

Supplemental Online Content

King B, Ko J, Kwon O, et al. Baricitinib withdrawal and retreatment in patients with severe alopecia areata: the BRAVE-AA1 randomized clinical trial. *JAMA Dermatol*. Published online August 14, 2024. doi:10.1001/jamadermatol.2024.2734

eTable. Baseline demographics and disease characteristics for patients withdrawn from 4mg or 2mg baricitinib (ie, transitioned to PBO) at Week 52

eFigure 1. Proportion of patients with SALT score ≤ 10 from Weeks 52 to 152 for patients who remained on treatment at Week 52 randomized withdrawal (Bari 2mg/2mg and Bari 4mg/4mg) and for patients who were withdrawn to placebo at Week 52 (-Bari 2mg/PBO and Bari 4mg/PBO)

eFigure 2. Proportion of patients with a response in A) eyebrow or B) eyelash regrowth from Weeks 52 to 152 for those who remained on treatment at Week 52 randomized withdrawal (Bari 2mg/2mg and Bari 4mg/4mg) and for patients who were withdrawn to placebo at Week 52 (Bari 2mg/PBO and Bari 4mg/PBO)

eFigure 3. SALT score trajectories from Week 36, for baricitinib 2-mg-treated patients who were randomized to placebo at Week 52 and lost treatment benefit (>20 -point worsening in SALT score from Week 52) and required retreatment (N=8)

eFigure 4. SALT score trajectories from Week 36, for baricitinib 4-mg-treated patients who were randomized to placebo at Week 52 and lost treatment benefit (>20 -point worsening in SALT score from Week 52) and required retreatment (N=24)

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

Entry	Transitioned to PBO: Bari 4-mg/PBO (N=30)		Transitioned to PBO: Bari 2-mg/PBO (N=10)	
	Loss of treatment benefit (N=24)*	No loss of treatment benefit (N=6)	Loss of treatment benefit (N=8)	No loss of treatment benefit (N=2)
Age of onset of AA (years), mean (SD)	26.3 (14.4)	32.7 (19.8)	25.9 (13.4)	26.5 (26.2)
Duration since AA onset (years), mean (SD)	8.95 (10.57)	3.42 (3.84)	9.68 (8.26)	11.65 (14.64)
Duration of current AA episode (years), mean (SD)	3.03 (2.42)	1.53 (1.29)	1.18 (0.42)	1.20 (0.28)
Duration of current AA episode, N(%)				
<4 years	17 (71%)	6 (100%)	8 (100%)	2 (100%)
≥4 years	7 (29%)	0	0	0
Baseline AA severity				
Severe (SALT score 50 to <95), N (%)	16 (67%)	5 (83%)	6 (75%)	2 (100)
Very severe (SALT score 95-100), N (%)	8 (33%)	1 (17%)	2 (25%)	0
SALT score, mean (SD)^a	78.4 (19.2)	82.2 (16.6)	78.4 (17.4)	69.0 (26.9)
Atopic background^b, N (%)	12 (50%)	1 (17%)	4 (50%)	1 (50%)
Universalis^c, N (%)	8 (33%)	0	2 (25)	1 (50)
ClinRO score of 2 or 3, N (%)				
ClinRO eyebrow score of 2 or 3 ^{d,e}	13 (54%)	1 (17%)	5 (63%)	2 (100%)
ClinRO eyelash score of 2 or 3 ^{d,e}	12 (50%)	1 (17%)	3 (38%)	1 (50%)
Scalp Hair PRO, N (%)				
Scalp Hair PRO of 3 (50-94% hair loss)	12 (50%)	4 (67%)	4 (50%)	1 (50%)
Scalp Hair PRO of 4 (95-100% hair loss)	10 (42%)	2 (33%)	4 (50%)	1 (50%)
PRO score of 2 or 3, N (%)				
PRO eyebrow score of 2 or 3 ^{d,e}	12 (50%)	0	5 (63%)	2 (100%)
PRO eyelash score of 2 or 3 ^{d,e}	10 (42%)	1 (17%)	4 (50%)	1 (50%)

Table S 1 Baseline demographics and disease characteristics for patients withdrawn from 4mg or 2mg baricitinib (ie, transitioned to PBO) at Week 52.

