



Scan the QR code.
The QR code is intended to provide scientific information for individual reference, and the information should not be altered or reproduced in any way.

# Exploring Super Responders Who Remained Treatment-free for More Than 3 Years After Guselkumab Withdrawal: Insights From the Phase 3b GUIDE Trial in Psoriasis

Knut Schäkel<sup>1</sup>, Matthias Hoffmann<sup>2</sup>, Michael Sebastian<sup>3</sup>, Margrit Simon<sup>4</sup>, Maurizio Podda<sup>5</sup>, Peter Radny<sup>6</sup>, Matthias Hahn<sup>7</sup>, Jan C Simon<sup>8</sup>, Peter Weisenseel<sup>9</sup>, Khusru Asadullah<sup>10, 11</sup>, Andreas Pinter<sup>12</sup>, Carle Paul<sup>13</sup>, Friedemann Taut<sup>14</sup>, Judita Makuc<sup>15</sup>, Nenja Krüger<sup>15</sup>, Nikolas Spindler<sup>15</sup>, Kilian Eyerich<sup>16</sup>

<sup>1</sup>Department of Dermatology, and Interdisciplinary Center for Inflammatory Diseases, Heidelberg University Hospital, Heidelberg, Germany, <sup>2</sup>Dermatological Practice Dr. med. Matthias Hoffmann, Witten, Germany, <sup>3</sup>Dermatological Practice Dr. med. Michael Sebastian, Mahlow, Germany, <sup>4</sup>Dermatology Practice and Clinical Study Center Dr. med. Margrit Simon, Berlin, Germany, <sup>5</sup>Department of Dermatology, Medical Center Klinikum Darmstadt, Teaching Hospital Goethe-University Frankfurt, Darmstadt, Germany, <sup>6</sup>Derma-Study-Center-FN GmbH Dr. med. Peter Radny, Friedrichshafen, Germany, <sup>7</sup>Department of Dermatology, University Medical Center, Eberhard Karls University Tübingen, Germany, <sup>8</sup>Department of Dermatology, Venerology and Allergology, Leipzig University Medical Center, Leipzig, Germany, <sup>9</sup>Dermatologikum Hamburg, Hamburg, Germany, <sup>10</sup>Department of Dermatology, Venerology and Allergology, Charité – Universitätsmedizin, Berlin, Germany, <sup>11</sup>Dermatology Potsdam MVZ, Potsdam, Germany, <sup>12</sup>University Hospital Frankfurt am Main, Frankfurt, Germany, <sup>13</sup>Toulouse University, Toulouse, France, <sup>14</sup>Taut Science and Service GmbH, Konstanz, Germany, <sup>15</sup>Johnson & Johnson, Neuss, Germany, <sup>16</sup>Department of Dermatology and Venereology, Medical Center, University of Freiburg, Freiburg, Germany

This presentation was sponsored by Johnson & Johnson.

Presented by Knut Schäkel at EADV; September 17-20, 2025; Paris, France

### Conflicts of Interest

KS: Advisory board/consultant/speaker/clinical trials/honoraria/grants: AbbVie, Apogee, Alumis, Amgen, Almirall, Biogen, Bristol Myers Squibb, Boehringer Ingelheim, Celgene, Celldex Therapeutics, Chugai, Galderma, Incyte, Johnson & Johnson, Leo Pharma, Eli Lilly, Merck Sharp & Dohme Corp., Morphosys, Nektar Therapeutics, Novartis, Regeneron, Sanofi, Smerud, and UCB.

MHo: Advisory board/consultant/speaker/clinical trials/honoraria/grants: AbbVie, Almirall, Biofrontera, Bristol Myers Squibb, Dermapharm, Dermasence, Forward, Galderma, Incyte, Johnson & Johnson, Kiniksa, Leo Pharma, Eli Lilly, L'Oréal, MSD, Nektar Therapeutics, Novartis, Pierre Fabre, Pfizer, Sanofi, Schering-Plough, Smerud Medical Research, Stallergenes Greer, Viatris, and UCB.

MSe: Cooperation with: Abb Vie, Affibody, Allergan, Almirall, Alumis, Amgen, Apogee, AstraZeneca, August Wolff, Boehringer Ingelheim, Bristol Myers Squibb, Dermapharm, Dermira, Incyte, Ipsen, Johnson & Johnson, Leo Pharma, Eli Lilly, Medlmmune, Menlo Therapeutics, Merz Pharma, Moonlake, MSD, Mundipharma, Novartis, Pfizer, Regeneron, Sanofi Genzyme, Takeda, UCB, and Zuellig Pharma.

MSi: None to declare

MP: COIs could not be confirmed as Prof. Podda passed away during the preparation of the presentation.

PR: Advisory board/consultant/speaker/clinical trials/honoraria/grants: Abbvie, Almirall, Amgen, Beiersdorf, Biofrontera, Biogen, Bristol Myers Squibb, Cutanea Life Science, Dermapharm AG, Dermira, Eli Lilly, Foamix, Forward-Pharma, Galderma, Galenpharma, Hermall, Incyte, Inovio, Infectopharm, Johnson & Johnson, Leo Pharma, Leti, Medac, Medimmune, Moberg Derma AB, MSD, Novartis, Pfizer, Pharmaceuticals, Regeneron/Sanofi, Smerud, UCB, and VBL Therapeutics.

