

## Supplementary Files

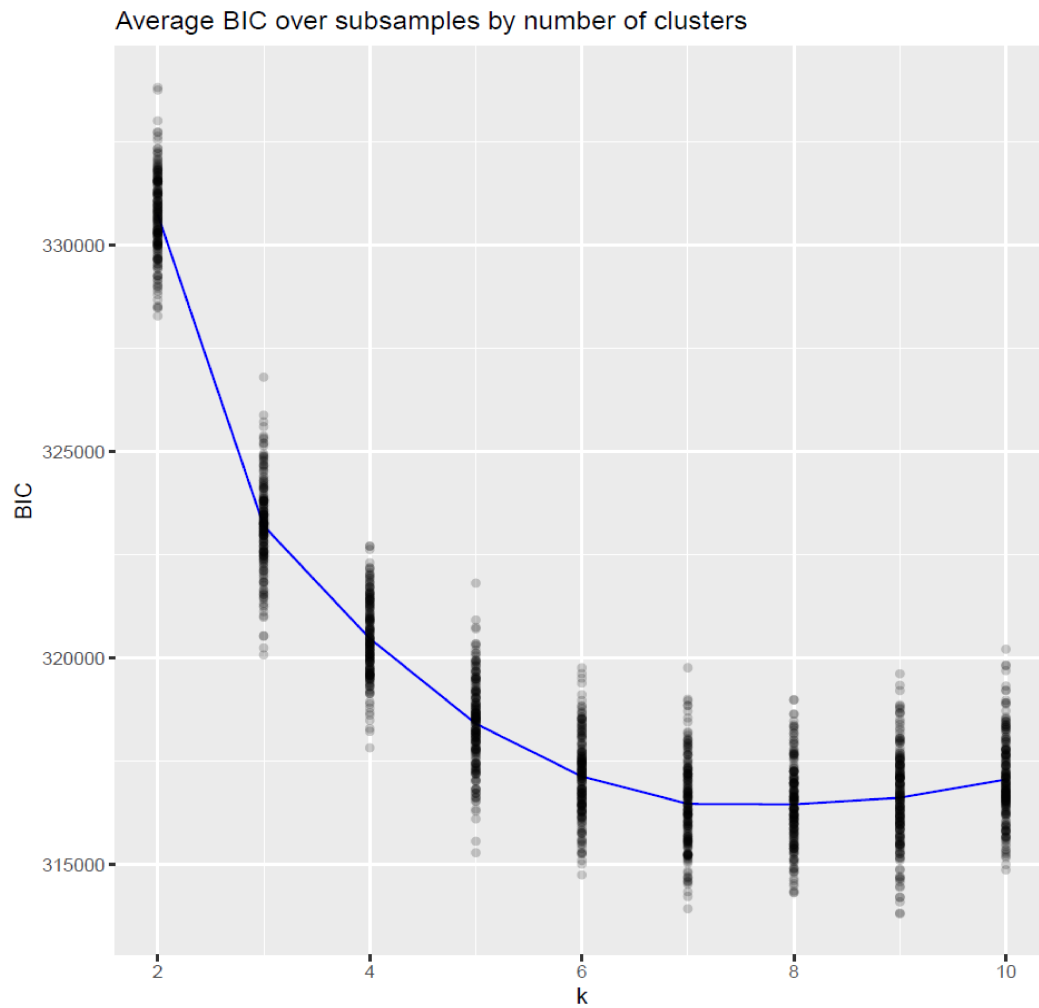
Supplementary Table 1. Baseline demographic and disease characteristics: FUTURE 2–5 pooled

