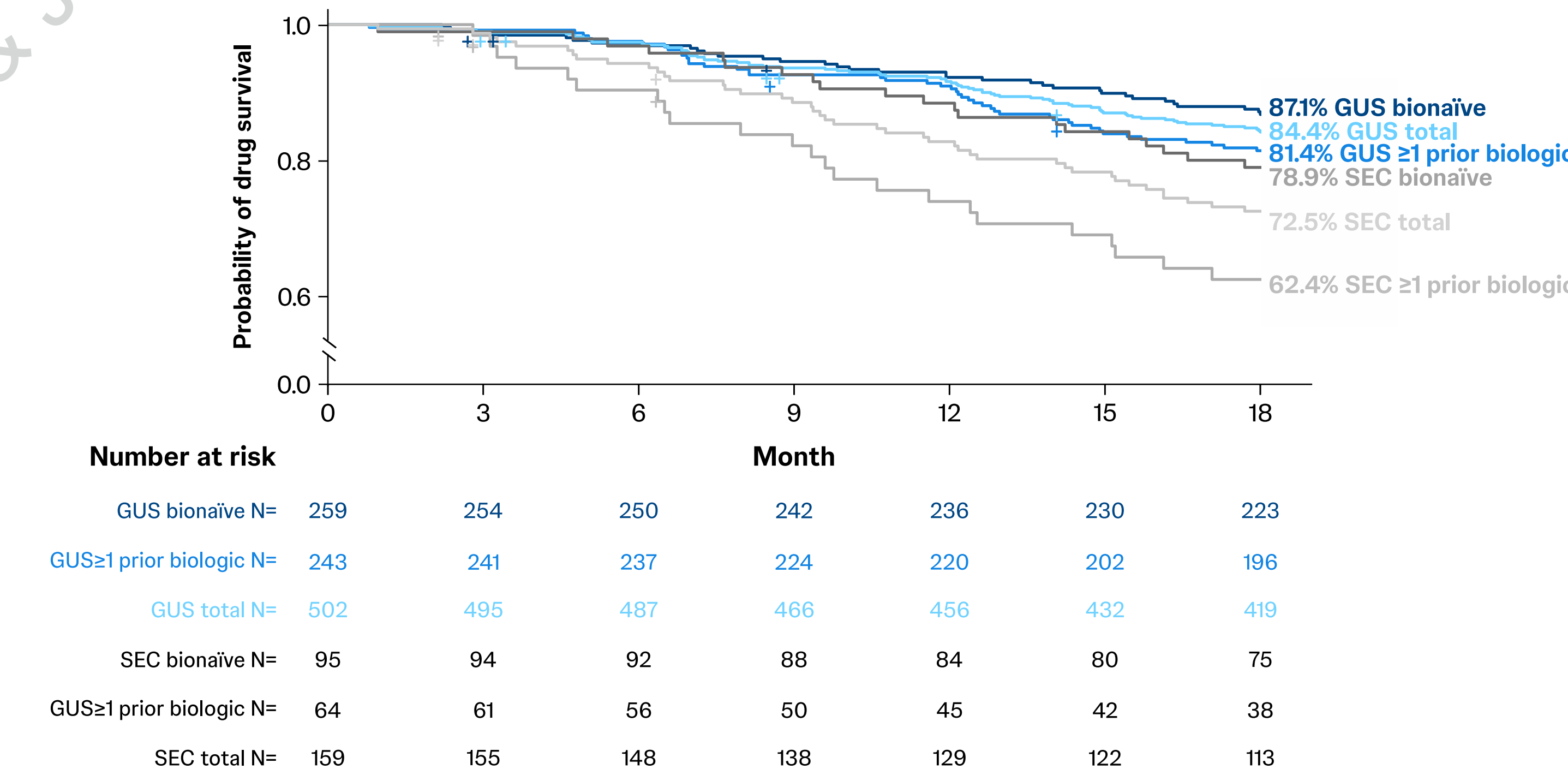
- GUS demonstrated the highest PASI=0 response rate in bionative patients, with higher rates than SEC from W28 to W84 (left-hand figure)
- Among patients who achieved PASI=0 at W28 in the overall population, a higher PASI=0 response rate was observed with GUS compared to SEC treatment at W84 (right-hand figure)
- The treatment failure^a rate with GUS (5.4%) was lower than that for SEC (17.0%) through W84 (data not shown)



Nominal **p*<0.05, ***p*<0.01 vs SEC. ^aPatients were considered treatment failures when (1) GUS or SEC was discontinued due to lack of effectiveness, loss of effectiveness, or an adverse event of psoriasis worsening, or (2) a new therapy other than the therapy at baseline was started. **GUS**=guselkumab, **PASI**=Psoriasis Area and Severity Index, **SEC**=secukinumab, **W**=week.

