Supplementary Material

Title: Quality-of-Life Outcomes, Effectiveness, and Tolerability of Apremilast in Patients With Plaque Psoriasis and Routine German Dermatology Care: Results From LAPIS-PSO

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Supplementary Table 1. Baseline Demographics and Patient Characteristics in the Safety Analysis Population

Characteristic	Safety Analysis Population N=364
Female, %	42.1
Age at inclusion, mean (SD), y	51.9 (13.3)
Duration of psoriasis, mean (SD), y	20.2 (16.4)
BMI, mean (SD), kg/m^2	28.5 (5.7)
Erythrodermic psoriasis, n (%)	6 (1.8)
Guttate psoriasis, n (%)	35 (10.3)
Inverse psoriasis, n (%)	54 (16.0)
ScPGA >0, n (%)	286 (79.4)
Target NAPSI >0,[a] n (%)	183 (50.7)
PPPGA >0, n (%)	81 (23.0)
Pruritus, n (%)	346 (97.5)
Comorbidities (>5%)	
Cardiovascular disorders	147 (4.0)
Hypertension	133 (36.5)
Coronary heart disease	25 (6.9)
Other	16 (4.4)
Peripheral artery disease	5 (1.4)
Dyslipidaemia	51 (14.0)
Diabetes mellitus	32 (8.8)
Confirmed depression	28 (7.7)
Hepatic disorder	23 (6.3)
Other	114 (31.3)

N represents the total sample; number of patients with data available may vary. Percentages represent data for patients with baseline values.
[a]NAPSI of the most involved nail.
BMI=body mass index; NAPSI=Nail Psoriasis Severity Index; PPPGA=Palmoplantar Psoriasis Physician's Global Assessment; ScPGA=Scalp Physician's Global Assessment; SD=standard deviation.

Supplementary Table 2. DLQI and BSA Outcomes by Study Visit in the Full Analysis Population

	Baseline	Visit 1 (~1 Month After BL)	Visit 2 (~4 Months After BL)	Visit 3 (~7 Months After BL)	Visit 4 (~10 Months After BL)	Visit 5 (~13 Months After BL)
LOCF						
DLQI score, n	257	257	257	257	257	257
Mean (SD)	14.1 (5.9)	9.0 (6.4)	7.1 (5.8)	6.5 (5.9)	6.6 (6.0)	6.6 (6.0)
DLQI change from baseline, n	—	257	257	257	257	257
Mean (SD)	—	-5.1 (5.9)	-7.0 (7.2)	-7.6 (7.2)	-7.5 (7.2)	-7.5 (7.3)
DLQI ≤5, n/N (%)	—	86/257 (33.5)	120/257 (46.7)	137/257 (53.3)	137/257 (53.3)	140/257 (54.5)
DLQI improvement ≥5 points, n/N (%)	—	124/257 (48.2)	153/257 (59.5)	168/257 (65.4)	166/257 (64.6)	172/257 (66.9)
BSA percentage, n	255	255	255	255	255	255
Mean (SD)	21.8 (18.5)	17.6 (15.8)	13.0 (14.0)	11.8 (14.5)	11.3 (13.2)	10.9 (13.0)

BSA change from baseline, n	—	255	255	255	255	255
Mean (SD)	—	-4.3 (9.2)	-8.8 (14.0)	-10.1 (14.0)	-10.5 (14.9)	-10.9 (15.1)

