

H.4 Specialist referral for psoriatic arthritis

Reference	Study type	Number of patients	Patient characteristics	Prognostic factors	Length of follow-up	Outcome measures	Source of funding
<p>D. Kane, L. Stafford, B. Bresnihan, O. FitzGerald. A prospective, clinical and radiological study of early psoriatic arthritis: an early synovitis clinic experience. <i>Rheumatology</i>. 42:1460-1468.2003</p> <p>REF ID: KANE2003</p>	<p>Inception cohort (prospective)</p> <p>Ireland/Scotland</p> <p>August 1994 – March 2000</p> <p>Representative:</p> <p>Loss to follow-up:</p> <p>10 patients (8%) at 1 year</p> <p>31 patients (25%) at 2 years</p> <p>119 patients followed up at 1 yr</p> <p>97 patients followed up at 2 yr</p>	<p>1018</p> <p>Patients presenting to Early Synovitis Clinic</p> <p>129 (12/7%) diagnosed with PsA</p>	<p>Patients referred to early arthritis clinic with joint tenderness in association with either active joint swelling or an elevated acute-phase response, symptom duration <2 years. RF factor titre < 1/80.</p> <p>Diagnosis of PsA confirmed by consultant rheumatologist using Moll & Wright criteria</p> <p>53% male, 47% female</p> <p>Mean age at presentation 41.2 ±15.1 years</p> <p>Mean duration of disease at presentation 9.9 ±15.1 months</p> <p>Median delay from symptom</p>	<p>Clinical assessment</p> <p>Baseline radiographs</p>	<p>2 years</p>	<p>RAI</p> <p>EULAR</p> <p>HAQ</p> <p>Pain</p> <p>DMARD use</p> <p>Swollen joints</p> <p>Radiological assessment</p>	<p>Not stated</p>

			onset to rheumatology referral 5.75-7 months			<p>nt – Sharp</p> <p>Remission: defined by absence of fatigue, stiffness <15 min, no joint pain, complete absence of joint tenderness or swelling (including dactylitis and enthesitis) on examination and ESR <20 mm/h (males) or ESR <30 mm/h</p>	
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						(females)	
<p>Effect size</p> <p>At presentation 52 (40%) had oligoarticular PsA, 77 (60%) had polyarticular disease</p> <p>ACR class at presentation: I: 39 (34%), II: 38 (32%), III: 33 (28%), IV 7 (6%)</p> <p>Mean HAQ score at presentation 0.71 ±0.64, at 1 yr 0.4 ±0.6, 2 yr 0.4 ±0.6</p> <p>Overall decrease in all clinical and lab parameters of inflammation at 1 and 2 yr.</p>							
	0 yr	1 yr	2 yr				
No. of patients	<i>n</i> = 129	<i>n</i> = 119 (92%)	<i>n</i> = 97 (75%)				
DMARD	15 (12%)	70 (59%)	54 (56%)				
Corticosteroids	14 (11%)	6 (5%)	5 (5%)				
VAS pain	4.8 (5) ± 2.7 (<i>n</i> = 122)	3.1 (2) ± 3 (<i>n</i> = 119)	3.4 (4) ± 2.7 (<i>n</i> = 97)				
ACR class III/IV	40 (34%) (<i>n</i> = 117)	22 (19%) (<i>n</i> = 118)	16 (16%) (<i>n</i> = 97)				
HAQ score	0.7 (0.6) ± 0.6 (<i>n</i> = 74)	0.4 (0.1) ± 0.6 (<i>n</i> = 65)	0.4 (0.1) ± 0.6 (<i>n</i> = 58)				
Ritchie Index	5.6 (4) ± 6	2.4 (1) ± 3.8	1.9 (1) ± 3				