MHa: Advisory board/investigator/grants: AbbVie, Almirall, Alumis, Amgen, Argenex, Apogee Therapeutics, Bristol Myers Squibb, Boehringer Ingelheim, Celldex, Chugai, Concert, Immunovant, Incyte, Galapagos, Johnson & Johnson, Leo Pharma, Eli Lilly, Novartis, Pfizer, Sanofi, Takeda, Topas, and UCB.

JCS: Advisory boards/speaker: Almirall, Bristol-Myers Squibb, Johnson & Johnson, Leo Pharma, Eli Lilly, MSD, Novartis, Pfizer, and Pierre Fabre.

PW: Advisory board/speaker/clinical trials/grants: AbbVie, Almirall, Biogen, Bristol Myers Squibb, Celgene, Eli Lilly, Johnson & Johnson, Leo Pharma, Medac, Novartis, Pfizer, and UCB Pharma.

KA: Advisory board/speaker/clinical trials/grants: AbbVie, Akribes, Almirall, Antabio, Bayer, DEKA Biosciences, Emeriti Pharma, Galderma, Incyte, Johnson & Johnson, LEO Pharma, L'Oréal, Novartis, Pierre Fabre, Sanofi Genzyme, and UCB.

AP: Advisor/speaker/grants/clinical trials: AbbVie, Almirall Hermal, Amgen, Biogen Idec, BioNTech, Boehringer Ingelheim, Celgene, Celltrion, Eli Lilly, Galderma, GSK, Hexal, Johnson & Johnson, Klinge Pharma, Leo Pharma, MC2, Medac, Merch Serono, Mitsubishi, MSD, Noavartis, Pascoe, Pfizer, Regeneron, Roche, Sandoz Biopharmaceuticals, Sanofi Genzyme, Schering-Plough, Tigercat Pharma, UCB, and Zuellig Pharma.

CP: Advisory board/speaker/clinical trials/grants: AbbVie, Almirall, Amgen, Bristol Myers Squibb, Boehringer Ingelheim, Galderma, Eli Lilly, Iqvia, Johnson & Johnson, Merck, Mylan, Novartis, Pfizer, Sanofi, and UCB.

FT: Owns Taut Science & Service GmbH, a consultancy specialized in clinical research and medical affairs, receiving consultancy fees from Johnson & Johnson.

JM, NK, NS: Employee: Johnson & Johnson; Shareholder: Johnson & Johnson.

KE: Speaker/advisory board: AbbVie, Almirall, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, Hexal, Johnson & Johnson, Leo Pharma, Novartis, Pfizer, Sanofi, Sitryx, and UCB. Co- 2 founder/shareholder: Dermagnostix and Dermagnostix R&D.

### Background



#### **Psoriasis (PSO)**

- Chronic, immune-driven, relapsing-remitting inflammatory skin disease¹
- Primarily driven by dysregulation of the IL-23/IL-17 axis<sup>2</sup>



### Guselkumab (GUS)

- Fully human, mAb that selectively inhibits IL-23 by targeting its p19 subunit
- Proven efficacy in patients with moderate-to-severe plaque PSO<sup>3-6</sup>
- Approved to treat moderate-to-severe PSO, active psoriatic arthritis and moderately-to-severely active ulcerative colitis and Crohn's disease<sup>7</sup>



### **GUIDE** study

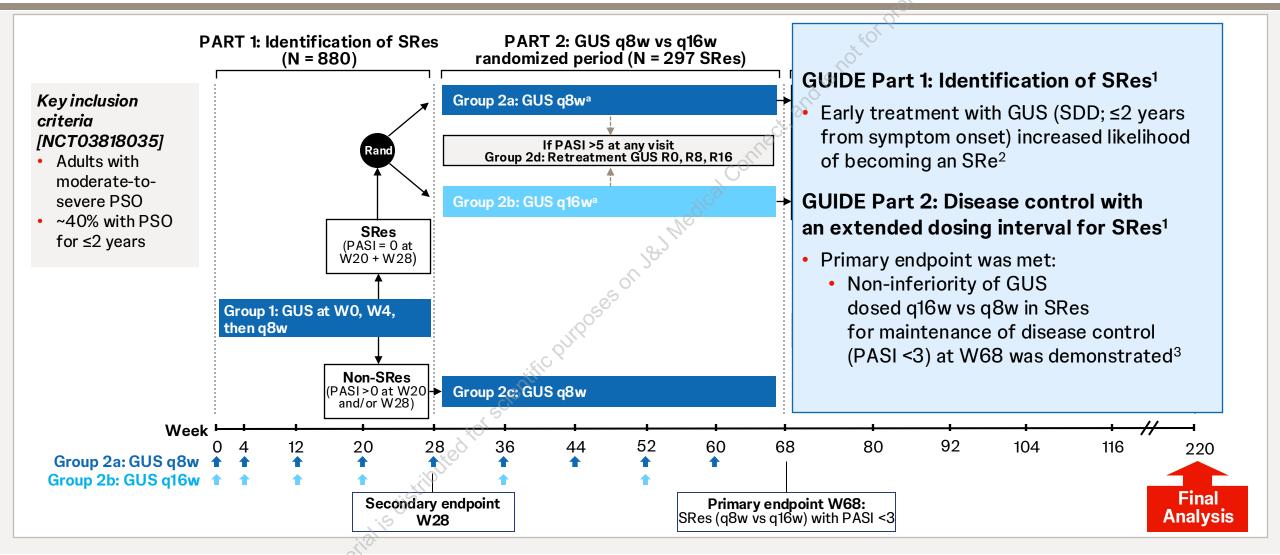
 Prospective Phase 3b RCT investigating early intervention with GUS for disease modification in patients with PSO<sup>7</sup>