Patients treated with GUS showed higher drug survival rates versus those treated with SEC across treatment lines through 18 months

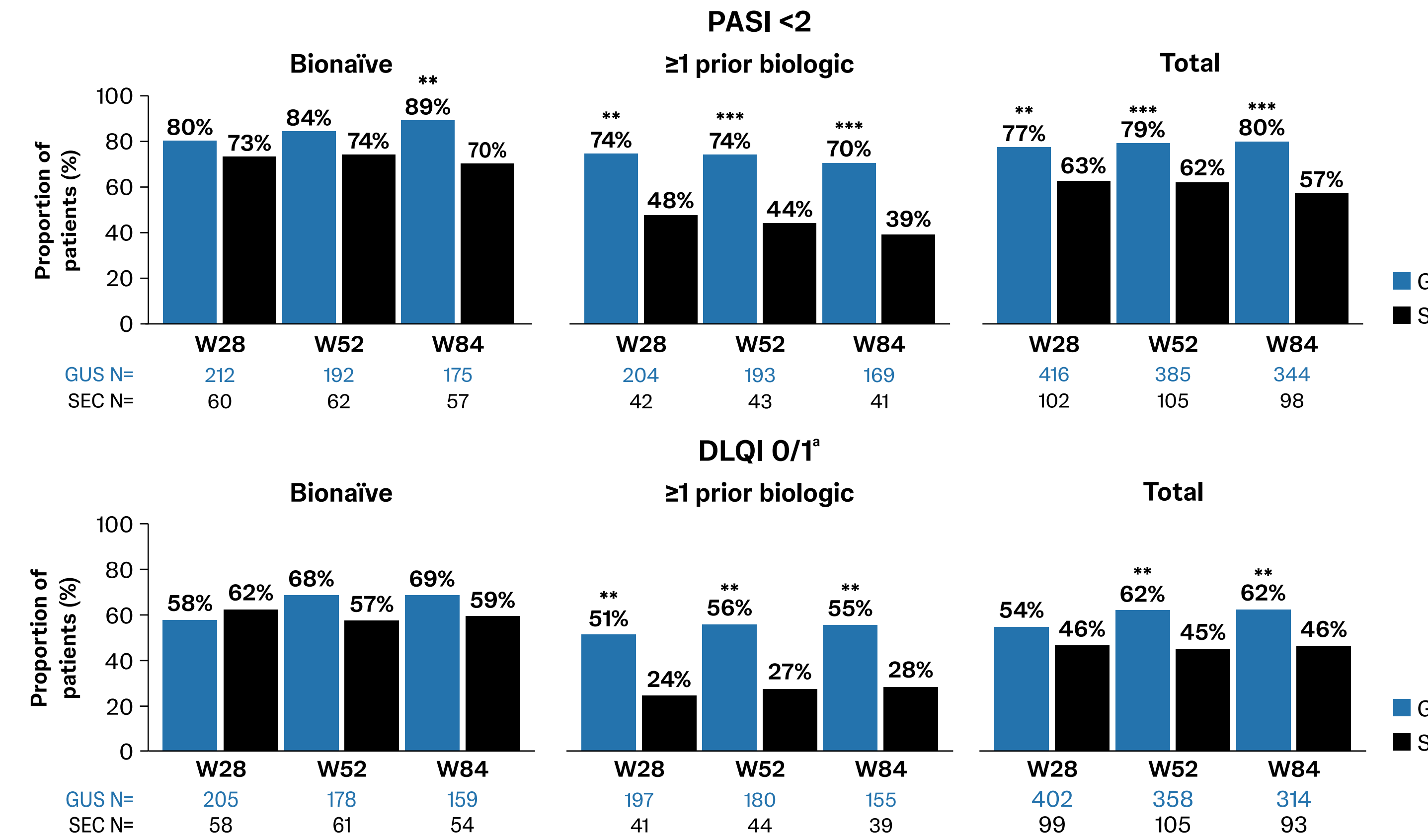
- Bionative patients treated with GUS showed the highest drug survival rate through 18 months
- Higher drug survival rates were observed across all GUS treatment lines (81.4–87.1%) versus all SEC treatment lines (62.4–78.9%) through 18 months
- The primary reasons for treatment discontinuation were AEs (GUS: 5.0%; SEC: 10.1%) and loss of effect (GUS: 2.2%; SEC: 8.8%)



Cross symbol (+) indicates censored patients. **GUS**=guselkumab, **SEC**=secukinumab.

GUS demonstrated generally higher PASI <2 and DLQI 0/1 response rates versus SEC through W84 across treatment lines

- Higher proportions of patients achieved PASI <2 with GUS compared with SEC through W84 across treatment lines
- GUS-treated patients achieved higher DLQI 0/1^a response rates versus SEC at all assessed time points across treatment lines (except at W28 in bionative patients)



Nominal ***p*<0.01, ****p*<0.001 vs SEC. ^aIndicating no effect of skin disease on patient's quality of life. **DLQI**=Dermatology Life Quality Index, **GUS**=guselkumab, **PASI**=Psoriasis Area and Severity Index, **QoL**=quality of life, **SEC**=secukinumab, **W**=week.