Swollen joint count	6.9 (4) ± 8	2.9 (1) ± 5.2	2.4 (1) ± 4.1
ESR (mm/h)	24 (16) ± 27 (<i>n</i> = 124)	13 (7) ± 15 (<i>n</i> = 112)	12 (7) ± 14 (<i>n</i> = 94)
CRP (mg/l)	28 (10) ± 59 (<i>n</i> = 112)	10 (5) ± 14 (<i>n</i> = 111)	8 (4) ± 12 (<i>n</i> = 94)
Enthesopathy	29 (38%)	15 (13%)	25 (26%)
Dactylitis	37 (29%)	10 (8%)	16 (16%)
Remission	0	31 (26%)	20 (21%)
Remission in 26% of patients at 1 yr, 21% of patients at 2 yr			
Spontaneous (DMARD-free) remission in only 11-12% of patients			
Radiological:			
At baseline, 32/117 (27%) of patients had erosions, 24 (19%) of patients had joint space narrowing and 22 (19%) of patients had periostitis			
After median 24 months follow-up, 40/86 (47%) of patients had erosions (despite early DMARD use), 32 (37%) had joint space narrowing and 25 (29%) of patients had periostitis			
Baseline (<i>n</i> = 117)		Follow-up (<i>n</i> = 86)	
Total number of joints with erosions			
Hands		75/3510 (2.1%)	100/2580 (3.9%)
Feet		26/1170 (2.2%)	53/860 (6.2%)
Mean no. of joints with erosions per patient ± S.D.			

Hands	0.7 ± 1.6	1.2 ± 2.5
Feet	0.2 ± 0.8	0.6 ± 1.6
Total number of joints with joint space narrowing		
Hands	71/3510 (2.0%)	62/2580 (2.4%)
Feet	14/1170 (1.2%)	35/860 (4.1%)
Mean no. of joints with joint space narrowing per patient ± S.D.		
Hands	0.6 ± 2.3	0.7 ± 1.7
Feet	0.1 ± 0.5	0.4 ± 1.4
Mean sharp score at baseline 1.2 ± 2.9, mean narrowing score (hands/feet) at baseline 1.4 ± 5.3		
Mean Sharp score increased to 3 ± 5.2 (P=0.002), mean narrowing score increased to 3.2 ± 7.5 (P=0.04)		
Sacroileitis present in 16 (17%) of patients		
Significant functional impairment at early stage		
Author conclusion: PsA is a chronic disease with significant functional impairment and radiological damage at an early stage in the course of the disease		

Reference	Study type	Number of patients	Patient characteristics	Prognostic factors	Length of follow-up	Outcome measures	Source of funding									
<p>L. Punzi, M. Pianon, P. Rossini, F. Schiavon, P. F. Gambari. Clinical and laboratory manifestations of elderly onset psoriatic arthritis: a comparison with younger onset disease. <i>Ann Rheum Dis.</i> 58:226-229. 1999</p> <p>REF ID: PUNZI1999</p>	<p>Prospective study</p> <p>Italy</p> <p>Elderly vs. younger onset disease</p>	66 consecutive PsA patients	<p>PsA patients with disease duration <1 year: 16 elderly onset PsA (>60 yrs), 50 younger onset PsA (≤60 yrs).</p> <p>RF +ve patients excluded</p> <table border="1"> <thead> <tr> <th></th> <th>EOPsA</th> <th>YOPsA</th> </tr> </thead> <tbody> <tr> <td>M/F</td> <td>8/8</td> <td>23/27</td> </tr> <tr> <td>Mean age at onset, y</td> <td>65.1 ±6.7</td> <td>44.2 ±11.1</td> </tr> </tbody> </table>		EOPsA	YOPsA	M/F	8/8	23/27	Mean age at onset, y	65.1 ±6.7	44.2 ±11.1	Disease duration	2 years	<p>Clinical</p> <p>Laboratory</p> <p>Radiographic</p>	Not stated
	EOPsA	YOPsA														
M/F	8/8	23/27														
Mean age at onset, y	65.1 ±6.7	44.2 ±11.1														

Effect size

DMARD (SAARD) at 2 years: 42/50 (84%) in YOPsA patients, 15/16 (94%) EOPsA patients

Mean \pm SD number of radiographic erosions in hands at presentation: 2.3 \pm 2.1 (EOPsA), 2.2 \pm 2.2 (YOPsA)

Mean \pm SD number of radiographic erosions in hands after 2 years: 4.4 \pm 3.0 (EOPsA), 2.7 \pm 2.0 (YOPsA)

Mean \pm SD number of radiographic erosions in feet at presentation: 2.7 \pm 1.2 (EOPsA), 1.1 \pm 1.1 (YOPsA)

