

**Table SI. Spearman's rho ( $r_s$ ) for changes in Psoriasis Area Severity Index (PASI) and changes in Dermatology Life Quality Index (DLQI) after treatment with biologics based on bio-nativity**

Period	Exposed			Naive			p-value (exposed vs. naive)
	$r_s$	95% CI	p-value	$r_s$	95% CI	p-value	
Absolute change in PASI and DLQI							
Baseline-3 months	0.55	0.46-0.62	<b>&lt;0.0001</b>	0.44	0.38-0.49	<b>&lt;0.0001</b>	<b>0.036</b>
3-12 months	0.57	0.46-0.66	<b>&lt;0.0001</b>	0.35	0.28-0.41	<b>&lt;0.0001</b>	<b>0.0008</b>
Baseline-12 months	0.52	0.43-0.61	<b>&lt;0.0001</b>	0.37	0.31-0.42	<b>&lt;0.0001</b>	<b>0.0072</b>
Relative change in PASI and DLQI							
Baseline-3 months	0.59	0.50-0.67	<b>&lt;0.0001</b>	0.57	0.52-0.61	<b>&lt;0.0001</b>	0.61
3-12 months	0.64	0.51-0.74	<b>&lt;0.0001</b>	0.35	0.26-0.44	<b>&lt;0.0001</b>	<b>0.0006</b>
Baseline-12 months	0.53	0.43-0.62	<b>&lt;0.0001</b>	0.47	0.41-0.52	<b>&lt;0.0001</b>	0.25
Relative change in PASI and absolute change in DLQI							
Baseline-3 months	0.44	0.33-0.53	<b>&lt;0.0001</b>	0.41	0.36-0.46	<b>&lt;0.0001</b>	0.65
3-12 months	0.55	0.41-0.65	<b>&lt;0.0001</b>	0.27	0.19-0.35	<b>&lt;0.0001</b>	<b>0.0007</b>
Baseline-12 months	0.40	0.28-0.50	<b>&lt;0.0001</b>	0.31	0.24-0.37	<b>&lt;0.0001</b>	0.18

CI: confidence interval. p-values <0.05 are in bold.

**Table SII. Spearman's rho ( $r_s$ ) for changes in Psoriasis Area Severity Index (PASI) and changes in Dermatology Life Quality Index (DLQI) after treatment with biologics for biologic-exposed patients based on the number of prior treatments**

Period	1 prior treatment			≥2 prior treatments			p-value (1 prior treatment vs. ≥2 prior treatments)
	$r_s$	95% CI	p-value	$r_s$	95% CI	p-value	
Absolute change in PASI and DLQI							
Baseline to 3 months	0.48	0.35-0.58	<b>&lt;0.0001</b>	0.68	0.55-0.77	<b>&lt;0.0001</b>	<b>0.018</b>
3-12 months	0.59	0.46-0.69	<b>&lt;0.0001</b>	0.54	0.32-0.70	<b>&lt;0.0001</b>	0.70
Baseline to 12 months	0.49	0.36-0.60	<b>&lt;0.0001</b>	0.60	0.43-0.72	<b>&lt;0.0001</b>	0.27
Relative change in PASI and DLQI							
Baseline to 3 months	0.55	0.43-0.65	<b>&lt;0.0001</b>	0.67	0.53-0.77	<b>&lt;0.0001</b>	0.15
3-12 months	0.62	0.46-0.75	<b>&lt;0.0001</b>	0.69	0.43-0.84	<b>&lt;0.0001</b>	0.60
Baseline to 12 months	0.55	0.42-0.65	<b>&lt;0.0001</b>	0.51	0.31-0.66	<b>&lt;0.0001</b>	0.74
Relative change in PASI and absolute change in DLQI							
Baseline to 3 months	0.37	0.23-0.49	<b>&lt;0.0001</b>	0.57	0.41-0.70	<b>&lt;0.0001</b>	<b>0.047</b>
3-12 months	0.53	0.36-0.66	<b>&lt;0.0001</b>	0.57	0.32-0.74	<b>&lt;0.0001</b>	0.73
Baseline to 12 months	0.29	0.14-0.43	<b>0.0002</b>	0.56	0.38-0.70	<b>&lt;0.0001</b>	<b>0.019</b>

CI: confidence interval. p-values <0.05 are in bold.