*Includes patients with loss of treatment benefit by Week 152.

^a Scores on the Severity of Alopecia Tool (SALT) range from 0 to 100, with 0 representing no scalp hair loss and 100 complete hair loss.

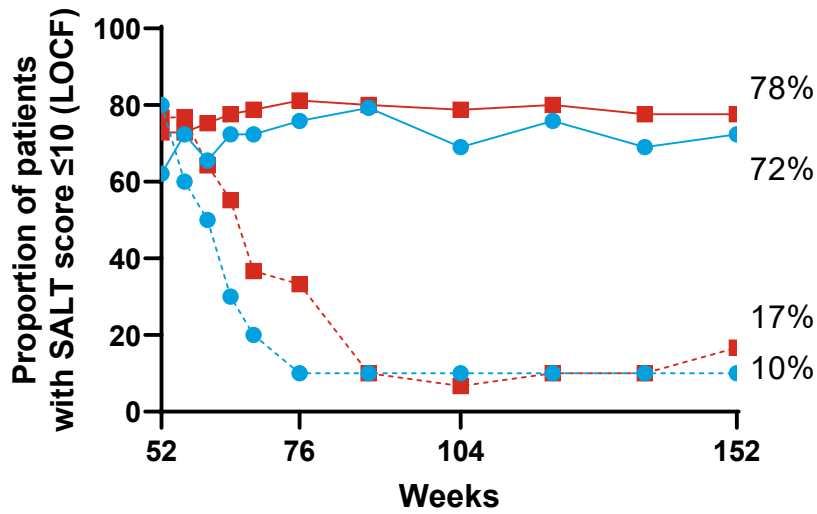
^bAtopic background is defined as medical history or current atopic dermatitis, allergic rhinitis, allergic conjunctivitis, or allergic asthma;

^cDiagnosis of alopecia universalis was according to the investigator's assessment

^dClinRO/PRO score of 2=Significant gaps in eyebrow(s)/eyelashes;

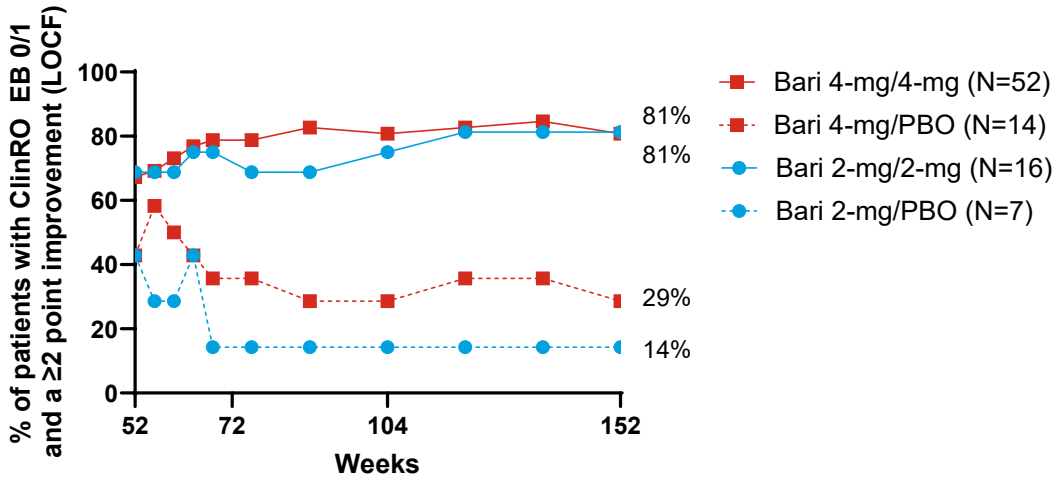
^eClinRO/PRO score of 3=No notable eyebrow(s)/eyelashes.