omotionaluse

Methods

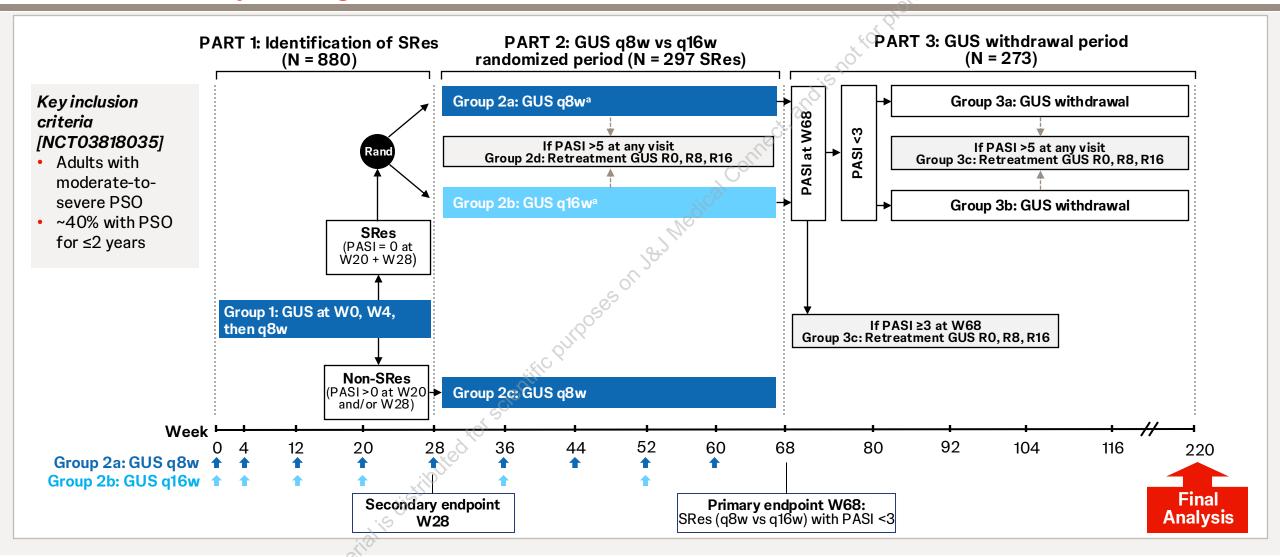
10

### GUIDE study design – Parts 1 and 2

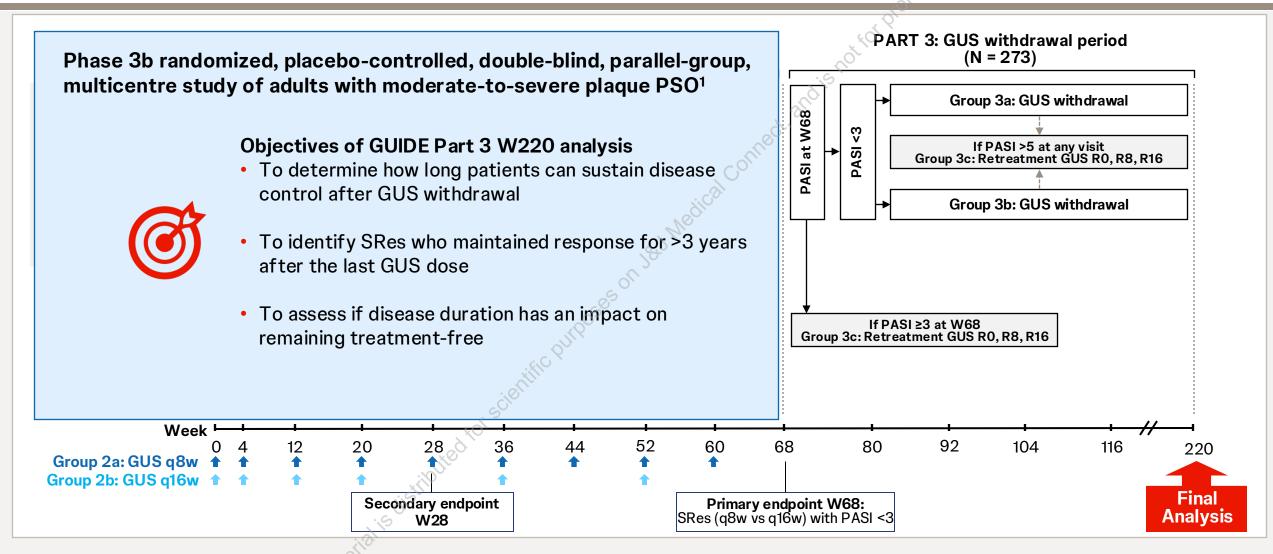


<sup>1.</sup> Eyerich K et al. BMJ Open 2021;11:e049822. 2. Schäkel K et al. J Eur Acad Dermatol Venereol 2023;37:2016–27; 3. Eyerich K et al. JAMA Dermatol 2024;e242463. aBlinded treatment. GUS=guselkumab, Non-SRe=non super responder, PASI=Psoriasis Area and Severity Index, PSO=psoriasis, q8w=every 8 weeks, q16w=every 16 weeks, R=retreatment, Rand=randomization, SDD=short disease duration, SRe=super responder, W=week.