Data as observed

DLQI score, n	257	222	220	169	135	128
Mean (SD)	14.1 (5.9)	8.2 (6.0)	6.7 (5.5)	5.2 (5.0)	4.9 (4.7)	4.7 (4.8)
DLQI change from baseline, n	—	222	220	169	135	128
Mean (SD)	—	-5.9 (6.0)	-7.2 (7.3)	-8.7 (7.1)	-8.8 (6.9)	-9.1 (7.0)
DLQI ≤5, n/N (%)	—	86/222 (38.7)	105/220 (47.7)	103/169 (60.9)	86/135 (63.7)	88/128 (68.8)
DLQI improvement ≥5 points, n/N (%)	—	124/222 (55.9)	135/220 (61.4)	124/169 (73.4)	98/135 (72.6)	102/128 (79.7)
BSA percentage, n	255	220	221	173	136	127
Mean (SD)	21.8 (18.5)	17.7 (16.2)	12.0 (13.2)	9.3 (13.6)	6.9 (9.0)	6.3 (8.3)
BSA change from baseline, n	—	220	220	172	135	126
Mean (SD)	—	-4.9 (9.8)	-9.7 (14.6)	-12.2 (14.2)	-13.8 (15.9)	-14.9 (15.3)

BL=baseline; BSA=psoriasis-involved body surface area; DLQI=Dermatology Life Quality Index; LOCF=last observation carried forward; SD=standard deviation.
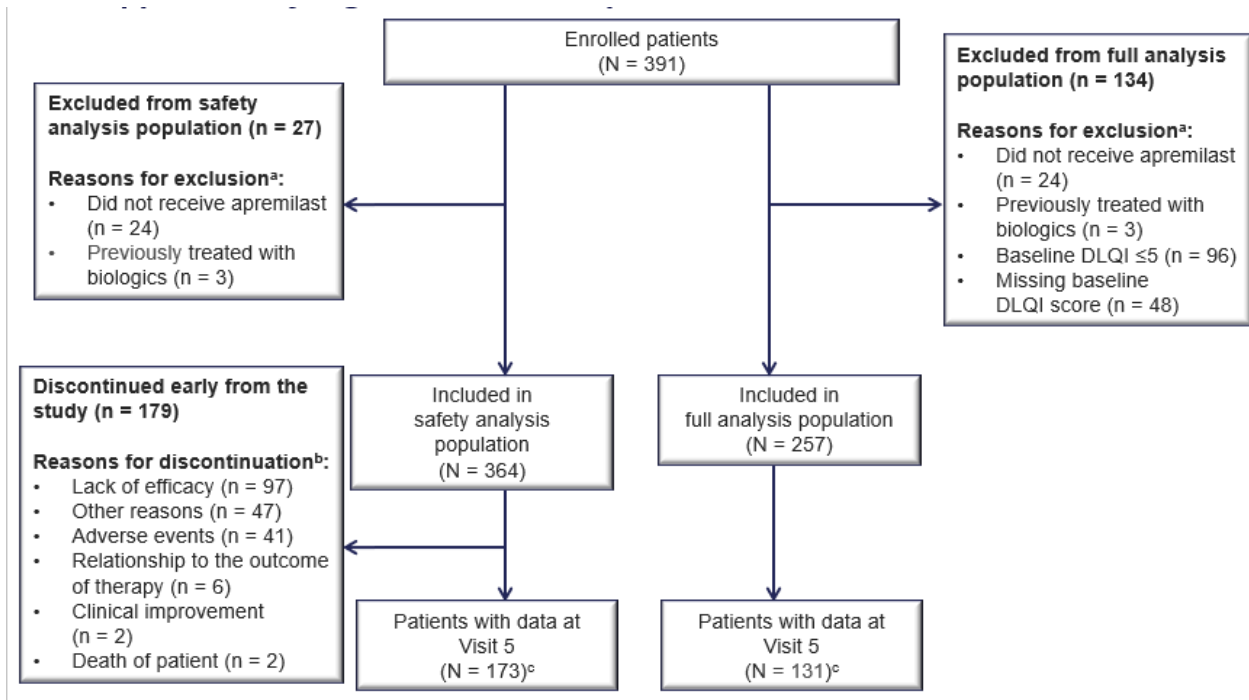
Supplementary Figure 1. LAPIS-PSO Study Design
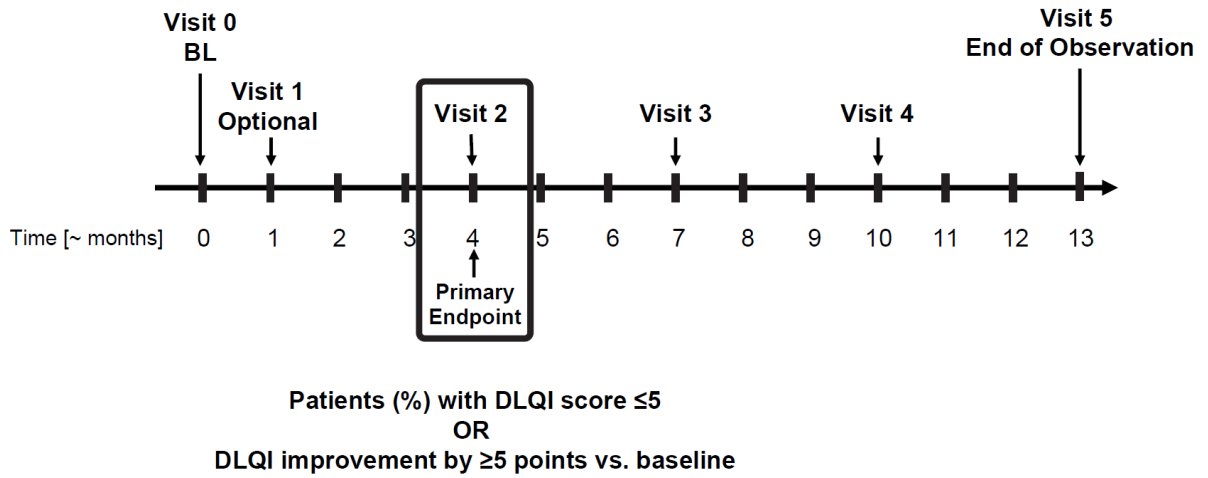
Study visits were timed according to physicians' clinical practice, and no strict study visit schedule was implemented. Visit 1 was optional.