Mean \pm SD number of radiographic erosions in feet after 2 years: 4.7 \pm 2.2 (EOPsA), 2.1 \pm 1.2 (YOPsA)

Higher number of active joints in elderly vs young onset PsA at both baseline (12.2 \pm 6.3 vs 6.7 \pm 6.6; $p < 0.001$) and 2-year follow-up (8.1 \pm 4.2 vs 4.7 \pm 3.6; NS)

Mean ESR decreased from 64.2 \pm 65.3 mm/h at baseline to 38.4 \pm 15.2 mm/h after 2 years' follow-up in Elderly Onset PsA patients and a more modest decrease from 30.5 \pm 30.0 mm/h to 26.3 \pm 15.0 mm/h in Younger Onset PsA patients. Mean CRP levels also decreased in both groups: 3.9 \pm 2.0 mg/l to 2.2 \pm 1.0 mg/l in Elderly Onset PsA and 1.33 \pm 1.3 mg/l to 0.9 \pm 0.9 mg/l in Younger Onset PsA patients.

Reference	Study type	Number of patients	Patient characteristics	Prognostic factors	Length of follow-up	Outcome measures	Source of funding
<p>B. J. Harrison, A. J. Silman, E. M. Barrett, D.G.I. Scottt, D.P.M. Symmons. Presence of psoriasis does not influence the presentation or short term outcome of patients with early inflammatory polyarthrtitis. <i>J Rheumatol.</i> 24:1744-9.1997</p> <p>REF ID: HARRISON1997</p>	<p>Primary care inception cohort</p> <p>Norfolk, UK</p> <p>1989</p>	<p>966 patients referred to Norfolk Psoriasis Registry</p> <p>51 patients with psoriasis</p>	<p>Patients ≥ 16 years old with early inflammatory polyarthritis (swelling of at least 2 joint areas that has persisted for a minimum of 4 weeks) and psoriasis in a primary care population.</p> <p>49% male, 51% female</p> <p>Median age at psoriasis onset 52 years</p> <p>Median duration of arthritis at presentation 5.75 months</p> <p>Note: approximately 50% had RA not PsA</p>	<p>Clinical assessment</p> <p>Lab markers</p> <p>Radiographs</p>	1 year	<p>Total number of swollen joints</p> <p>DMARD use</p> <p>Remission</p> <p>HAQ score</p> <p>Radiographs</p>	Not stated

Effect size	Baseline	1 year
Second line drugs/steroids		21 (41%)
Median HAQ	0.63	0.44
Median swollen joints	7 (0-32)	4 (range: 0-16)
Remission		3 (6%)
Radiological erosions		7/32 (22%)

Reference	Study type	Number of patients	Patient characteristics	Prognostic factors	Length of follow-up	Outcome measures	Source of funding
R. Queiro-Silva, J.C. Torre-Alonso, T. Tinture-Eguren, I. Lopez-Lagunas. A polyarticular onset predicts erosive and deforming disease in psoriatic arthritis. <i>Ann Rheum Dis.</i> 62:68-70.2003 REF ID: QUEIROSILVA2003	Prospective cohort – consecutive sample Spain 1991-2001	71 patients	Patients with PsA 44 men, 27 women Mean disease duration at presentation 12 ± months (without radiographical evidence of erosions at presentation) Mean age 47 ±12 years	Disease duration	10 years	ACR HAQ Lab values Radiographs	Not stated
<p>Effect size</p> <p>During first 6 months 5 patients (7%) had isolated DIP disease</p> <p>30 (42%) oligoarthritis</p>							

20 (28%) polyarthritis

16 (23%) axial disease

0 arthritis mutilans

At end of study (10 years)

28 (39%) showed oligoarthritis

24 (34%) polyarthritis

17 (24%) axial disease

2 (3%) arthritis mutilans

32/71 (45%) had developed erosive and deforming arthritis

Mean time to detect erosions or narrowing of joint spaces was 20±4 months (SD)

HAQ (unclear if at baseline or follow-up): 1.2 (0.3) in those with erosive (n=32) vs 0.6 (0.4) in non erosive (n=39) (p=0.012)

NS difference in between number of months duration of arthritis (8 ±7 months versus 10±6 months) for erosive and non-erosive disease

DMARD use in 68% of patients

Author conclusion: we support the use of DMARDs as early as possible, particularly in patients with polyarticular onset

