## **Supplementary Online Content**

Papp KA, Gordon K, Strober B, et al. Meaningful change thresholds for the Psoriasis Symptoms and Signs Diary: a secondary analysis of a randomized clinical trial. *JAMA Dermatol*. Published online December 20, 2023. doi:10.1001/jamadermatol.2023.5058

**eFigure 1.** Patient Disposition Throughout the POETYK PSO-1 Trial

**eFigure 2.** Cumulative Distribution Function for PSSD Symptom Score Change From Baseline to Week 16 With All Treatment Arms Combined, Anchored to (A) the Patient Global Impression of Change and (B) the Patient Global Impression of Severity

**eFigure 3.** Cumulative Distribution Function for PSSD Sign Score Change From Baseline to Week 16 With All Treatment Arms Combined, Anchored to (A) the Patient Global Impression of Change and (B) the Patient Global Impression of Severity

**eFigure 4.** Cumulative Proportion of Patients Reporting Any Change From Baseline in PSSD Symptom Score at Week 16 of POETYK PSO-1, by Treatment Arm

**eFigure 5.** Cumulative Proportion of Patients Reporting Any Change From Baseline in PSSD Sign Score at Week 16 of POETYK PSO-1, by Treatment Arm

**eTable 1.** Polyserial Correlation Coefficients Between Anchor Variables and Change From Baseline at Week 16 in PSSD Domain and Total Scores

**eTable 2.** Distribution-Based Meaningful Within-Patient Change Threshold Estimates at Baseline for PSSD Domain and Total Scores

**eTable 3.** PGI-C–Anchored Mean Individual PSSD Item Score Change From Baseline at Week 16 in POETYK PSO-1

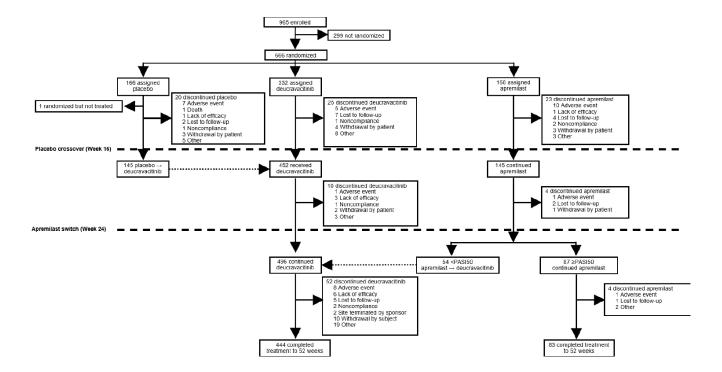
**eTable 4.** PGI-S—Anchored Mean Individual PSSD Item Score Change From Baseline at Week 16 in POETYK PSO-1

**eTable 5.** Distribution-Based Meaningful Within-Patient Change Threshold Estimates at Baseline for PSSD Individual Items

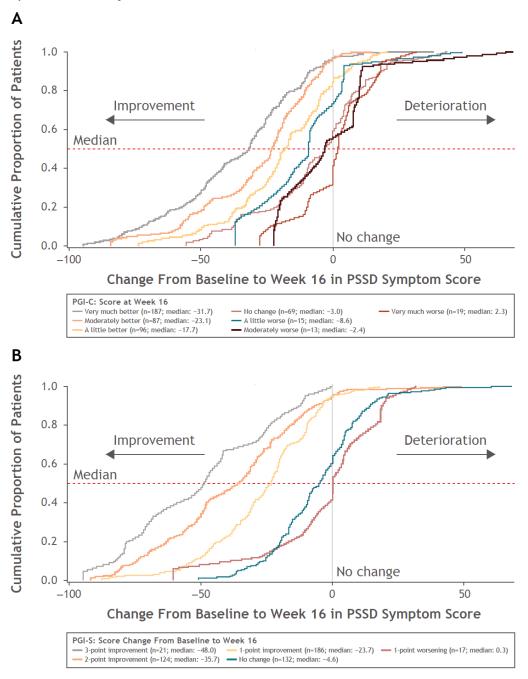
This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Patient Disposition Throughout the POETYK PSO-1 Trial

