Supplement file

Supplementary Table 1a. Associations with the health related quality of life measure 15D in male psoriatic arthritis patients tested in univariate and multivariate linear regression models.

Only variables with a p value < 0.10 in the univariate analyses were tested in the multivariate analysis, which was adjusted for age and BMI independent of their significance in the univariate analyses. Apart from age and BMI only variables with at p value < 0.01 is displayed in the multivariate analysis.

	Univariate analyses		Adjusted analyses	
	B (95% CI)	p value	B (95% CI)	p *
Age, years	-0.001 (-0.003, 0.002)	0.59	-0.001 (-0.003, 0.000)	0.13
Male gender	NA		NA	
BMI, kg/m2	-0.005 (-0.011, 0.001)	0.12	0.002 (-0.001, 0.006)	0.23
Current smoking	-0.072 (-0.137, -0.007)	0.030		
Part time/full time employed/working	0.092 (0.048, 0.136)	<0.001		
PsA disease duration, years	-0.004 (-0.007, -0.001)	0.015		
CRP, mg/L	0.001 (-0.002, 0.003)	0.60		
TJC68	-0.003 (-0.005, -0.001)	0.003†		
SJC66	-0.005 (-0.026, 0.015)	0.60		
DAPSA, range 0-164	-0.004 (.0.005, -0.002)	<0.001		
PASDAS, **	-0.082 (-0.127, -0.037)	0.001		
MASES, range 0-13	-0.013 (-0.022, -0.005)	0.004		
IGA, VAS 0-100 mm	-0.002 (-0.004, -0.001)	0.005		
PGA, VAS 0-100 mm	-0.003 (-0.004, -0.002)	<0.001†		
Pain, VAS 0-100 mm	-0.003 (-0.003, -0.002)	<0.001		
Fatigue, VAS 0-100 mm	-0.002 (-0.003, -0.002)	<0.001	-0.001 (-0.002, -0.000)	0.007
Morning stiffness, hour	-0.028 (-0.044, -0.012)	0.001		
Sleep disturbance, NRS 0-10	-0.025 (-0.031, -0.019)	<0.001	-0.008 (-0.015, -0.000)	0.040
Anxiety/depression, range 1-3	-0.091 (-0.129, -0.053)	<0.001	-0.037 (-0.065, -0.008)	0.013

MHAQ, range 0-3	-0.174 (-0.231, -0.118)	<0.001		
Exercise ≥1 time per week	0.018 (-0.028, 0.065)	0.43		
Power Doppler signal present in any joints, entheses or tendons	-0.021 (-0.067, 0.025)	0.37		
Power Doppler sum score in joints, entheses and tendons (range 0-347)	0.002 (-0.009, 0.013)	0.70		
Comorbidities ≥ 1	-0.035 (-0.083, 0.013)	0.15		
PASI, range 0-72	-0.005 (-0.010, 0.000)	0.067		
DLQI, range 0-30	-0.009 (-0.016, -0.003)	0.004		
Current bDMARD	-0.054 (-0.098, -0.009)	0.019		
Current csDMARD	-0.019 (-0.067, 0.029)	0.43		
Ever bDMARD	-0.055 (-0.099, -0.011)	0.016		
Ever csDMARD	-0.043 (-0.117, 0.031)	0.25		

† Not in the final multivariate model
*With DAPSA in the model.
**The independent associations remained the same when DAPSA was replaced by PASDAS in the model.

CI, Confidence intervals; BMI, Body Mass Index; PsA, Psoriatic arthritis; CRP, C-Reactive Protein; TJC, Tender Joint Count; SJC, Swollen Joint Count; DAPSA, Disease Activity index for Psoriatic Arthritis; PASDAS, Psoriatic Arthritis Disease Activity Score; MASES, Maastricht Ankylosing Spondylitis Enthesitis Score; IGA, Investigator Global Assessment; VAS, Visual analogue scale; PGA, Patient Global Assessment; NRS, Numeric Rating Scale; MHAQ, Modified Health Assessment Questionnaire; PASI, Psoriasis Area Severity Index; DLQI, Dermatology Life Quality Index; bDMARDs: Biologic Disease Modifying Anti-Rheumatic Drugs; csDMARDs: Conventional synthetic DMARDs.

