SUPPLEMENTARY MATERIAL

Supplemental table 1. Baseline characteristics of included patient population (n=661)

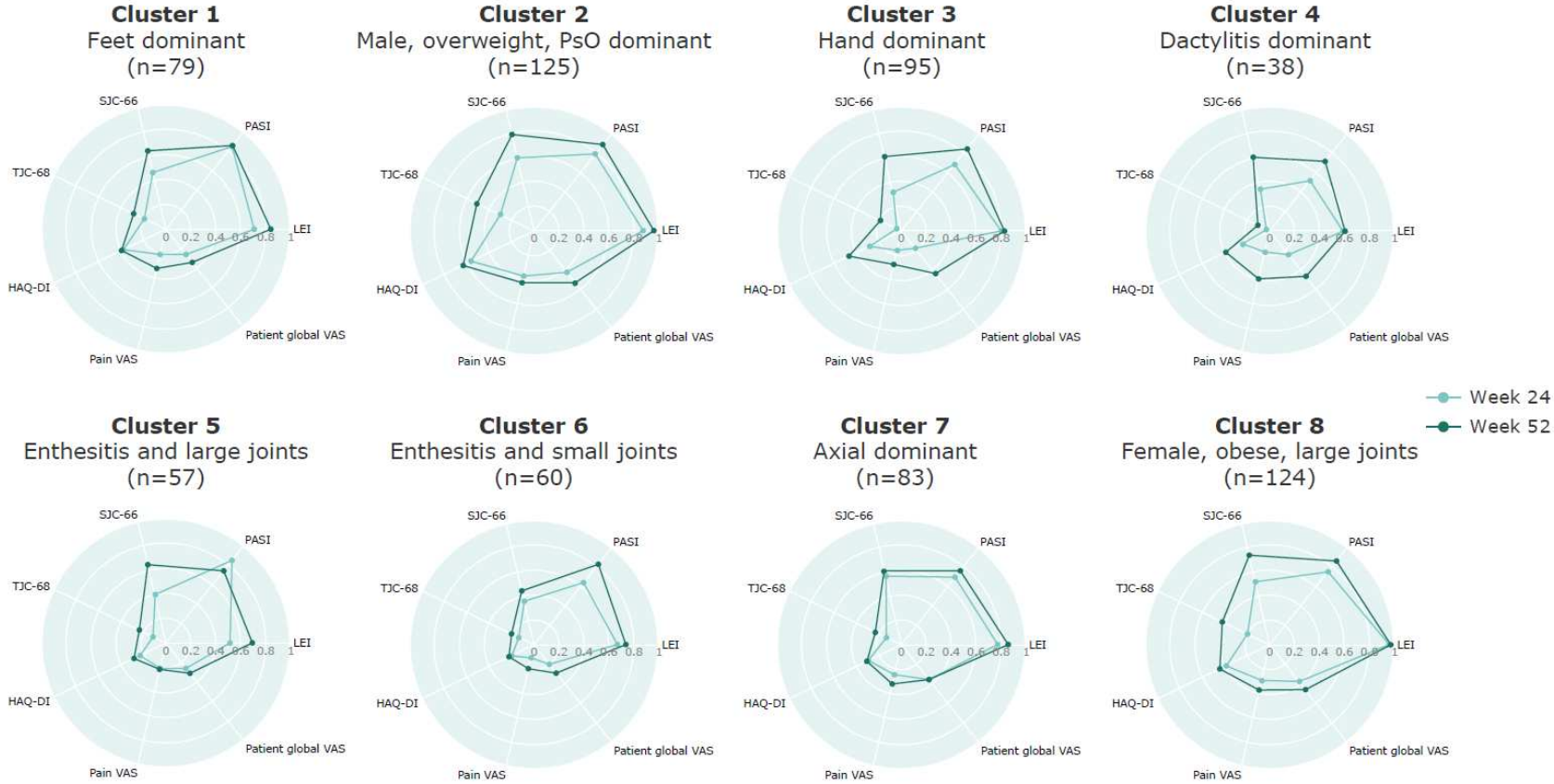
	Analysed population
Number of randomised and treated patients	661
Age, years	46.1 (11.8)
Female	45.8
BMI, kg/m^2	29.1 (6.1)
Normal <25 kg/m^2	26.9
Overweight 25–<30 kg/m^2	39.5
Obese ≥30 kg/m^2	33.6
CRP, mg/dL	1.7 (2.2)
Disease duration, years	5.4 (5.9)
HLA-B27 positive (n)[a]	27.9 (109)
SJC, 0–66	11.5 (7.4)
TJC, 0–68	20.3 (13.1)
BSA, %[b]	16.4 (19.8)
BSA <3%	20.2
BSA ≥3–<10%	32.6
BSA ≥10%	47.2
PASI	9.8 (11.1)
Hand/foot PsO	47.0
Nail PsO	61.4
Scalp PsO	81.4
Dactylitis	43.4
Dactylitis score, 0–60[c]	3.7 (7.8)
Enthesitis	63.2
LEI score, 0–6[d]	1.8 (1.9)
Current smoker	18.3
Current alcohol user	38.4