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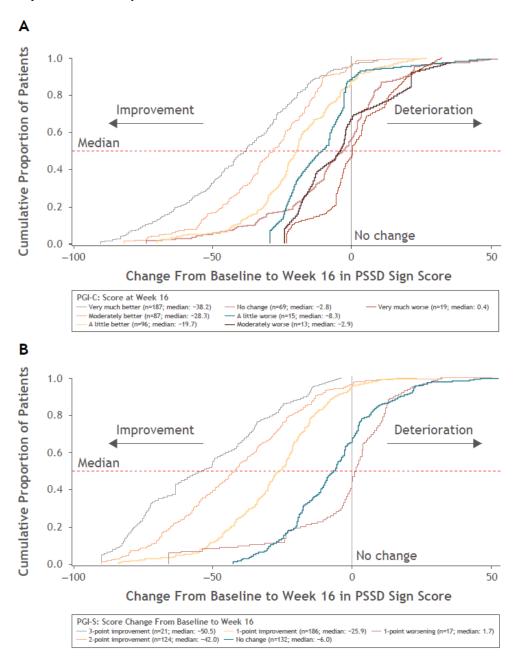


**eFigure 2.** Cumulative Distribution Function for PSSD Symptom Score Change From Baseline to Week 16 With All Treatment Arms Combined, Anchored to (A) the Patient Global Impression of Change and (B) the Patient Global Impression of Severity



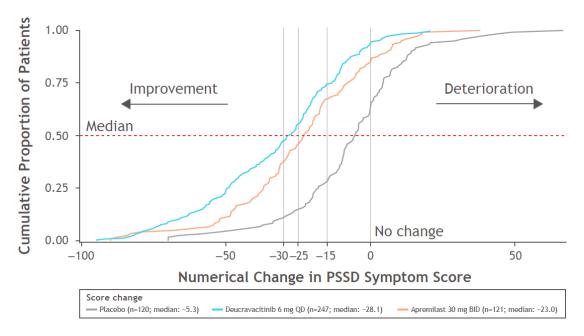
PGI-C, Patient Global Impression of Change; PGI-S, Patient Global Impression of Severity; PSSD, Psoriasis Symptoms and Signs Diary.

**eFigure 3.** Cumulative Distribution Function for PSSD Sign Score Change From Baseline to Week 16 With All Treatment Arms Combined, Anchored to (A) the Patient Global Impression of Change and (B) the Patient Global Impression of Severity



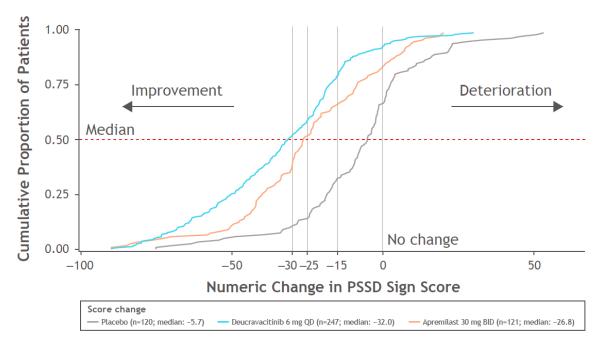
PGI-C, Patient Global Impression of Change; PGI-S, Patient Global Impression of Severity; PSSD, Psoriasis Symptoms and Signs Diary.

**eFigure 4.** Cumulative Proportion of Patients Reporting Any Change From Baseline in PSSD Symptom Score at Week 16 of POETYK PSO-1, by Treatment Arm



BID, twice daily; PSSD, Psoriasis Symptoms and Signs Diary; QD, once daily.

**eFigure 5.** Cumulative Proportion of Patients Reporting Any Change From Baseline in PSSD Sign Score at Week 16 of POETYK PSO-1, by Treatment Arm



BID, twice daily; PSSD, Psoriasis Symptoms and Signs Diary; QD, once daily.

**eTable 1.** Polyserial Correlation Coefficients Between Anchor Variables and Change From Baseline at Week 16 in PSSD Domain and Total Scores

Anchor	Patients, no.	PSSD symptom score	PSSD sign score	PSSD total score
PGI-C	486	0.541	0.606	0.585
PGI-S	481	0.562	0.606	0.596

PGI-C, Patient Global Impression of Change; PGI-S, Patient Global Impression of Severity; PSSD, Psoriasis Symptoms and Signs Diary.