**Table SIII. Spearman's rho ( $r_s$ ) for Psoriasis Area Severity Index (PASI) and the individual questions of Dermatology Life Quality Index (DLQI) during a 5-year treatment period**

	Baseline $r_s$	3 months $r_s$	6 months $r_s$	12 months $r_s$	24 months $r_s$	36 months $r_s$	48 months $r_s$	60 months $r_s$
The single questions in DLQI								
1. Symptoms and feelings	0.33	0.40	0.50	0.42	0.41	0.39	0.35	0.31
2. Symptoms and feelings	0.24	0.35	0.39	0.30	0.27	0.28	0.23	0.19
3. Daily activities	0.24	0.30	0.33	0.24	0.29	0.22	0.21	0.25
4. Daily activities	0.26	0.34	0.39	0.35	0.30	0.36	0.35	0.33
5. Leisure	0.25	0.27	0.37	0.21	0.23	0.31	0.22	0.20
6. Leisure	0.21	0.28	0.30	0.20	0.18	0.23	0.17	0.16
7. Work/school	0.22	0.21	0.20	0.13	0.13	0.21	0.20	0.25
8. Personal relationships	0.16	0.27	0.29	0.18	0.13	0.30	0.18	0.15
9. Personal relationships	0.13	0.19	0.22	0.14	0.11	0.24	0.24	0.17
10. Treatment	0.32	0.39	0.39	0.35	0.30	0.30	0.24	0.31

**Table SIV. Correlation between changes in Psoriasis Area Severity Index (PASI) and changes in the individual questions of the Dermatology Life Quality Index (DLQI) during the first year of treatment**

	Baseline to 3 months			3-12 months			Baseline to 12 months		
	$r_s$	95% CI	p-value	$r_s$	95% CI	p-value	$r_s$	95% CI	p-value
The single questions in DLQIs									
1. Symptoms and feelings	0.43	0.37-0.49	<b>&lt;0.0001</b>	0.39	0.31-0.47	<b>&lt;0.0001</b>	0.47	0.40-0.54	<b>&lt;0.0001</b>
2. Symptoms and feelings	0.42	0.35-0.48	<b>&lt;0.0001</b>	0.31	0.22-0.38	<b>&lt;0.0001</b>	0.34	0.26-0.41	<b>&lt;0.0001</b>
3. Daily activities	0.33	0.27-0.40	<b>&lt;0.0001</b>	0.27	0.19-0.36	<b>&lt;0.0001</b>	0.33	0.25-0.40	<b>&lt;0.0001</b>
4. Daily activities	0.40	0.34-0.46	<b>&lt;0.0001</b>	0.29	0.21-0.37	<b>&lt;0.0001</b>	0.32	0.24-0.39	<b>&lt;0.0001</b>
5. Leisure	0.38	0.31-0.44	<b>&lt;0.0001</b>	0.18	0.09-0.26	<b>&lt;0.0001</b>	0.27	0.19-0.35	<b>&lt;0.0001</b>
6. Leisure	0.32	0.25-0.38	<b>&lt;0.0001</b>	0.14	0.05-0.23	<b>0.0019</b>	0.24	0.15-0.32	<b>&lt;0.0001</b>
7. Work/school	0.29	0.22-0.35	<b>&lt;0.0001</b>	0.15	0.06-0.23	<b>0.0011</b>	0.23	0.14-0.31	<b>&lt;0.0001</b>
8. Personal relationships	0.31	0.24-0.37	<b>&lt;0.0001</b>	0.15	0.07-0.24	<b>0.0007</b>	0.24	0.16-0.32	<b>&lt;0.0001</b>
9. Personal relationships	0.27	0.20-0.34	<b>&lt;0.0001</b>	0.19	0.10-0.27	<b>&lt;0.0001</b>	0.24	0.16-0.32	<b>&lt;0.0001</b>
10. Treatment	0.37	0.30-0.43	<b>&lt;0.0001</b>	0.32	0.23-0.39	<b>&lt;0.0001</b>	0.37	0.29-0.44	<b>&lt;0.0001</b>

CI: confidence intervals; rs: Spearman's rho. p-values <0.05 are in bold.