Supplementary table 1b. Associations with the health related quality of life measure 15D in female psoriatic arthritis patients tested in univariate and multivariate linear regression models.

Only variables with a p value < 0.10 in the univariate analyses were tested in the multivariate analysis, which was adjusted for age and BMI independently of their significance in the univariate analyses. Apart from age and BMI only variables with at p value < 0.01 is displayed in the multivariate analysis.

	Univariate analyses		Adjusted analyses	
	B (95% CI)	p value	B (95% CI)	p *
Age, years	-0.002 (-0.004, 0.001)	0.19	0.000 (-0.002, 0.001)	0.81
Male gender	NA		NA	
BMI, kg/m2	-0.004 (-0.009, 0.001)	0.14	0.001 (-0.002, 0.005)	0.51
Current smoking	-0.044 (-0.108, 0.021)	0.18		
Part time/full time employed/working	0.065 (0.017, 0.113)	0.009	0.027 (-0.002, 0.057)	0.071
PsA disease duration, years	0.003 (-0.002, 0.007)	0.21		
CRP, mg/L	-0.005 (-0.010, 0.001)	0.10		
TJC68	-0.003 (-0.005, -0.001)	0.005†		
SJC66	0.000 (-0.027, 0,026)	0.97		
DAPSA, range 0-164	-0.003 (-0.005, -0.002)	<0.001		
PASDAS, **	-0.101 (-0.156, -0.045)	0.001		
MASES, range 0-13	-0.011 (-0.018, -0.004)	0.004		
IGA, VAS 0-100 mm	-0.002 (-0.004, 0.000)	0.050		
PGA, VAS 0-100 mm	-0.003 (-0.004, -0.002)	<0.001†		
Pain, VAS 0-100 mm	-0.003 (-0.004, -0.002)	<0.001		
Fatigue, VAS 0-100 mm	-0.002 (-0.003, -0.001)	<0.001		
Morning stiffness, hour	-0.021 (-0.042, 0.000)	0.047		
Sleep disturbance, NRS 0-10	-0.022 (-0.028, -0.016)	<0.001	-0.010 (-0.017, -0.003)	0.008
Anxiety/depression, range 1-3	-0.090 (-0.123, -0.057)	<0.001	-0.046 (-0.070, -0.021)	<0.001
MHAQ, range 0-3	-0.165 (-0.204, -0.125)	<0.001	-0.065 (-0.114, -0.016)	0.010

Exercise ≥1 time per week	0.041 (-0.010, 0.091)	0.11		
Power Doppler signal present in any joints, entheses or tendons	0.014 (-0.036, 0.065)	0.57		
Power Doppler sum score in joints, entheses and tendons (range 0-347)	0.003 (-0.012, 0.018)	0.66		
Comorbidities ≥ 1	-0.067 (-0.116, -0.017)	0.009	-0.041 (-0.073, -0.010)	0.011
PASI, range 0-72	0.000 (-0.009, 0.008)	0.92		
DLQI, range 0-30	-0.005 (-0.012, 0.001)	0.12		
Current bDMARD	0.035 (-0.022, 0.092)	0.23		
Current csDMARD	0.000 (-0.051, 0.051)	1.00		
Ever bDMARD	0.021 (-0.034, 0.075)	0.45		
Ever csDMARD	-0.036 (0.117, 0.045)	0.38		

† Not in the final multivariate mode
*With DAPSA in the model.
**The independent associations remained the same when DAPSA was replaced by
PASDAS in the model.

CI, Confidence intervals; BMI, Body Mass Index; PsA, Psoriatic arthritis; CRP, C-Reactive Protein; TJC, Tender Joint Count; SJC, Swollen Joint Count; DAPSA, Disease Activity index for Psoriatic Arthritis; PASDAS, Psoriatic Arthritis Disease Activity Score; MASES, Maastricht Ankylosing Spondylitis Enthesitis Score; IGA, Investigator Global Assessment; VAS, Visual analogue scale; PGA, Patient Global Assessment; NRS, Numeric Rating Scale; MHAQ, Modified Health Assessment Questionnaire; PASI, Psoriasis Area Severity Index; DLQI, Dermatology Life Quality Index; bDMARDs: Biologic Disease Modifying Anti-Rheumatic Drugs; csDMARDs: Conventional synthetic DMARDs.