Data shown are mean (SD) or %. [a]HLA-B27 status was available for 390 patients. [b]Data were missing for two patients. [c]Dactylitis score is a measure of the degree of dactylitis using a scoring system (0, none; 1, mild; 2, moderate; 3, severe) at each of the 20 digits, giving an individual score range of 0–60. [d]The LEI is a measure of the presence or absence of enthesitis at six sites (bilateral lateral epicondyles, medical femoral condyles and Achilles tendon insertions), giving an individual score range of 0–6.[1]

BMI, body mass index; BSA, body surface area; CRP, C-reactive protein; LEI, Leeds Enthesitis Index; PASI, Psoriasis Area and Severity Index; PsO, psoriasis; SD, standard deviation; SJC, swollen joint count; TJC, tender joint count.

1. Mease PJ. *Arthritis Care Res (Hoboken)* 2011;63:S64-S85.

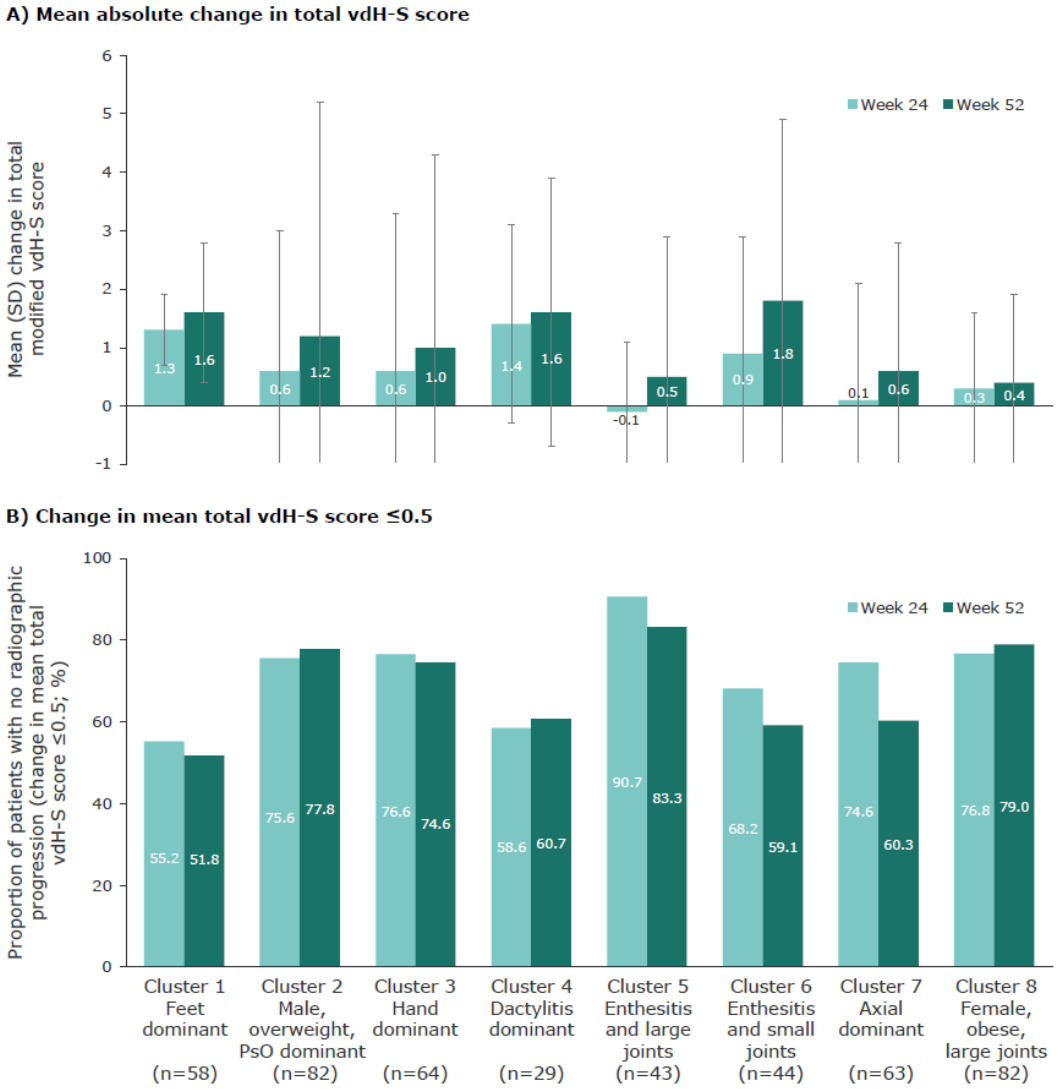
Supplemental figure 1. Radar plots showing the proportion of patients achieving MDA threshold* responses to guselkumab 100 mg (q8w and q4w pooled) at Week 24 and Week 52 by PsA phenotype cluster