### GUIDE study design – Parts 1, 2 and 3



### GUIDE study design – Part 3



<sup>1.</sup> Eyerich K et al. BMJ Open 2021;11:e049822. GUS=guselkumab, PASI=Psoriasis Area and Severity Index, PSO=psoriasis, q8w=every 8 weeks, q16w=every 16 weeks, R=retreatment, SRe=super responder, W=week.

onotional use

Results

1/1

## SRes remaining treatment-free through 3 years tended to have shorter disease duration and received no prior systemic therapies

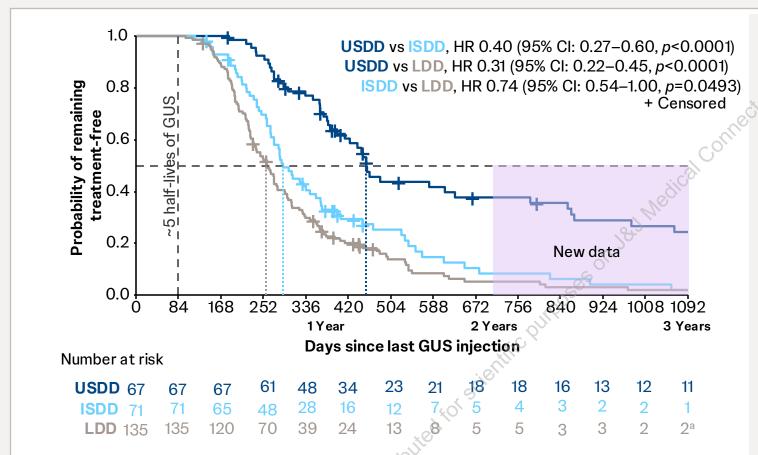
aseline Character	istics of SRes Entering GUS Withdrawal in GUIDE Part 3	SRes remaining treatment- free until W220 (N = 13)	SRes initiating re-treatme prior to W220 (N = 260)
Demographics			, in the second
	Mean age, years (SD)	42.4 (12.4)	39.6 (14.1)
	Male, n (%)	9 (69.2)	178 (68.5)
	Female, n (%)	4 (30.8)	82 (31.5)
	Mean BMI, kg/m <sup>2</sup> (SD)	26.1 (4.7)	27.0 (5.2)
Disease Character	ristics		
	Mean PSO duration, years (SD)	2.0 (4.7)	10.6 (12.8)
	LDD (>2 years), n (%)	1 (7.7)	134 (51.5)
0	SDD (≤2 years), n (%)	12 (92.3)	126 (48.5)
	USDD (<15 months), n (%)	11 (84.6)	56 (21.5)
11	ISDD (≥15−≤24 months), n (%)	1 (7.7)	70 (26.9)
	Mean BSA with PSO, % (SD)	19.1 (11.6)	25.2 (15.4)
	Mean PASI (0-72) (SD)	14.6 (3.6)	18.9 (7.5)
Hierarchical Prior	PSO Medication <sup>a</sup>		
	Topical therapy, n (%)	9 (69.2)	85 (32.7)
	Phototherapy <sup>b</sup> , n (%)	2 (15.4)	50 (19.2)
	Non-biologic systemic therapy <sup>c</sup> , n (%)	0 (0)	100 (38.5)
	<b>Biologic therapy</b> d, n (%)	0 (0)	21 (8.1)
GUS dosing in part	2: q8w/q16w, %	53.8/46.2	48.9/51.2

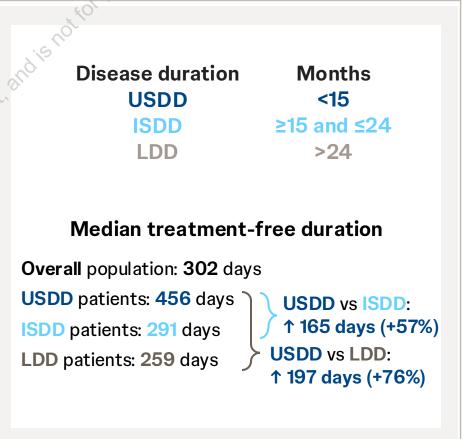
<sup>&</sup>lt;sup>a</sup>Counts per most advanced therapy regimen. <sup>b</sup>PUVA, UVB, UVB or photosole, <sup>c</sup>Methotrexate, cyclosporine, fumaric acid esters, acitretin, apremilast, tofacitinib, oral steroids, and other. <sup>d</sup>Infliximab, etanercept, adalimumab, efalizumab, ustekinumab, secukinumab, ixekizumab, brodalumab, certolizumab, and other. **BMI**=body mass index, **BSA**=body surface area, **GUS**=guselkumab, **ISDD**=intermediate-short disease duration, **LDD**=long disease duration, **PASI**=Psoriasis Area and Severity Index, **PSO**=psoriasis, **PUVA**=psoralen + ultraviolet A, **q8w**=every 8 weeks; **q16w**=every 16 weeks, **SD**=standard deviation, **SDD**=short disease duration, **SRe**=super responder, **USDD**=ultra-short disease duration, **UV**=ultraviolet, **W**=week.