AA=Alopecia Areata; Bari = baricitinib; ClinRO = Clinician Reported Outcome; PBO = Placebo; PRO = Patient Reported Outcome; SALT = Severity of Alopecia Tool ; SD = Standard deviation

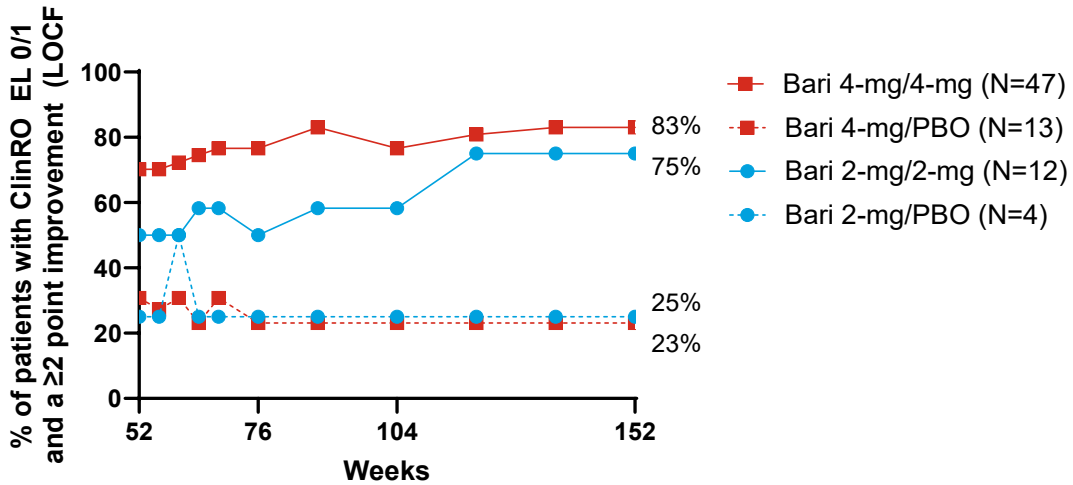


■ Bari 4mg/4mg (N=85) ● Bari 2mg/2mg (N=29)
- - ■ Bari 4mg/PBO (N=30) - - ● Bari 2mg/PBO (N=10)

1
 2 Figure S 1 Proportion of patients with SALT score ≤ 10 from Weeks 52 to 152 for patients who
 3 remained on treatment at Week 52 randomized withdrawal (Bari 2mg/2mg and Bari 4mg/4mg)
 4 and for patients who were withdrawn to placebo at Week 52 (-Bari 2mg/PBO and Bari
 5 4mg/PBO).
 6 *Bari = baricitinib; LOCF = last observation carried forward; PBO = placebo; SALT = Severity of*
 7 *Alopecia Tool*