*Thresholds include: SJC/TJC ≤1, PASI ≤1, LEI ≤1, HAQ-DI ≤0.5, patient global VAS ≤20, and patient pain VAS ≤15.

HAQ-DI, Health Assessment Questionnaire Disability Index; LEI, Leeds Enthesitis Index; MDA, minimal disease activity; PASI, Psoriasis Area and Severity Index; PsO, psoriasis; q4w, every 4 weeks; q8w, every 8 weeks; SJC, swollen joint count; TJC, tender joint count; VAS, visual analogue scale.

Supplemental figure 2. Mean absolute change in total vdH-S score from baseline (A) and proportion of patients with no radiographic progression (mean absolute change in total vdH-S score from baseline ≤0.5) (B) with guselkumab 100 mg (q8w and q4w pooled) at Week 24 and Week 52 in DISCOVER-2 by PsA phenotype cluster*



*Only DISCOVER-2 included X-rays. Data were missing for seven patients at Week 52.
PsA, psoriatic arthritis; PsO, psoriasis; q4w, every 4 weeks; q8w, every 8 weeks; SD, standard deviation; vdH-S, van der Heijde-Sharp.

Patients from DISCOVER-2 were evenly distributed across the clusters (accounting for approximately 66–75% in each cluster). At baseline, Cluster 4 had the highest radiographic damage and Cluster 5 had the lowest radiographic damage. Clusters 1, 4 and 6 exhibited the largest changes in van der Heijde-Sharp (vdH-S) score at Week 24 and Week 52, whereas Clusters 5, 7 and 8 exhibited the smallest changes (online supplemental fig 2A). The

proportion of patients with no radiographic progression remained consistent between Week 24 and Week 52 for most clusters, with Cluster 7 displaying the largest difference between these two time points (online supplemental fig 2B).

Although there was a low rate of radiographic progression overall, differences were observed among clusters. Cluster 2 (male, overweight and PsO dominant) had a low level of small joint involvement, but the change in vdH-S score was similar to that observed in Clusters 1, 3, 4 and 6, all of which exhibited a high level of small joint involvement. Data such as these could inform the design of future trials looking specifically at patients with PsA who have progressive disease. Given that overall progression was low, small patient numbers (and large standard deviations) restrict the inferences that can be made from these data. Nonetheless, given that vdH-S scores measure damage in hands, wrists and feet,[1] less progression may be expected in clusters with low small joint involvement, as is demonstrated by the results for Clusters 5, 7 and 8.

1. van der Heijde D, Sharp J, Wassenberg S, et al. *Ann Rheum Dis* 2005;64(Suppl 2):ii61-4.