BL=baseline; DLQI=Dermatology Life Quality Index.

Supplementary Figure 2. Patient Populations

In the safety analysis population, 14 patients had missing documentation for Visit 5 or no documentation of early discontinuation. The safety analysis population consisted of all patients who received ≥1 dose of apremilast and fulfilled the inclusion criteria. The full analysis population was defined as all patients in the safety analysis population with DLQI score >5 at baseline who had DLQI data available at Visit 2. A patient was referred to as a dropout if he or she left the study prior to the planned completion. Dropouts were not replaced. All data available from the follow-up visits were analyzed and contributed to the study outcome.
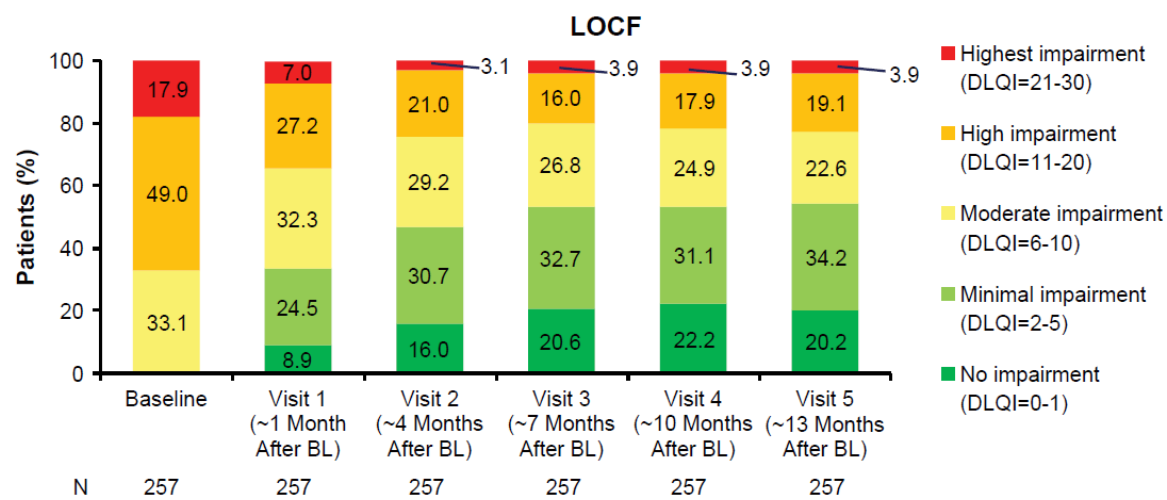
[a]For some patients, >1 reason for exclusion was reported.