Characteristic	Secukinumab 300 mg (N=404)	Secukinumab 150 mg (N=812)	Placebo (N=591)
Age (years), mean (SD)	47·7 (12·4)	48·2 (12·0)	48·5 (11·9)
Female	202 (50·0)	410 (50·5)	326 (55·2)
BMI, (kg/m <sup>2</sup> ), mean (SD)	29·34 (6·0)	29·63(6·4)	29·28 (6·2)
Presence of enthesitis	254 (62·9)	505 (62·2)	375 (63·5)
Presence of dactylitis	149 (36·9)	300 (36·9)	200 (33·8)
Adjusted TJC score	19·13 (13·6)	21·45 (16·9)	21·38 (16·3)
Adjusted SJC score	9·82(7·6)	11·45(10·0)	11·01 (9·57)
<b>Baseline CRP (mg/L)</b>			
≤5	210 (52·0)	450 (55·4)	315 (53·3)
>5	194 (48·0)	362 (44·6)	276 (46·7)
<b>Baseline BSA (%)</b>			
<3	157 (38·9)	342 (42·1)	251 (42·5)
≥3–<10	69 (17·1)	147 (18·1)	123 (20·8)
≥10	89 (22·0)	232 (28·6)	132 (22·3)
<b>Patients with PsO≥3% of BSA</b>	159 (39·4)	381 (46·9)	257 (43·5)
<b>Patients with nail PsO</b>	254 (62·9)	535 (65·9)	394 (66·7)
Values are n (%) unless otherwise specified BMI, body mass index; BSA, body surface area; CRP, C-reactive protein; N, number of randomized patients; n, number of evaluable patients; PsA, psoriatic arthritis; PsO, psoriasis; SD, standard deviation; SJC, swollen joint count; SD, standard deviation; TJC, tender joint count			

**Supplementary Table 2. Endpoints with statistically significant differential response in clusters at different time points**

Cluster	Endpoint	Visit Week	Relative Delta	Relative Lower	Relative Upper
2. H-TEN (251)	LEISCO	16	-0.428	-0.792	-0.065
2. H-TEN (251)	LEISCO	32	-0.337	-0.649	-0.035
4. L-Nails-Skin (209)	DACTCNT	3	-0.538	-0.995	-0.024
4. L-Nails-Skin (209)	LEISCO	24	-0.314	-0.587	-0.033
4. L-Nails-Skin (209)	PASI_PSTSCO	2	-0.192	-0.364	-0.004
4. L-Nails-Skin (209)	PASI_PSTSCO	3	-0.304	-0.521	-0.062
4. L-Nails-Skin (209)	PASI_PSTSCO	4	-0.245	-0.431	-0.034
4. L-Nails-Skin (209)	PASI_PSTSCO	8	-0.271	-0.439	-0.06
4. L-Nails-Skin (209)	PASI_PSTSCO	12	-0.231	-0.383	-0.058
4. L-Nails-Skin (209)	PASI_PSTSCO	16	-0.225	-0.381	-0.069
4. L-Nails-Skin (209)	PASI_PSTSCO	24	-0.174	-0.328	-0.028
4. L-Nails-Skin (209)	PASI_PSTSCO	40	-0.138	-0.279	-0.005
4. L-Nails-Skin (209)	PASI_PSTSCO	52	-0.145	-0.282	-0.021
5. L-Skin (283)	SWJT76	3	-0.213	-0.405	-0.021
6. L-Nails (294)	PASI_PSTSCO	12	-0.327	-0.579	-0.061
6. L-Nails (294)	PASI_PSTSCO	16	-0.352	-0.63	-0.076

This table shows which endpoints demonstrated a statistically significant differential response (and in which clusters and at which time points). The relative delta column shows the difference between relative mean of 300 mg and relative mean of 150 mg. The following two columns “relative lower” and “relative upper” show the lower and upper limits of the corresponding 95% bootstrap confidence intervals, which have been Bonferroni adjusted to correct for multiple comparisons (i.e. by dividing the significance level  $\alpha=0.05$  by the number of comparisons, which is  $42 = (\# \text{ of clusters}) * (\# \text{ of endpoints})$ ).

**Supplementary Figure S1. Number of clusters determined with BIC**

The BIC is a method for model selection among a finite set of models; the model with the lowest BIC is preferred. In the figure above, the BIC is plotted as a function of number of clusters. The minimum is achieved at  $K=7$  and hence that was considered the optimal choice for the number of clusters

BIC, Bayesian Information Criteria