**eTable 2.** Distribution-Based Meaningful Within-Patient Change Threshold Estimates at Baseline for PSSD Domain and Total Scores

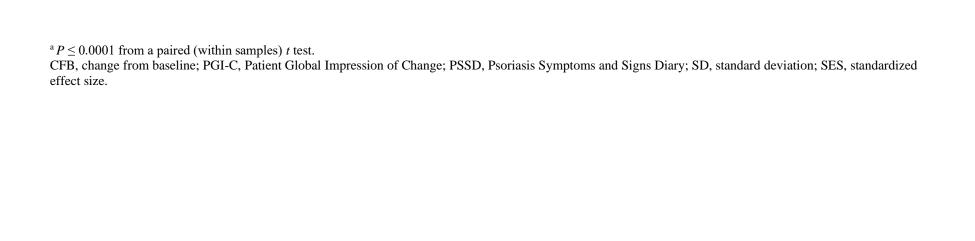
PSSD Domain	Patients, no.	0.5 SD	Cronbach's Alpha	SEM <sup>a</sup>
Symptom score	601	12.796	0.948	5.808
Sign score	601	11.090	0.945	5.210
Total score	601	11.648	0.969	4.100

<sup>&</sup>lt;sup>a</sup>SEM was calculated as the SD multiplied by the square root of 1 minus the reliability as measured by Cronbach's alpha.

PSSD, Psoriasis Symptoms and Signs Diary; SD, standard deviation; SEM, standard error of measurement.

eTable 3. PGI-C-Anchored Mean Individual PSSD Item Score Change From Baseline at Week 16 in POETYK PSO-1

PSSD Item		PGI-C change group (No.)						
		Much better (187) <sup>a</sup>	Moderately better (88) <sup>a</sup>	A little better (96) <sup>a</sup>	No change (69)	A little worse (15)	Moderately worse (14)	Very much worse (19)
	Mean CFB (SD)	-4.3 (2.50)	-3.0 (2.27)	-1.9 (2.11)	-0.7 (2.40)	-0.7 (1.71)	-0.2 (2.66)	0.6 (1.24)
Itch	95% CI	−4.6 to −3.9	−3.4 to −2.5	−2.4 to −1.5	-1.2 to -0.1	-1.7-0.2	-1.7-1.4	0.0-1.2
	SES	-1.70	-1.30	-0.91	-0.27	-0.41	-0.07	0.49
	Mean CFB (SD)	-3.4 (2.72)	-2.6 (2.55)	-1.8 (2.29)	-0.7 (2.06)	-0.5 (2.18)	-0.2 (2.80)	-0.4 (2.09)
Pain	95% CI	−3.8 to −3.0	−3.1 to −2.0	-2.3 to -1.3	−1.2 to −0.2	-1.7-0.7	-1.8-1.5	-1.4-0.6
	SES	-1.24	-1.00	-0.78	-0.32	-0.24	-0.06	-0.17
	Mean CFB (SD)	-3.1 (2.82)	-2.5 (2.43)	-1.8 (2.27)	-0.3 (2.48)	-1.0 (3.00)	-0.3 (2.54)	0.5 (1.72)
Stinging	95% CI	−3.5 to −2.7	−3.1 to −2.0	-2.3 to -1.3	-0.9-0.3	-2.6-0.7	-1.7-1.2	-0.4-1.3
	SES	-1.11	-1.05	-0.79	-0.11	-0.32	-0.10	0.27
	Mean CFB (SD)	-3.4 (2.78)	-2.8 (2.53)	-1.9 (2.37)	-0.6(2.9)	-1.1 (2.32)	0.0 (2.34)	0.29 (2.00)