9 **A**



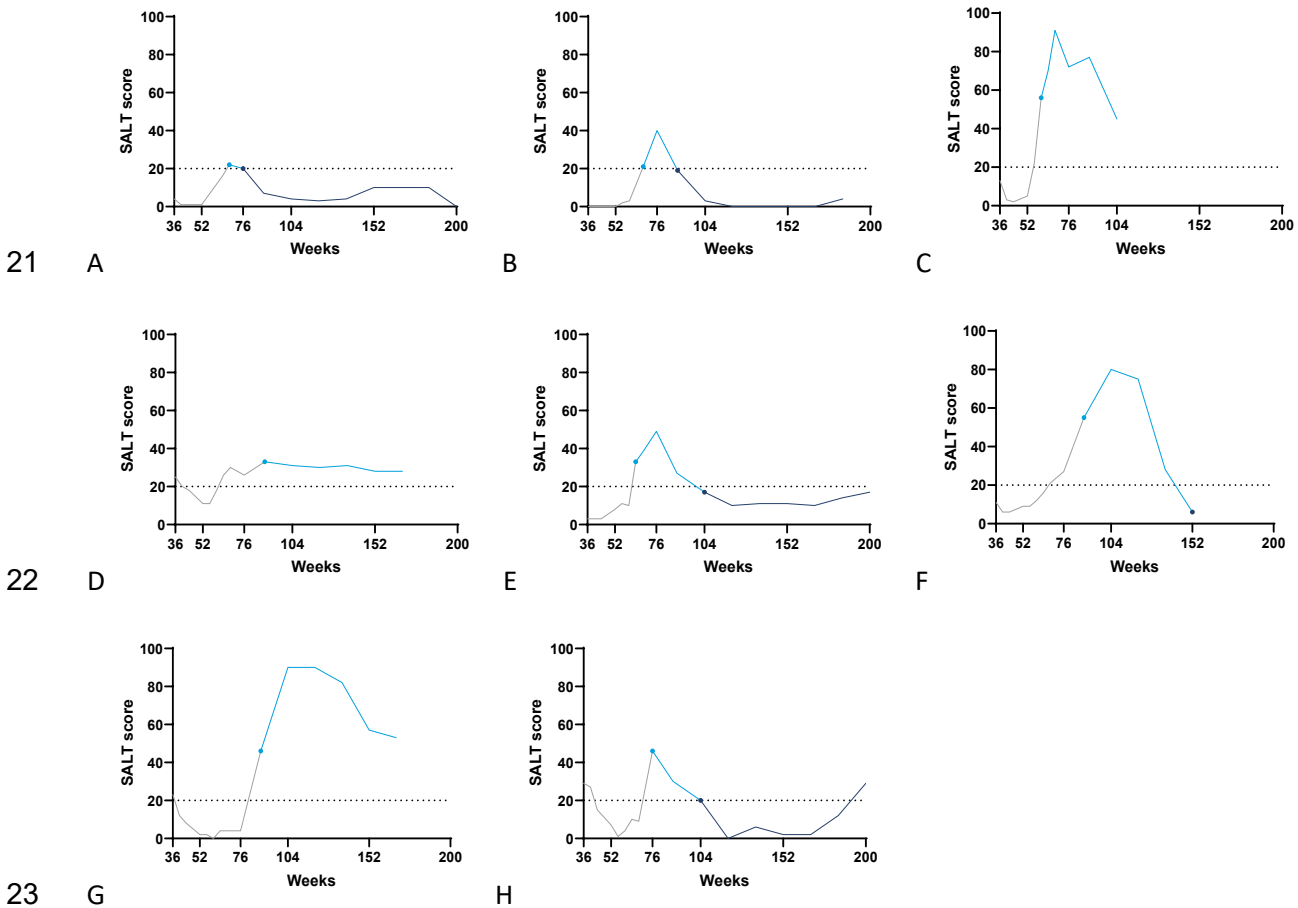
10 **B**

11 Figure S 2 Proportion of patients with a response in A) eyebrow or B) eyelash regrowth from
 12 Weeks 52 to 152 for those who remained on treatment at Week 52 randomized withdrawal (Bari
 13 2mg/2mg and Bari 4mg/4mg) and for patients who were withdrawn to placebo at Week 52 (Bari
 14 2mg/PBO and Bari 4mg/PBO).

15 *Bari = baricitinib; EB = eyebrow; EL = eyelash; LOCF = last observation carried forward; PBO =*
 16 *placebo*

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18 Figure S 3 SALT score trajectories from Week 36, for baricitinib 2-mg-treated patients who were
 19 randomized to placebo at Week 52 and lost treatment benefit (>20-point worsening in SALT
 20 score from Week 52) and required retreatment (N=8).