[b]For some patients, >1 reason for discontinuation was reported.

[c]Two patients had documented visit 5 data and early study dropout.

DLQI=Dermatology Life Quality Index.

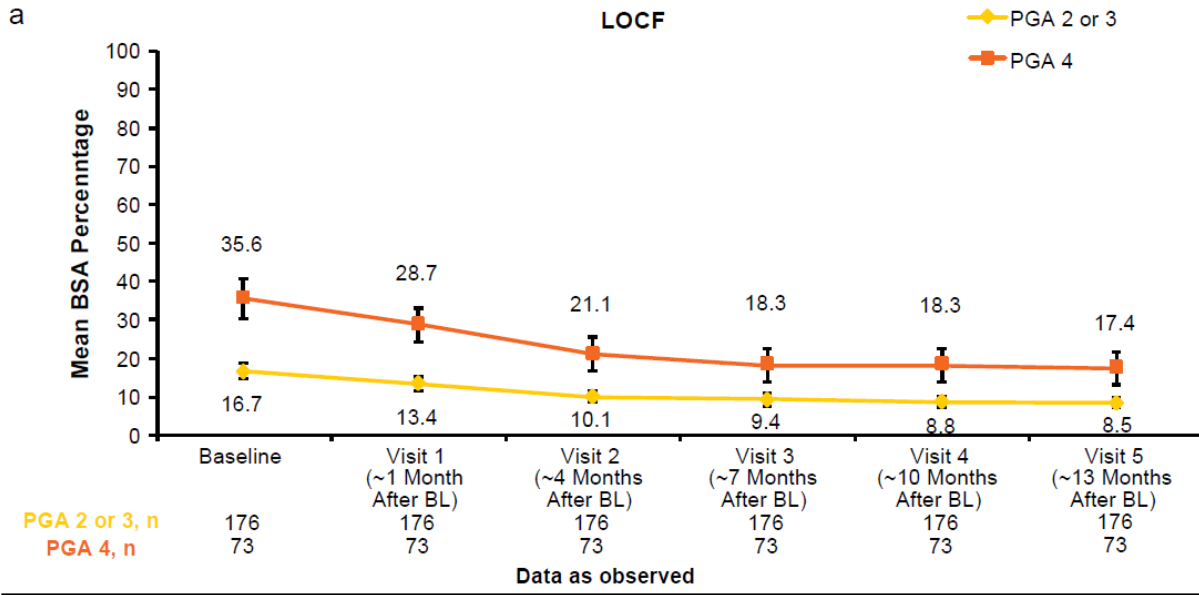**Supplementary Figure 3. Percentage of Patients Achieving DLQI Score Categories in the Full Analysis Population**

LOCF

DLQI, n/N (%)	Baseline	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5
0-1	0/257 (0.0)	23/222 (10.4)	38/220 (17.3)	44/169 (26.0)	42/135 (31.1)	36/128 (28.1)
2-5	0/257 (0.0)	63/222 (28.4)	67/220 (30.5)	59/169 (34.9)	44/135 (32.6)	52/128 (40.6)
6-10	85/257 (33.1)	68/222 (30.6)	65/220 (29.5)	44/169 (26.0)	32/135 (23.7)	22/128 (17.2)
11-20	126/257 (49.0)	54/222 (24.3)	46/220 (20.9)	19/169 (11.2)	16/135 (11.9)	17/128 (13.3)
21-30	46/257 (17.9)	14/222 (6.3)	4/220 (1.8)	3/169 (1.8)	1/135 (0.7)	1/128 (0.8)

Data as observed

Data are from the full analysis population (N=257). For the as observed analysis, n/N=number of patients who achieved response/number of patients with available data.

