



**ONLINE SUPPLEMENTARY DATA**

**Supplementary Table 1. Demographic data of the 206 psoriatic arthritis patients and 179 controls**

	Controls=179	Psoriatic arthritis=206	p
<b>Demographics</b>			
Male, n (%)	90 (50)	91 (44)	0.23
Age, years	41 ± 9	45 ± 8	<b>0.000</b>
BMI, mg/cm <sup>2</sup>	25.4 ± 4.2	26.9 ± 5.8	<b>0.010</b>
Waist circumference, cm	8+E70	94 ± 15	<b>0.048</b>
Systolic pressure, mmHg	121 ± 13	129 ± 18	<b>0.000</b>
Diastolic pressure, mmHg	76 ± 9	77 ± 11	0.237
<b>Comorbidity</b>			
Hypertension, n (%)	21 (12)	76 (37)	<b>0.000</b>
Dyslipidemia, n (%)	106 (59)	114 (55)	0.48
Current smoking, n (%)	32 (18)	58 (28)	<b>0.017</b>
Diabetes, n (%)	4 (2)	21 (10)	<b>0.002</b>
BMI > 30, n (%)	25 (14)	42 (20)	<b>0.020</b>
<b>Laboratory data</b>			
ESR, mm/h	5 (2-9)	6 (3-12)	<b>0.002</b>
hsCRP, mg/l	0.8 (0.5-2.0)	0.3 (0.1-0.8)	<b>0.006</b>
Cholesterol, mg/dl	199 ± 34	189 ± 30	<b>0.006</b>
Triglycerides, mg/dl	103 ± 56	102 ± 52	0.83
LDL, mg/dl	119 ± 31	111 ± 34	<b>0.023</b>
HDL, mg/dl	59 ± 17	57 ± 17	0.27
Atherogenic index	3.62 ± 1.06	3.94 ± 5.89	0.49
<b>Psoriatic arthritis-related data</b>			
Type of psoriatic arthritis			
Peripheral oligoarthritis		19 (9)	
Peripheral polyarthritis		124 (60)	
Spondylitis		30 (15)	
Mixed		30 (15)	
Disease duration, years		4.6 (2.0-10.9)	
Psoriasis at the time of the study, n (%)		151 (73)	
HLA-B27 positive, n (%)		20 (10)	
ANA positive, n (%)		15 (7)	
Rheumatoid factor, n (%)		29 (14)	
Positive family history of PsA, n (%)		69 (33)	
BASDAI, total score		2.2 (0.0-4.7)	
BASDAI >4, n (%)		31 (15)	
BASFI, total score		0 (0-3)	
PsAID, total score		1-0 (0.0-2.9)	
DAPSA, total score		4.2 (0.1-13.0)	
BSA, total score		0.75 (0.00-2.05)	
PASI, total score		0.45 (0.00-2.00)	

NAPSI, total score		0.0 (0.0-3.1)	
PGA, total score		0 (0-1)	
Number of swelling joints			
0, n (%)		63 (31)	
1-5, n (%)		46 (22)	
> 5, n (%)		10 (5)	
Axial symptoms, n (%)		70 (34)	
Peripheral symptoms, n (%)		150 (73)	
Hip symptoms, n (%)		44 (21)	
Enthesitis, n (%)		78 (38)	
Uveitis, n (%)		13 (6)	
Dactylitis, n (%)		51 (25)	
Inflammatory bowel disease, n (%)		14 (7)	
Sacroiliitis on MRI, n (%)		26 (13)	
Sacroiliitis in x-ray grade			
Grade I, n (%)		102 (50)	
Grade II, n (%)		11 (5)	
Grade III, n (%)		12 (6)	
Grade IV, n (%)		4 (2)	
Syndesmophytes in axial x-ray, n (%)		7 (3)	
Current NSAIDs, n (%)		162 (79)	
Current prednisone, n (%)		85 (41)	
DMARDs, n (%)		154 (75)	
Methotrexate, n (%)		139 (67)	
Leflunomide, n (%)		49 (24)	
Salazopyrin, n (%)		37 (18)	
Anti TNF therapy, n (%)		87 (42)	
Secunikumab, n (%)		14 (7)	
Ustenikumab, n (%)		4 (2)	
Ixezumab, n (%)		5 (2)	
Tofacitinib, n (%)		7 (3)	
Apremilast, n (%)		10 (5)	
<b>Carotid intima media assessment</b>			
Carotid plaque, n (%)	47 (26)	100 (49)	<b>0.000</b>
bilateral, n (%)	20 (11)	56 (27)	<b>0.000</b>
cIMT, mm	0.606 ± 0.116	0.679 ± 0.165	<b>0.000</b>