## Overall, 11 of 13 SRes remaining treatment-free through 3 years after withdrawing from GUS had <15 months PSO duration (USDD)

Age, years   37   19   50   51   26   55   41   34   43   58   58   31   44				Patient												
Age, years 37 19 50 51 26 55 41 34 43 58 58 31 4  Sex Male Male Female Male Male Female Male Male Male Male Male Male Male M			1	2	3	4	5	6	700	8	9	10	11	12	13	
Sex   Male   Male   Female   Male   Male   Female   Male   Male   Male   Male   Male   Male   Male   Female   Female   Female   BMI, kg/m²   29.1   20.5   26.5   30.3   22.2   22.6   22.6   30   24.8   36.2   30.1   20.9   24.8   2	Demograp	hics							rec							
Sex   Male   Male   Female   Male   Male   Female   Male   Male   Male   Male   Male   Male   Male   Male   Male   Female   Female   Female   Female   Female   BMI, kg/m²   29.1   20.5   26.5   30.3   22.2   22.6   22.6   30   24.8   36.2   30.1   20.9   24.8	0.0	Age, years	37	19	50	51	26	550	41	34	43	58	58	31	4	
PSO duration, yrs		Sex	Male	Male	Female	Male	Male	Female	Male	Male	Male	Male	Male	Female	Fer	
PSO duration, yrs		<b>BMI,</b> kg/m <sup>2</sup>	29.1	20.5	26.5	30.3	22.2	22.6	22.6	30	24.8	36.2	30.1	20.9	24	
PSO duration category PASI (0-72) 12.8 13.8 13 18.6 11.8 16.2 13.8 22.4 12.6 12.8 19.6 11.5 10 DLQI (0-30) 22 21 28 21 15 12 27 24 13 24 23 11 1  PSO Medication Use  PSO therapy Topical + PUVA + UVB Only topical There is a second of the pure of t	Disease Ch	naracteristics			'		183				'		'			
Category   LDD   ISDD   USDD		PSO duration, yrs	17.6	1.4	1.2	0.3	0.8	1.2	1.1	0.4	0.8	0.2	0.4	0.5	0	
PASI (0-72) 12.8 13.8 13 18.6 11.8 16.2 13.8 22.4 12.6 12.8 19.6 11.5 10  DLQI (0-30) 22 21 28 21 15 12 27 24 13 24 23 11 1  PSO Medication Use  PSO therapy Topical + PUVA + UVB  Only topical their			LDD	ISDD		2050.		USDD								
PSO Medication Use  PSO therapy  Topical + PUVA + UVB  Only topical  therefore	VI	<b>PASI</b> (0-72)	12.8	13.8	13	18.6	11.8	16.2	13.8	22.4	12.6	12.8	19.6	11.5	10	
PSO therapy Topical Topical + PUVA + UVB Only topical there		<b>DLQI</b> (0-30)	22	21	28	21	15	12	27	24	13	24	23	11	1	
+ PUVA + UVB Only topical their	PSO Medic	cation Use									k					
Biologic therapy  Biologic naïve	H	PSO therapy	•		() nly topical										the	
		Biologic therapy	Biologic naïve													

## SRes with USDD (<15 months) had the highest probability of remaining treatment-free through 3 years after GUS withdrawal

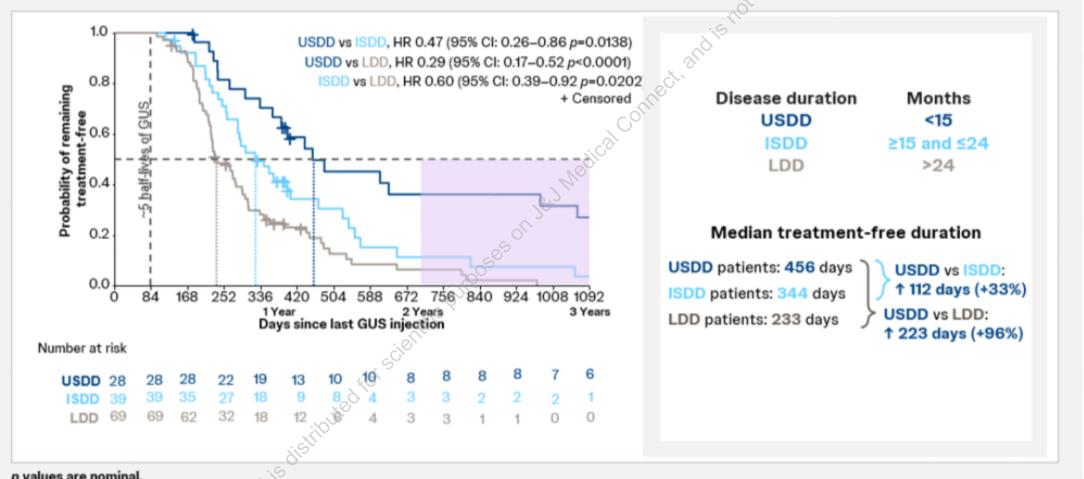




p values are nominal.