BL=baseline; DLQI=Dermatology Life Quality Index.

Supplementary Figure 4. Mean (a) BSA Percentage and (b) PASI Over Time by Baseline PGA Severity Subgroup

a

	Baseline	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5
BL PGA 2 or 3, n	176	149	152	119	96	88
Mean BSA % (95% CI)	16.7 (14.7, 18.7)	13.3 (11.4, 15.3)	9.5 (7.9, 11.0)	7.8 (5.6, 10.0)	6.2 (4.5, 7.8)	5.7 (4.0, 7.4)
BL PGA 4, n	73	67	64	50	36	36
Mean BSA % (95% CI)	35.6 (30.4, 40.8)	28.3 (23.6, 33.0)	18.9 (14.4, 23.3)	13.7 (9.1, 18.2)	9.7 (6.0, 13.4)	8.2 (5.1, 11.2)

b

LOCF

Mean PASI Score

Legend: PGA 2 or 3 (yellow); PGA 4 (red)

PGA 4: Baseline 24.0; Visit 1 17.4; Visit 2 12.8; Visit 3 11.8; Visit 4 12.0; Visit 5 11.7

PGA 2 or 3: Baseline 11.7; Visit 1 8.9; Visit 2 6.6; Visit 3 6.1; Visit 4 6.3; Visit 5 6.2

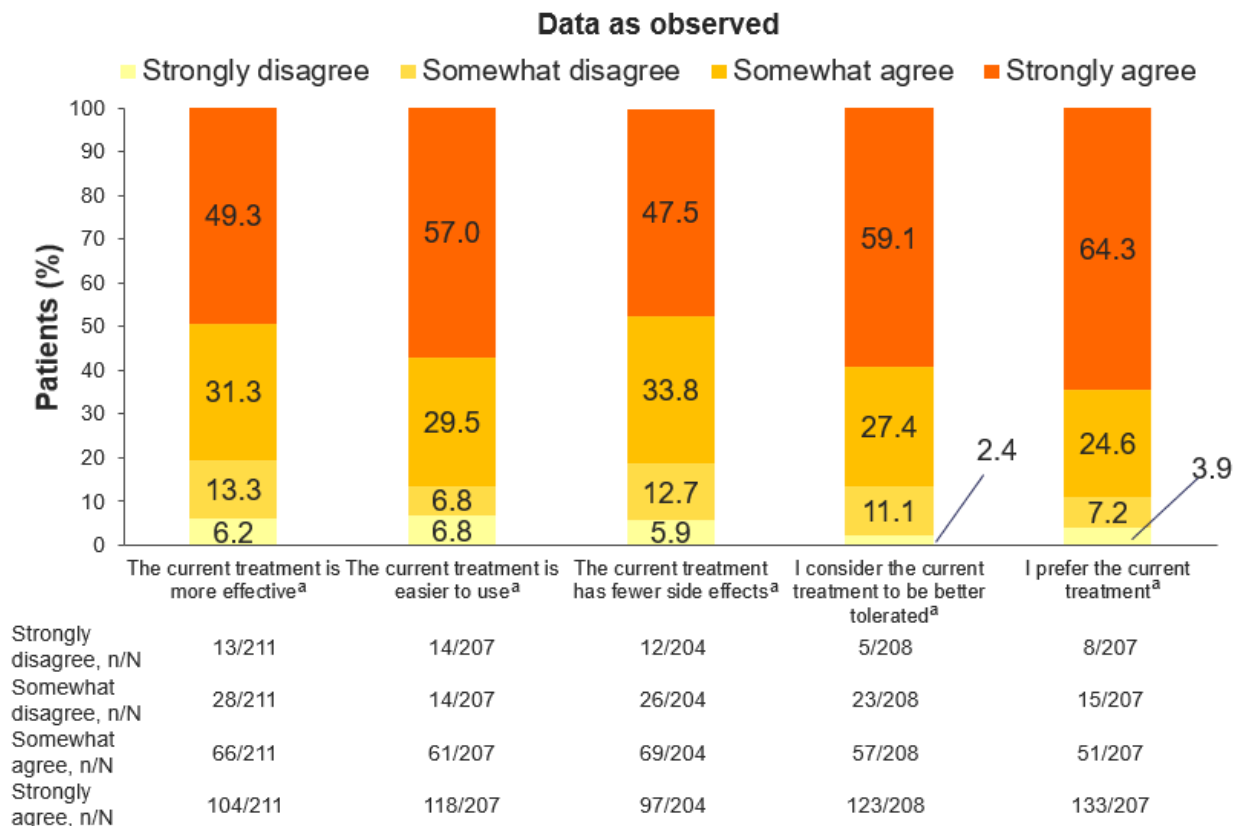|	Baseline	Visit 1 (~1 Month After BL)	Visit 2 (~4 Months After BL)	Visit 3 (~7 Months After BL)	Visit 4 (~10 Months After BL)	Visit 5 (~13 Months After BL)
PGA 2 or 3, n	151	151	151	151	151	151
PGA 4, n	65	65	65	65	65	65