Data represent means ± SD or median (IQR) when data were not normally distributed.

BMI: body mass index; CRP: C-reactive protein; LDL: low-density lipoprotein.

DMARD: disease-modifying antirheumatic drug.

HDL: high-density lipoprotein; ANA: antinuclear antibodies; hsCRP: high-sensitivity C-reactive protein

cIMT, carotid intima media thickness; BASFI: Bath Ankylosing Spondylitis Functional Index.

BASDAI: Bath Ankylosing Spondylitis Disease Activity Index.

NAPSI: Nail Psoriasis Severity Index; BSA: Body Surface Area.

PGA: Psoriasis Global Assessment; PsAID: PsA Impact of Disease Score.

DAPSA: Disease Activity in PSoriatic Arthritis.

**Supplementary Table 2. SCORE risk category re-classification after carotid ultrasonography depending on anti-TNF alpha treatment patients**

Initial SCORE risk category	SCORE Risk Category after Carotid Ultrasound Assessment					% patients being reclassified	p*
	Low	Moderate	High	Very high			
<b>Controls</b>							
Low	139	120	0	0	19	13,7%	
Moderate	28	0	10	0	18	64,3%	
High	12	0	0	2	10	83,3%	
Very High	0	0	0	0	0	-	
<b>Total</b>	<b>179</b>	<b>120</b>	<b>10</b>	<b>2</b>	<b>47</b>	<b>26,3%</b>	
<b>Non anti-TNF patients</b>							
Low	53	34	0	0	19	35,8%	<b>0.001</b>
Moderate	45	0	14	0	31	68,9%	0.68
High	14	0	0	4	10	71,4%	0.65
Very High	7	0	0	0	7	-	-
<b>Total</b>	<b>119</b>	<b>34</b>	<b>14</b>	<b>4</b>	<b>67</b>	<b>56,3%</b>	<b>0.000</b>
<b>On anti-TNF patients</b>							
Low	48	37	0	0	11	22,9%	0.13
Moderate	33	0	10	0	23	69,7%	0.48
High	5	0	0	3	2	40,0%	0.074
Very High	1	0	0	0	1	-	
<b>Total</b>	<b>87</b>	<b>37</b>	<b>10</b>	<b>3</b>	<b>37</b>	<b>42,5%</b>	<b>0.007</b>

SCORE: Systematic Coronary Risk Evaluation

\*p values refer to the comparison between patients on anti-TNF alpha treatment or not and controls for each SCORE category

**Supplementary Table 3. Differences between reclassified and non-reclassified patients with PsA into the very high CV risk category following carotid ultrasound assessment.**