13 SRes remained treatment-free for >3 years following GUS withdrawal

### Similar results were observed in the subgroup of SRes withdrawing from GUS q8w dosing

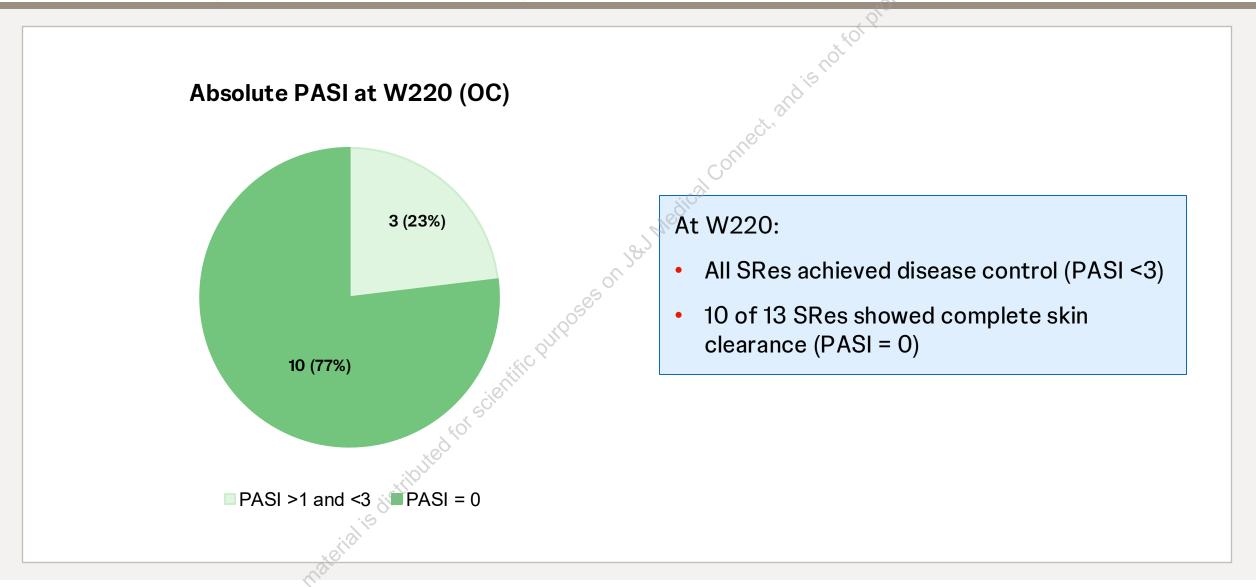


p values are nominal.

CI=confidence interval; GUS=guselkumab, HR=hazard ratio; ISDD=intermediate-short disease duration, LDD=long disease duration, q8w=every 8 weeks, SRe=super responder, USDD=ultra-short disease duration.

13

## The 13 SRes who remained treatment-free for >3 years after withdrawing from GUS had high PASI responses at W220<sup>a</sup>