Supplementary Table 2a. Associations with the skin quality of life measure DLQI in male psoriatic arthritis patients tested in univariate and multivariate linear regression models.

Only variables with a p value < 0.10 in the univariate analyses were tested in the multivariate analysis, which was adjusted for age and BMI independently of their significance in the univariate analyses. Apart from age and BMI only variables with at p value < 0.01 is displayed in the multivariate analysis.

	Univariate analyses		Adjusted analyses	
	B (95% CI)	p value	B (95% CI)	p value*
Age, years	-0.096 (-0.178, -0.013)	0.025	-0.095 (-0.161, -0.028)	0.006
Male gender	NA		NA	
BMI, kg/m2	0.127 (-0.100, 0.353)	0.27	0.013 (-0.174, 0.199)	0.89
Current smoking	-0.228 (-2.762, 2.305)	0.86		
Part time/full time employed/working	-1.730 (-3.553, 0.094)	0.063		
PsA disease duration, years	-0.030 (-0.155, 0.095)	0.64		
CRP, mg/L	0.054 (-0.025, 0.134)	0.18		
TJC68 (n=130)	-0.002 (-0.088, 0.083)	0.96		
SJC66 (n=130)	-0.064 (-0.843, 0.715)	0.87		
DAPSA, range 0-164	0.038 (-0.028, 0.105)	0.25		
PASDAS,	2.960 (1.237, 4.682)	0.001	2.091 (0.546, 3.635)	0.009
MASES, range 0-13	0.240 (-0.115, 0.594)	0.18		
IGA, VAS 0-100 mm	0.073 (0.008, 0.138)	0.028		
PGA, VAS 0-100 mm	0.066 (0.032, 0.101)	<0.001†		
Pain, VAS 0-100 mm	0.055 (0.018, 0.092)	0.004		
Fatigue, VAS 0-100 mm	0.045 (0.019, 0.071)	0.001	0.026 (-0.001, 0.053)	0.062
Morning stiffness, hour	0.725 (0.083, 1.367)	0.028		
Sleep disturbance, NRS 0-10	0.341 (0.028, 0.655)	0.033	-0.309 (-0.649, 0.032)	0.075
Anxiety/depression, range 1-3	0.805 (-0.844, 2.454)	0.33		
MHAQ, range 0-3	4.172 (1.699, 6.645)	0.001		

Exercise ≥1 time per week	-1.274 (-2.997, 0.449)	0.15		
Power Doppler signal present in any joints, entheses or tendons	0.480 (-1.258, 2.219)	0.58		
Power Doppler sum score in joints, entheses and tendons (range 0-347)	-0.136 (-0.561, 0.288)	0.52		
Comorbidities ≥ 1	0.761 (-1.071, 2.593)	0.41		
PASI, range 0-72	0.530 (0.368, 0.692)	<0.001	0.418 (0.261, 0.575)	<0.001
Current bDMARD	0.633 (-1.112, 2.378)	0.47		
Current csDMARD	-1.524 (-3.291, 0.243)	0.09		
Ever bDMARD	0.678 (-1.061, 2.416)	0.44		
Ever csDMARD	1.857 (-4.643, 0.929)	0.19		

†Not in the final multivariate model
*With PASDAS in the model.
**With DAPSA instead of PASDAS in the model only age, PASI and comorbidities remained but not DAPSA was statistically significantly associated with DLQI

CI, Confidence intervals; BMI, Body Mass Index; PsA, Psoriatic arthritis; CRP, C-Reactive Protein; TJC, Tender Joint Count; SJC, Swollen Joint Count; DAPSA, Disease Activity index for Psoriatic Arthritis; PASDAS, Psoriatic Arthritis Disease Activity Score; MASES, Maastricht Ankylosing Spondylitis Enthesitis Score; IGA, Investigator Global Assessment; VAS, Visual analogue scale; PGA, Patient Global Assessment; NRS, Numeric Rating Scale; MHAQ, Modified Health Assessment Questionnaire; PASI, Psoriasis Area Severity Index; DLQI, Dermatology Life Quality Index; bDMARDs: Biologic Disease Modifying Anti-Rheumatic Drugs; csDMARDs: Conventional synthetic DMARDs.