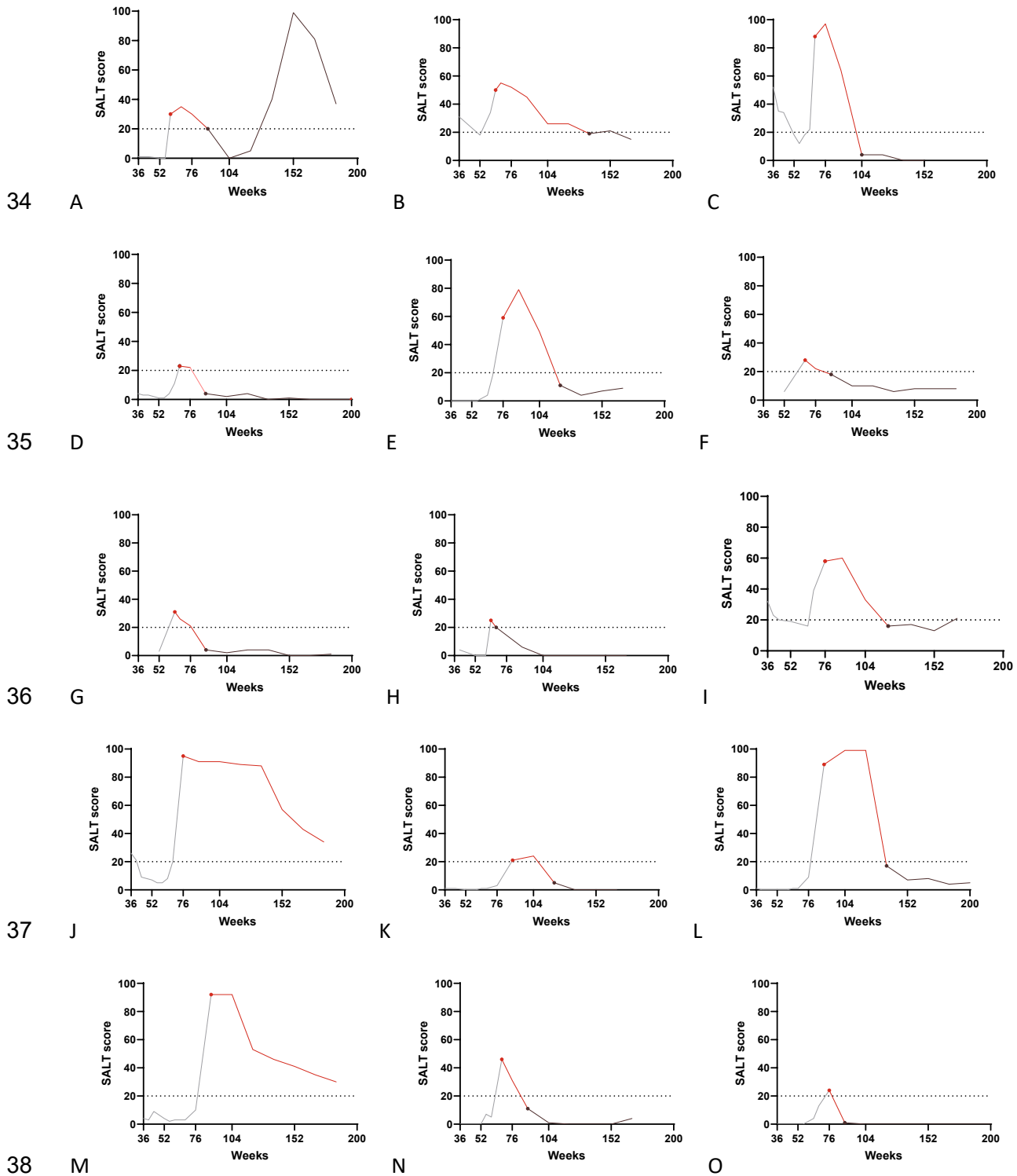


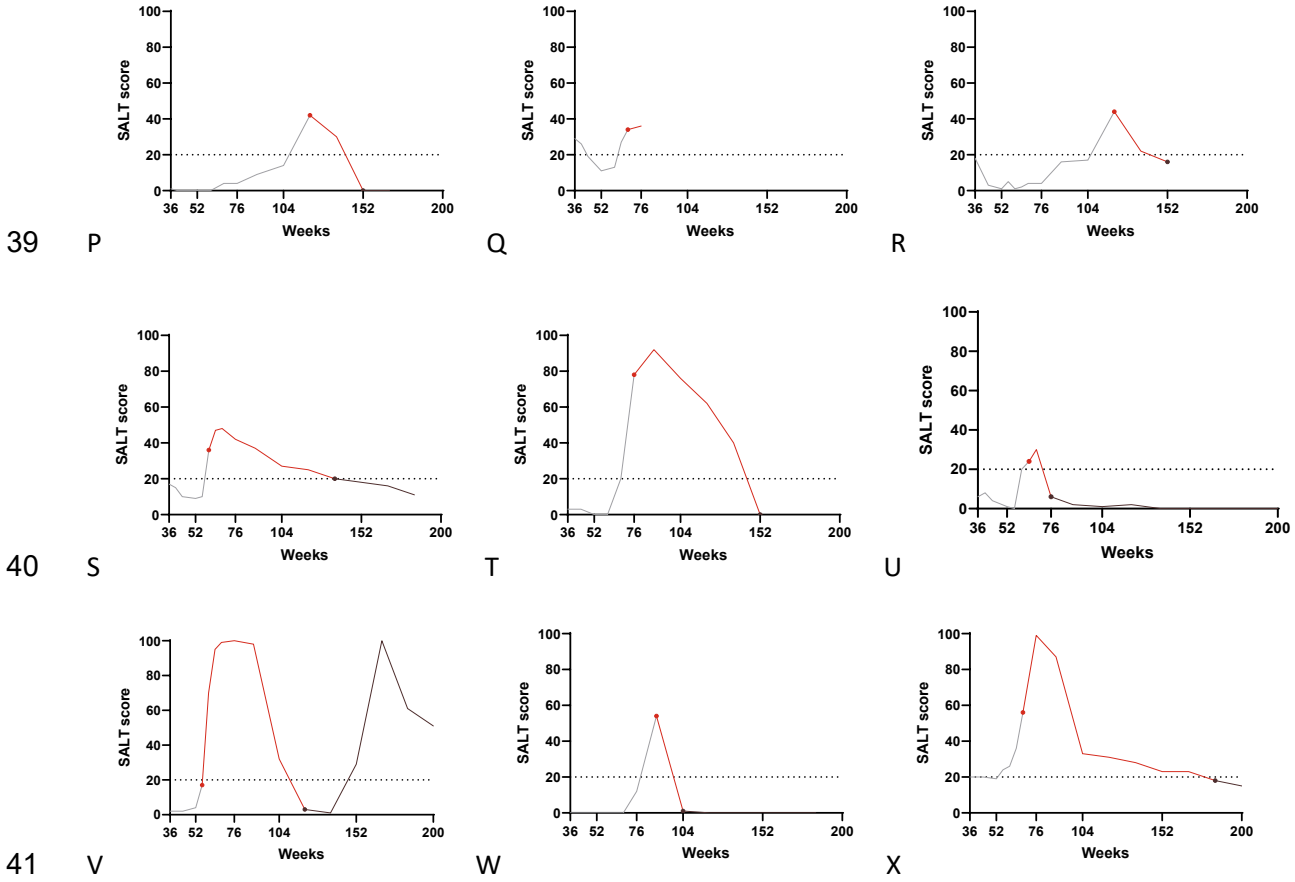
24 Dashed line indicates a SALT score of 20.

25 The grey lines indicate patient trajectories of SALT score from Week 36 to Week 52
 26 (randomized withdrawal) through first reported loss of treatment benefit. The light blue dots
 27 indicate time of retreatment, and the light blue lines indicate the retreatment period for each
 28 patient. The dark blue dots indicate first reported recapture of response to treatment (i.e., SALT
 29 score ≤ 20), and the dark blue lines indicate patient trajectories following recapture of response.

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31 Figure S 4 SALT score trajectories from Week 36, for baricitinib 4-mg-treated patients who were
 32 randomized to placebo at Week 52 and lost treatment benefit (>20-point worsening in SALT
 33 score from Week 52) and required retreatment (N=24)





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43 The patient whose trajectory is illustrated in panel V was retreated after loss of treatment benefit
 44 at an unscheduled visit between Weeks 56 and 60. Week 56 was used to approximate SALT
 45 score at retreatment.

46 Dashed line indicates a SALT score of 20. The grey lines indicate patient trajectories of SALT
 47 score from Week 36 to Week 52 (randomized withdrawal) through first reported loss of
 48 treatment benefit. The red dots indicate time of retreatment, and the red lines indicate the
 49 retreatment period for each patient. The dark brown dots indicate first reported recapture of
 50 response to treatment (i.e., SALT score ≤ 20), and the dark brown lines indicate patient
 51 trajectories following recapture of response.