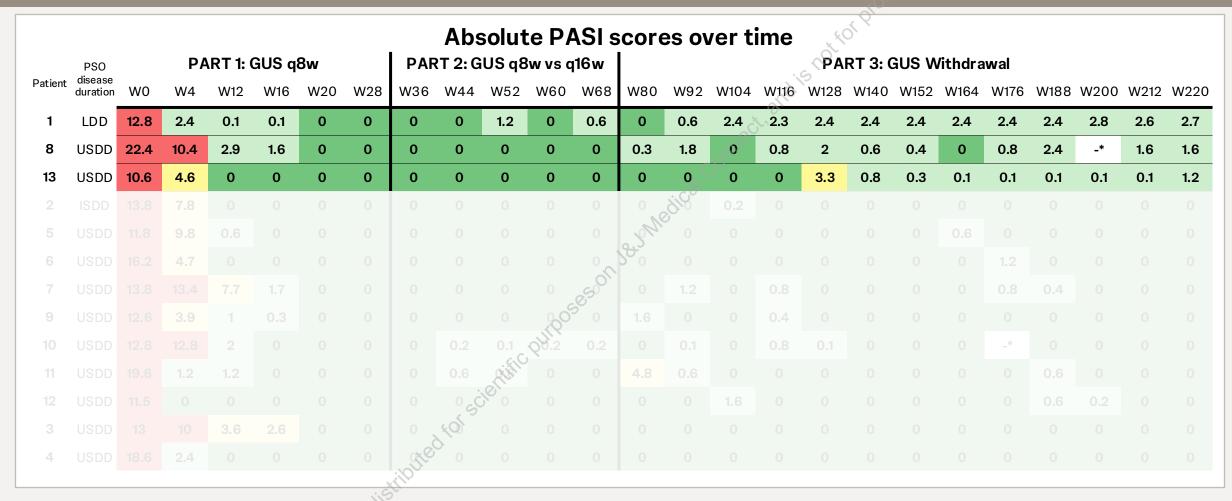


## The 13 SRes who remained treatment-free for >3 years maintained overall low PASI scores after GUS withdrawal

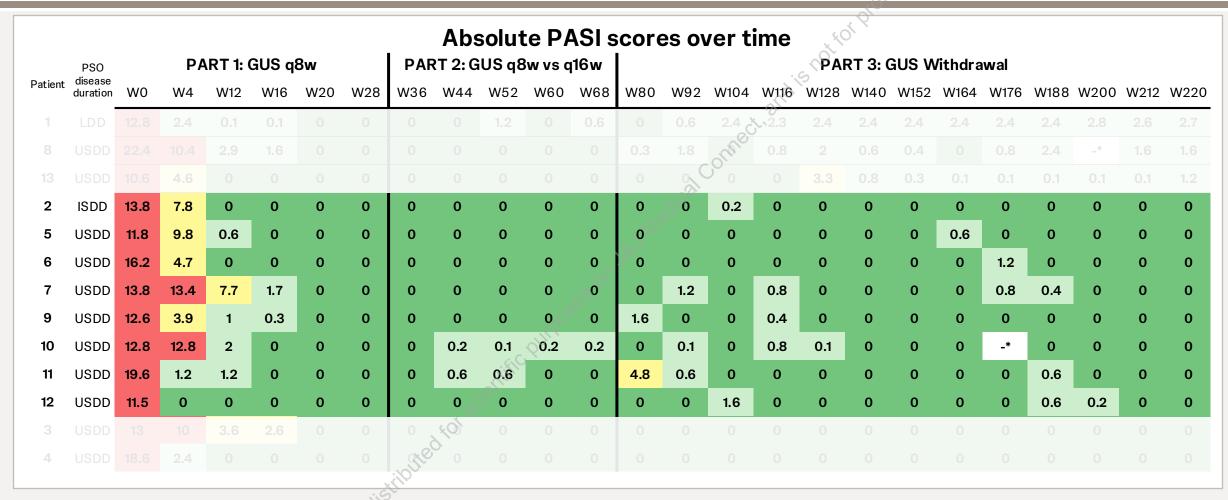
	Absolute PASI scores over time																								
	PSO PART 1: GUS q8w PART 2: GUS q8w vs q16w						16w					PAI	RT 3: 0	GUS W	/ithdra	wal									
Patient	disease duration	WO	W4	W12	W16	W20	W28	W36	W44	W52	W60	W68	W80	W92	W104	W116	W128	W140	W152	W164	W176	W188	W200	W212	W220
1	LDD	12.8	2.4	0.1	0.1	0	0	0	0	1.2	0	0.6	0	0.6	2.4	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.8	2.6	2.7
8	USDD	22.4	10.4	2.9	1.6	0	0	0	0	0	0	0	0.3	1.8	0	0.8	2	0.6	0.4	0	0.8	2.4	_*	1.6	1.6
13	USDD	10.6	4.6	0	0	0	0	0	0	0	0	0	0	0	0	0	3.3	8.0	0.3	0.1	0.1	0.1	0.1	0.1	1.2
2	ISDD	13.8	7.8	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0
5	USDD	11.8	9.8	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0	0	0
6	USDD	16.2	4.7	0	0	0	0	0	0	0	0	0_	0	0	0	0	0	0	0	0	1.2	0	0	0	0
7	USDD	13.8	13.4	7.7	1.7	0	0	0	0	0	0	0	0	1.2	0	0.8	0	0	0	0	0.8	0.4	0	0	0
9	USDD	12.6	3.9	1	0.3	0	0	0	0	0	00	0	1.6	0	0	0.4	0	0	0	0	0	0	0	0	0
10	USDD	12.8	12.8	2	0	0	0	0	0.2	0.1	0.2	0.2	0	0.1	0	0.8	0.1	0	0	0	_*	0	0	0	0
11	USDD	19.6	1.2	1.2	0	0	0	0	0.6	0.6	0	0	4.8	0.6	0	0	0	0	0	0	0	0.6	0	0	0
12	USDD	11.5	0	0	0	0	0	0	و غي ٥	0	0	0	0	0	1.6	0	0	0	0	0	0	0.6	0.2	0	0
3	USDD	13	10	3.6	2.6	0	0	0	<b>(0</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	USDD	18.6	2.4	0	0	0	0	0,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	'							de																	