Burning	95% CI	−3.8 to −3.0	−3.3 to −2.2	-2.3 to -1.4	-1.2 to -0.1	-2.3-0.2	-1.4-1.3	-0.7-1.3
	SES	-1.24	-1.09	-0.79	-0.28	-0.45	-0.02	0.15
	Mean CFB (SD)	-4.0 (2.59)	-3.1 (2.20)	-2.0 (2.06)	-0.6 (2.45)	-1.0(2.07)	0.2 (2.55)	0.1 (1.72)
Tightness	95% CI	-4.4 to -3.6	−3.6 to −2.7	-2.4 to -1.6	-1.2 to -0.1	-2.2-0.1	-1.3 to 1.7	-0.8-0.9
	SES	-1.54	-1.42	-0.97	-0.26	-0.50	0.08	0.03
	Mean CFB (SD)	-4.5 (2.45)	-3.3 (2.06)	-2.1 (2.05)	-0.7 (2.42)	-1.0 (1.83)	0.2 (2.65)	0.1 (1.38)
Dryness	95% CI	-4.8 to -4.1	−3.7 to −2.8	-2.5 to -1.7	-1.3 to -0.1	-2.0-0.0	-1.4-1.7	-0.6-0.8
	SES	-1.83	-1.58	-1.02	-0.29	-0.56	0.07	0.08
	Mean CFB (SD)	-4.0 (2.71)	-3.2 (2.23)	-2.1 (2.31)	-0.7 (2.59)	-1.1 (2.31)	0.1 (2.91)	0.4 (2.47)
Cracking	95% CI	-4.4 to -3.6	−3.6 to −2.7	−2.6 to −1.7	−1.4 to −0.1	-2.4-0.2	-1.6-1.8	-0.8-1.6
	SES	-1.46	-1.41	-0.92	-0.28	-0.47	0.02	0.18
	Mean CFB (SD)	-4.3 (2.53)	-3.2 (2.19)	-2.0 (1.98)	-0.6 (2.57)	-0.7 (1.9)	-0.4 (2.17)	0.4 (1.50)
Scaling	95% CI	−4.7 to −3.9	−3.7 to −2.7	−2.4 to −1.6	-1.2 to 0.1	-1.7-0.4	-1.7-0.8	-0.3-1.2
	SES	-1.69	-1.46	-1.00	-0.22	-0.35	-0.20	0.29
C1 4 4:/	Mean CFB (SD)	-4.6 (2.65)	-3.1 (2.32)	-2.0 (2.01)	-0.6 (2.48)	-0.5 (2.04)	-0.3 (2.18)	0.5 (1.67)
Shedding/	95% CI	-4.9 to -4.2	−3.6 to −2.6	−2.4 to −1.6	-1.2-0.0	-1.7-0.6	-1.6-0.9	-0.3-1.3
flaking	SES	-1.72	-1.34	-0.99	-0.25	-0.26	-0.15	0.30
Redness	Mean CFB (SD)	-4.1 (2.64)	-3.1 (1.95)	-1.9 (2.10)	-0.6 (2.53)	-1.0 (1.97)	-0.8 (2.17)	0.25 (1.62)
	95% CI	−4.5 to −3.7	−3.5 to −2.7	-2.3 to -1.4	-1.2-0.0	-2.1-0.1	-2.0-0.5	-0.5-1.0
	SES	-1.56	-1.59	-0.89	-0.22	-0.50	-0.36	0.15
	Mean CFB (SD)	-2.6 (2.70)	-2.0 (2.31)	-1.4 (1.95)	-0.5 (2.12)	-0.7 (2.68)	-0.7 (2.63)	0.0 (1.95)
Bleeding	95% CI	-2.9 to -2.2	-2.5 to -1.5	-1.8 to -1.0	-1.0-0.0	-2.2-0.8	-2.2-0.8	-0.9-1.0
_	SES	-0.94	-0.88	-0.74	-0.24	-0.25	-0.27	0.01