	Reclassification into Very High–Risk after Carotid Ultrasound			Adjusted Model OR (95% CI)	p
	No (n = 109)	Yes (n = 97)	p		
cIMT, carotid intima media thickness, mm	0.638 ± 0.162	0.725 ± 157	<b>0.000</b>		
<b>Demographics</b>					
Male, n (%)	44	47	0.24		
Age, years	50 ± 13	57 ± 9	<b>0.000</b>		
BMI, mg/cm <sup>2</sup>	27.7 ± 6.8	27.9 ± 6.6	0.89		
Waist circumference, cm	94 ± 15	94 ± 20	0.91		
Systolic pressure, mmHg	137 ± 22	136 ± 19	0.74		
Diastolic pressure, mmHg	79 ± 13	80 ± 11	0.63		
<b>Comorbidity</b>					
Hypertension, n (%)	24 (22)	52 (54)	<b>0.000</b>		
Dyslipidemia, n (%)	64 (59)	50 (52)	0.15		
Current smoking, n (%)	30 (28)	28 (29)	0.83		
Diabetes, n (%)	7 (6)	14 (14)	0.058		
BMI > 30, n (%)	15 (14)	27 (28)	<b>0.011</b>		
Statins, n (%)	32 (29)	80 (82)	<b>0.000</b>		
<b>Laboratory data</b>					
ESR, mm/h	7 (4-13)	5 (3-11)	0.94		
hsCRP, mg/l	0.3 (0.1-0.8)	0.2 (0.1-0.7)	0.19		
Cholesterol, mg/dl	197 ± 36	179 ± 40	<b>0.001</b>		
Triglycerides, mg/dl	96 ± 39	108 ± 62	0.10		
LDL, mg/dl	116 ± 35	106 ± 34	<b>0.032</b>		
HDL, mg/dl	58 ± 17	55 ± 17	0.32		

Atherogenic index	3.40 (2.72-4.12)	3.34 (2.71-4.13)	0.27		
<b>Psoriatic arthritis-related data</b>					
Type of psoriatic arthritis					
Peripheral oligoarthritis	14 (13)	5 (5)			
Peripheral polyarthritis	55 (50)	69 (71)	<b>0.001</b>		
Spondylitis	15 (14)	15 (15)			
Mixed	24 (22)	6 (6)			
Disease duration, years	4.1 (1.4-8.0)	5.7 (2.2-12.5)	<b>0.023</b>	1.00 (0.97-1.02)	0.77
Psoriasis, n (%)	76 (70)	75 (77)	0.093	1.66 (0.65-4.25)	0.30
HLA-B27, n (%)	17 (16)	3 (3)	<b>0.004</b>	0.17 (0.03-1.06)	0.058
ANA positive, n (%)	8 (7)	7 (7)	0.81	1.89 (0.31-11.53)	0.49
Rheumatoid factor, n (%)	13 (12)	16 (16)	0.27	2.62 (0.82-8.39)	0.11
Positive family history of PsA, n (%)	40 (37)	29 (30)	0.23	0.76 (0.29-1.96)	0.56
BASDAI, total score	2.65 (0.00-5.70)	1.4 (0.0-3.8)	0.21	0.92 (0.74-1.13)	0.41
BASDAI >4, n (%)	19 (17)	12 (12)	0.19	0.54 (0.16-1.84)	0.33
BASFI, total score	0.3 (0.0-3.5)	0.0 (0.0-2.1)	0.40	0.88 (0.70-1.11)	0.27
PsAID, total score	1.0 (0.0-3.2)	1.0 (0.0-2.0)	0.11	1.03 (0.77-1.37)	.87
DAPSA, total score	1.92 (0.00-10.01)	6.10 (0.05-15.10)	0.056	<b>1.10 (1.02-1.19)</b>	<b>0.019</b>
Remission, n (%)	35 (32)	23 (24)		-	-
Low, moderate or high activity, n (%)	23 (21)	32 (33)	<b>0.049</b>	<b>3.22 (1.05-9.90)</b>	<b>0.041</b>
DAPSA, total score					