71% of all PASI assessments showed complete skin clearance

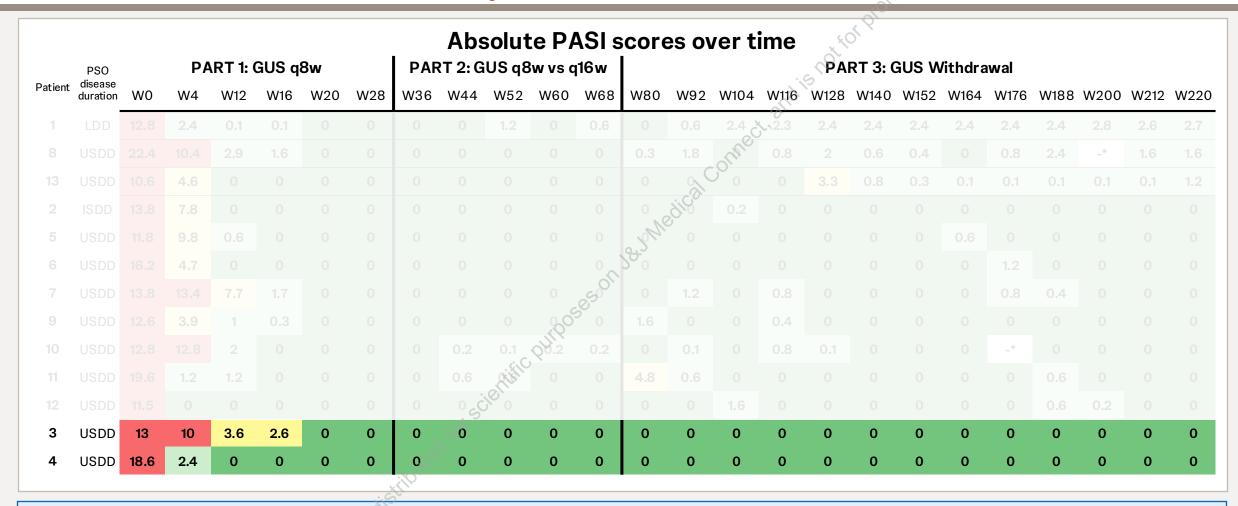
## In all, 3 SRes maintained low PASI scores with minor fluctuations after GUS withdrawal, showing no consistent pattern of increase over time



## A total of 8 SRes experienced isolated increases in PASI scores, reachieving PASI = 0 at follow-up visits without the need for re-treatment



## In all, 2 SRes, both with USDD (<15 months), achieved complete skin clearance at all visits for >3 years after GUS withdrawal



Both patients achieved complete skin clearance as of W20 with GUS q8w in part 1 of the study

### **Key Takeaways**

**GUIDE** is the **first prospective large scale RCT to identify and characterize** patients with moderate-to-severe PSO who **maintained disease control for >3 years** after PSO treatment withdrawal

- ✓ 13 SRes maintained disease control for >3 years after GUS withdrawal, with substantially lower disease activity throughout the withdrawal period than before GUS treatment was initiated
- ✓ SRes initiating GUS within 15 months of disease onset had a significantly higher likelihood of remaining treatment-free compared to those with longer disease duration
  - ✓ 11 of 13 SRes who maintained treatment-free status had USDD
  - ✓ 2 SRes, both with USDD, showed complete skin clearance at all visits for >3 years
  - ✓ ~1 in 6 SRes with USDD who initiated withdrawal, maintained treatment-free status for >3 years
- ✓ Overall PASI scores remained low during withdrawal, with a majority of all assessments showing complete skin clearance

Together with previous biomarker data<sup>1-3</sup>, these findings suggest that **GUS may have disease-modifying properties in a subset of patients**, particularly those initiating treatment early in the disease course. The potential for disease modification with guselkumab treatment should be further explored.

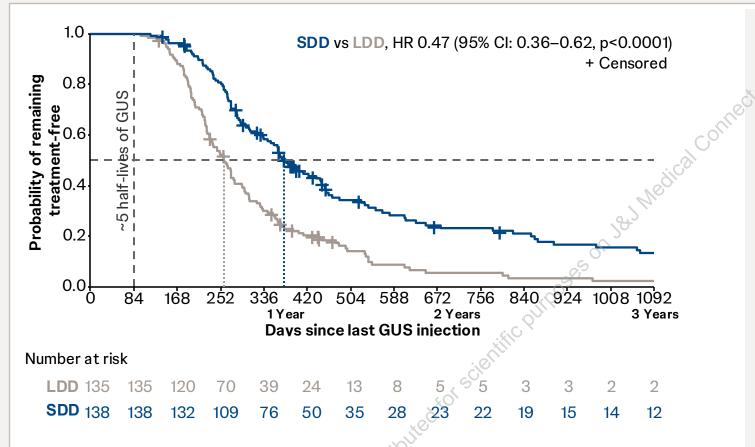
<sup>1.</sup> Eyerich K et al. JAMA Dermatol 2024;e242463. 2. Angsana J et al. Poster presentation at: ISDS Congress; 15–18 November 2023; Vienna, Austria. P180. 3. Angsana J et al. Oral presentation at: ISID Congress; 10–13 May 2023; Tokyo, Japan. Presentation 587. GUS=guselkumab, PASI=Psoriasis Area and Severity Index, PSO=psoriasis, RCT=randomized controlled trial, SRe=super responder, USDD=ultra-short disease duration.

### Acknowledgements

- We give our thanks to all GUIDE patients, investigators, nurses and study coordinators who made this study possible
- In Memoriam: Dr. Maurizio Podda. As we conclude this work on the GUIDE study, we would like to take a moment to honor and remember our esteemed colleague, Dr. Maurizio Podda

- Medical writing support was provided by Joanna Dembowy, PhD of JSS Medical Research, under the direction of the authors in accordance with Good Publication Practice guidelines (Ann Intern Med 2022;175:1298–304)
- Sponsored by Johnson & Johnson

## SRes with SDD (≤2 years) were 50% more likely to remain treatment-free vs SRes with LDD (<2 years) through 3 years after GUS withdrawal





## SRes with SDD (≤2 years) vs LDD (>2 years) had a higher probability of remaining treatment-free following withdrawal from GUS q8w dosing