Supplementary Table 2b. Associations with the skin quality of life measure DLQI in female psoriatic arthritis patients tested in univariate and multivariate linear regression models.

Only variables with a p value < 0.10 in the univariate analyses were tested in the multivariate analysis, which was adjusted for age and BMI independently of their significance in the univariate analyses. Apart from age and BMI only variables with at p value < 0.01 is displayed in the multivariate analysis.

	Univariate analyses		Adjusted analyses	
	B (95% CI)	p value	B (95% CI)	p value*

Age, years	-0.037 (-0.132, 0.058)	0.44	-0.024 (-0.110, 0.062)	0.58
Male gender	NA		NA	
BMI, kg/m2 (n=63)	0.123 (-0.075, 0.320)	0.22	0.042 (-0.131, 0.216)	0.63
Current smoking	1.340 (-1.128, 3.807)	0.28		
Part time/full time employed/working	0.922 (-1.002, 2.846)	0.34		
PsA disease duration, years	0.003 (-0.156, 0.161)	0.97		
CRP, mg/L	0.099 (-0.119, 0.318)	0.37		
TJC68 (n=130)	0.026 (-0.057, 0.110)	0.54		
SJC66 (n=130)	-0.210 (-1.209, 0.789)	0.68		
DAPSA, range 0-164	0.041 (-0.024, 0.106)	0.22		
PASDAS,	2.426 (0.177, 4.675)	0.035		
MASES, range 0-13	0.117 (-0.174, 0.407)	0.43		
IGA, VAS 0-100 mm	0.015 (-0.065, 0.096)	0.71		
PGA, VAS 0-100 mm	0.043 (0.006, 0.079)	0.022†		
Pain, VAS 0-100 mm	0.050 (0.010, 0.089)	0.015		
Fatigue, VAS 0-100 mm	0.026 (-0.004, 0.056)	0.089		
Morning stiffness, hour	0.169 (-0.657, 0.996)	0.68		
Sleep disturbance, NRS 0-10	0.401 (0.097, 0.706)	0.011		
Anxiety/depression, range 1-3	0.714 (-0.800, 2.229)	0.35		
MHAQ, range 0-3	1.908 (-0.203, 4.019)	0.076		
Exercise ≥1 time per week	-1.309 (-3.224, 0.606)	0.18		
Power Doppler signal present in any joints, entheses or tendons	-1.184 (-3.096, 0.727)	0.22		
Power Doppler sum score in joints, entheses and tendons (range 0-347)	-0.450 (-1.007, 0.108)	0.11		
Comorbidities ≥ 1	0.618 (-0.275, 1.511)	0.17		
PASI, range 0-72	0.795 (0.526, 1.064)	<0.001	0.726 (0.433, 1.018)	<0.001

Current bDMARD	-1.651 (-3.809, 0.507)	0.13			
Current csDMARD	-0.257 (-2.200, 1.686)	0.79			
Ever bDMARD	-1.080 (-3.129, 0.968)	0.30			
Ever csDMARD	1.467 (-1.629, 4.562)	0.35			

† Not in the final multivariate model
*With PASDAS in the model.
**With DAPSA instead of PASDAS in the model only age, PASI and comorbidities, but not DAPSA, were statistically significantly associated with DLQI

CI, Confidence intervals; BMI, Body Mass Index; PsA, Psoriatic arthritis; CRP, C-Reactive Protein; TJC, Tender Joint Count; SJC, Swollen Joint Count; DAPSA, Disease Activity index for Psoriatic Arthritis; PASDAS, Psoriatic Arthritis Disease Activity Score; MASES, Maastricht Ankylosing Spondylitis Enthesitis Score; IGA, Investigator Global Assessment; VAS, Visual analogue scale; PGA, Patient Global Assessment; NRS, Numeric Rating Scale; MHAQ, Modified Health Assessment Questionnaire; PASI, Psoriasis Area Severity Index; DLQI, Dermatology Life Quality Index; bDMARDs: Biologic Disease Modifying Anti-Rheumatic Drugs; csDMARDs: Conventional synthetic DMARDs.