Remission, n (%)	35 (32)	23 (24)	0.14	-	-
Low activity, n (%)	13 (12)	17 (18)		1.50 (0.42-5.37)	0.53
				<b>0.01</b>	
Moderate or high activity, n (%)	10 (9)	15 (15)		<b>15.09 (1.69-135.08)</b>	<b>5</b>
BSA, total score	0.5 (0.0-2.9)	0.9 (0.0-2.0)	0.30	0.79 (0.52-1.22)	0.29
PASI, total score	0.8 (0.0-2.1)	0.2 (0.02-0)	0.30	0.73 (0.51-1.04)	0.73
Low	42 (39)	44 (45)		-	-
			0.27		0.09
Moderate and severe	6 (6)	2 (2)		0.10 (0.01-1.48)	4
NAPSI, total score	0 (0-3)	0 (0-4)	0.43	1.08 (0.93-1.26)	0.45
log PGA, total score	0.37 ± 0.88	0.42 ± 0.64	0.82	180 (0.57-5.70)	0.32
Number of swelling joints					
0, n (%)	31 (28)	32 (33)		-	-
1-5, n (%)	26 (24)	20 (21)	0.30	0.65 (0.21-1.97)	0.44
> 5, n (%)	3 (3)	7 (7)		2.60 (0.31-21.94)	0.38
			<b>0.04</b>		
Axial symptoms, n (%)	44 (40)	26 (13)	<b>6</b>	0.86 (0.36-2.07)	0.74
Peripheral symptoms, n (%)	83 (76)	67 (33)	0.31	0.57 (0.22-7.85)	0.23
			0.05		0.06
Hip symptoms, n (%)	29 (27)	15 (7)	3	0.38 (0.14-1.07)	7
Enthesitis, n (%)	47 (43)	31 (15)	0.14	0.93 (0.39-2.°14)	0.87
Uveitis, n (%)	8 (7)	5 (2)	0.54	0.75 (0.17-3.39)	0.75
Dactylitis, n (%)	28 (26)	23 (11)	0.79	1.30 (0.47-3.58)	0.61
Inflammatory bowel disease, n (%)	8 (7)	6 (3)	0.80	0.63 (0.15-2.60)	0.63
Sacroiliitis on MRI, n (%)	17 (16)	9 (4)	0.21	0.74 (0.21-2.61)	0.64
Sacroiliitis in x-ray grade				0.69 (0.20-2.39)	0.69
Grade I, n (%)	55 (50)	47 (48)		-	-
Grade ≥ II, n (%)	16 (15)	11 (11)	0.62	0.72 (0.21-2.51)	0.60
Syndesmophytes in axial x-ray, n (%)	4 (4)	3 (3)	0.99	0.52 (0.08-3.34)	0.49
Current NSAIDs, n (%)	91 (83)	71 (73)	0.12	0.45 (0.17-1.20)	0.11

Current prednisone, n (%)	44 (40)	41 (42)	0.59	1.02 (0.45-6.74)	0.96 0.09
DMARDs, n (%)	78 (72)	76 (378)	0.11	2.32 (0.87-6.24)	5
Methotrexate, n (%)	71 (65)	68 (70)	0.30	1.25 (0.52-3.03)	0.62
Leflunomide, n (%)	26 (24)	22 (23)	0.92	0.46 (0.18-1.22)	0.12
Salazopyrin, n (%)	24 (22)	13 (13)	0.13	0.72 (0.25-2.11)	0.55
Anti TNF therapy, n (%)	50 (46)	37 (38)	0.32	1.41 (0.57-3.52)	0.63
Secunikumab, n (%)	9 (8)	5 (5)	0.45	1.28 (0.26-6.43)	0.76
Ustenikumab, n (%)	1 (1)	3 (3)	0.66	0.34 (0.43-2.73)	0.31
Ixekuzimab, n (%)	2 (2)	3 (3)	0.33	-	-
Tofacitinib, n (%)	3 (3)	4 (4)	0.71	8.42 (0.85- 83.51)	0.06 9
Apremilast, n (%)	4 (4)	6 (6)	0.52	3.30 (0.40- 27.05)	0.27

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BMI: body mass index; CRP: C reactive protein; LDL: low-density lipoprotein; hsCRP: high-sensitivity C-reactive protein

DMARD: disease-modifying antirheumatic drug; HDL: high-density lipoprotein; ANA: antinuclear antibodies.

cIMT, carotid intima media thickness; NAPSI: Nail Psoriasis Severity Index; BSA: Body Surface Area.

DAPSA: Disease Activity in PSoriatic Arthritis; BASDAI: Bath Ankylosing Spondylitis Disease Activity.

BASFI: Bath Ankylosing Spondylitis Functional Index; PGA: Psoriasis Global Assessment.

Adjusted model for age, hypertension, dyslipidemia, diabetes, obesity and statins.