eTable 4. PGI-S-Anchored Mean Individual PSSD Item Score Change From Baseline at Week 16 in POETYK PSO-1

		PGI-S change group (No.)						
PSSD Item		3-point improvement (21) <sup>a</sup>	2-point improvement (124) <sup>a</sup>	1-point improvement (187) <sup>a</sup>	No change (133)	1-point worsening (17)	2-point worsening (0)	3-point worsening (1)
T1.	Mean CFB (SD)	-6.0 (2.42)	-4.3 (2.60)	-2.8 (2.17)	-0.6 (1.95)	-0.1 (1.97)	-	1.0 (-)
Itch	95% CI	−7.1 to −4.9	−4.8 to −3.9	−3.1 to −2.5	−0.9 to −0.2	-1.1-0.9	_	_
	SES	-2.48	-1.67	-1.30	-0.29	-0.04	_	_
ъ.	Mean CFB (SD)	-4.8 (3.06)	-3.5 (3.01)	-2.5 (2.26)	-0.7 (1.87)	0.0 (2.41)	-	1.5 (–)
Pain	95% CI	−6.2 to −3.4	−4.0 to −3.0	−2.8 to −2.1	-1.0 to -0.4	-1.3-1.2	_	_
	SES	-1.56	-1.16	-1.08	-0.36	-0.01	_	_
C4:	Mean CFB (SD)	-3.6 (3.55)	-3.4 (3.01)	-2.5 (2.29)	-0.3 (2.10)	-0.1 (2.23)	-	1.3 (–)
Stinging	95% CI	−5.2 to −2.0	−3.9 to −2.9	−2.8 to −2.2	-0.7-0.1	-1.2-1.1	_	_
	SES	-1.01	-1.13	-1.09	-0.14	-0.04	_	_
_	Mean CFB (SD)	-4.6 (3.14)	-3.6 (2.90)	-2.6 (2.35)	-0.5 (2.09)	-0.4 (2.33)	-	0.5 (-)
Burning	95% CI	-6.1 to -3.2	−4.2 to −3.1	−2.9 to −2.3	−0.9 to −0.1	-1.6-0.8	_	_
	SES	-1.47	-1.26	-1.11	-0.23	-0.18	_	_
Ti abtuana	Mean CFB (SD)	-5.1 (2.80)	-4.2 (2.75)	-2.8 (2.07)	-0.7 (2.02)	0.1 (2.16)	-	1.0 (-)
Tightness	95% CI	−6.3 to −3.8	−4.7 to −3.7	−3.1 to −2.6	-1.0 to -0.3	-1.0-1.2	_	_
	SES	-1.81	-1.54	-1.37	-0.33	0.04	_	_
D	Mean CFB (SD)	-5.9 (2.48)	-4.6 (2.52)	-3.1 (2.06)	-0.8 (2.06)	0.0 (2.20)	-	1.2 (-)
Dryness	95% CI	−7.0 to −4.8	−5.0 to −4.1	−3.4 to −2.8	−1.1 to −0.4	-1.1-1.1	_	_
	SES	-2.37	-1.82	-1.49	-0.38	0.00	_	_
Cracking	Mean CFB (SD)	-4.9 (2.79)	-4.3 (2.80)	-2.8 (2.23)	-0.8 (2.36)	0.0 (2.51)	_	1.5 (-)
	95% CI	−6.2 to −3.7	−4.8 to −3.8	−3.2 to −2.5	-1.2 to -0.4	-1.3-1.3	_	_
	SES	-1.77	-1.52	-1.28	-0.32	0.01	_	_
a .:	Mean CFB (SD)	-5.5 (2.76)	-4.5 (2.67)	-3.0 (2.07)	-0.6 (2.03)	0.0 (2.20)	-	0.8 (-)
Scaling	95% CI	−6.7 to −4.2	−5.0 to −4.0	−3.3 to −2.7	-1.0 to -0.3	-1.1-1.2	_	_
	SES	-1.98	-1.68	-1.44	-0.30	0.01	_	_

Shedding/flak ing	Mean CFB (SD)	-5.6 (3.10)	-4.7 (2.79)	-3.1 (2.16)	-0.6 (2.00)	0.0 (2.12)	-	0.3 (-)
	95% CI	−7.0 to −4.2	−5.2 to −4.2	-3.4 to $-2.7$	−0.9 to −0.2	-1.1-1.1	_	_
	SES	-1.81	-1.68	-1.41	-0.29	0.00	_	-
Dadaasa	Mean CFB (SD)	-5.5 (3.08)	-4.2 (2.56)	-2.9 (2.22)	-0.7 (2.07)	-0.3 (2.31)	_	- 0.7 (-)
Redness	95% CI	−6.9 to −4.1	−4.6 to −3.7	−3.2 to −2.6	-1.1 to -0.4	-1.5-0.9	_	_
	SES	-1.78	-1.62	-1.29	-0.34	-0.15	_	_
Dlanding	Mean CFB (SD)	-3.3 (2.90)	-2.8 (2.93)	-1.8 (2.12)	-0.5 (1.97)	-0.6 (2.09)	_	0.3 (–)
Bleeding	95% CI	−4.6 to −2.0	−3.3 to −2.3	−2.1 to −1.5	−0.9 to −0.2	-1.7-0.5	_	_
	SES	-1.14	-0.95	-0.86	-0.26	-0.27	_	_

 $^{a}P \le 0.0002$  from a paired (within samples) t test. CFB, change from baseline; PGI-S, Patient Global Impression of Severity; PSSD, Psoriasis Symptoms and Signs Diary; SD, standard deviation; SES, standardized effect size.

**eTable 5.** Distribution-Based Meaningful Within-Patient Change Threshold Estimates at Baseline for PSSD Individual Items

Item	Patients, no.	0.5 SD
Itch	609	1.197
Pain	609	1.499
Stinging	609	1.531
Burning	609	1.494
Tightness	609	1.275
Dryness	609	1.126
Cracking	609	1.343
Scaling	609	1.154
Shedding/flaking	609	1.180
Redness	609	1.206
Bleeding	609	1.474

PSSD, Psoriasis Symptoms and Signs Diary; SD, standard deviation.