Data as observed

	Baseline	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5
BL PGA 2 or 3, n	151	123	131	97	77	76
Mean (95% CI)	11.7 (10.7, 12.7)	8.2 (7.1, 9.3)	6.6 (5.5, 7.8)	4.7 (3.7, 5.7)	4.3 (3.3, 5.3)	3.9 (2.9, 4.9)
BL PGA 4, n	65	52	49	38	28	29
Mean (95% CI)	24.0 (21.0, 27.0)	16.0 (12.4, 19.6)	11.4 (8.4, 14.5)	7.8 (4.9, 10.7)	6.1 (3.1, 9.1)	5.7 (3.1, 8.3)

Data are from the full analysis population (N=257). For the as observed analysis, n=number of patients with available data. Error bars represent 95% CI.

BL=baseline; BSA=psoriasis-involved body surface area; CI=confidence interval; PASI=Psoriasis Area and Severity Index; PGA=Physician's Global Assessment.

Supplementary Figure 5. PPQ Responses at Visit 2 (~4 Months After Baseline) in the Full Analysis Population

Data as observed

Legend: ■ Strongly disagree ■ Somewhat disagree ■ Somewhat agree ■ Strongly agree

Y-axis: Patients (%)

	The current treatment is more effective[a]	The current treatment is easier to use[a]	The current treatment has fewer side effects[a]	I consider the current treatment to be better tolerated[a]	I prefer the current treatment[a]
Strongly agree (%)	49.3	57.0	47.5	59.1	64.3
Somewhat agree (%)	31.3	29.5	33.8	27.4	24.6
Somewhat disagree (%)	13.3	6.8	12.7	11.1	7.2
Strongly disagree (%)	6.2	6.8	5.9	2.4	3.9
Strongly disagree, n/N	13/211	14/207	12/204	5/208	8/207
Somewhat disagree, n/N	28/211	14/207	26/204	23/208	15/207
Somewhat agree, n/N	66/211	61/207	69/204	57/208	51/207
Strongly agree, n/N	104/211	118/207	97/204	123/208	133/207

Data are from the full analysis population (N=257). Patients responded to the following statements: the current treatment is more effective than previous systemic treatments; the current treatment is easier to use than previous systemic treatments; the current treatment has fewer side effects than previous systemic treatments; I consider the current treatment to be better tolerated than previous systemic treatments; I prefer the current treatment to previous systemic treatments.

[a]Versus previous systemic treatments.

PPQ=Patient Therapy Preference Questionnaire.