Reference	Study type	Number of patients	Patient characteristics	Prognostic factors	Length of follow-up	Outcome measures	Source of funding
N.J. McHugh, C. Balachrishnan, S.M. Jones. Progression of peripheral joint disease in psoriatic arthritis: a 5-year prospective study. <i>Rheumatology</i> . 42:778-783.2003 REF ID: MCHUGH2003	Prospective follow-up study Bath, UK Baseline information collected between 1987 and 1990 87% available for full follow-up	87 patients; 13 patients with arthritis < 1 year duration	Patients attending a PsA clinic (established/new onset) 25% referrals from primary care, <10% from dermatology 49 females, 38 males Median age in years at follow-up (range) 53.5 (2-85) Median disease duration at baseline: 11 years (IQR 3.5-17 years), subgroup analysed with arthritis within 1 year of baseline	Disease duration	Median 65 months (range 39-90)	Rates of progression of peripheral joint score (0-70) Joint score PASI HAQ Radiographs	Jules Thorn Charitable Trust Remedi UK
<p>Effect size</p> <p>13 patients with <12 months duration of arthritis</p> <p>Median joint score at baseline: 4 (IQR 2.3-10)</p> <p>Median joint score at follow-up: 7 (IQR 4.3-13)</p>							

Rate of peripheral joint progression significantly higher in this group up to baseline assessment compared with the rate of the joint progression in the same patients over subsequent years of follow-up (4.0 vs. 0.32, P=0.003)

Highest rate of peripheral joint involvement appeared to be within 12 months of disease onset, but steady progression of peripheral joint involvement among those referred to a clinic – 0.4 joints per year)

Median rates of joint progression according to age of onset or stage of arthritis (interquartile ranges are given in parentheses)

	Total PsA group (n=87)	Arthritis within 1 yr of baseline (n=13)
Duration of arthritis at baseline (yr)	11 (3.5–17)	<12 months
Joint score at baseline	6 (2–15)	4 (2.3–10)
Change in joint involvement to baseline	0.88 (0.33–1.7)	4* (2.3–10)
Joint score at follow-up	11 (4.5–24)	7 (4.3–13)
Change in joint involvement to follow-up	0.76 ((0.28–1.3)	1.2 (0.6–2.4)
Change in joint involvement from baseline to follow-up	0.43 (0–1.3)	0.32 (0–1)

Full group (not just early onset; median duration at baseline = 11 years)

% of patients with erosions in hand or wrist increased from 53 to 68%, and erosive foot disease increased from 37 to 44%

% taking MTX: at baseline (referral) = 12% vs 15% at follow-up

4/87 patients in remission at follow-up

Mean HAQ score at baseline 0.375, at follow-up 0.5 (p<0.001)

Author conclusion: although a disproportionately high number of peripheral joints are involved in the first 12 months following disease onset, there is a steady progression of peripheral joint involvement in patients with PsA who are referred to a hospital clinic

Reference	Study type	Number of patients	Patient characteristics	Prognostic factors	Length of follow-up	Outcome measures	Source of funding
S.J. Bond, V.T. Farewell, C.T. Schentag, D.D. Gladman. Predictors for radiological damage in psoriatic arthritis: results from a single centre. <i>Ann Rheum Dis.</i> 66:370-376. 2007	Prospective cohort Toronto 1978 – 2004 Analysis: corrected for within-patient correlation Adjusted for: Sex, age, arthritis duration, functional class, ESR, tender joint	625 patients	Patients referred to University of Toronto PsA Clinic Baseline characteristics: Female/male 272/353 Median (range) age (years) 34 (9–86) Median (range) duration of arthritis (years) 4.5 (0–47.7)	Disease duration	26 years	Change in number of permanently damaged joints between visits (clinically/radiographically) Radiological damage (Steinbrocker) hands and feet	Not stated

<p>REF ID: BOND2007</p>	<p>count, swollen joint count and drugs (order of increasing severity: no drug, NSAID, DMARD, steroids – none were taking biologics)</p>	<p>Median (range) number of tender joints (all joints) 4 (0–43)</p> <p>Median (range) number of tender joints (hands and feet) 3 (0–35)</p> <p>Median (range) number of swollen joints (all joints) 2 (0–33)</p> <p>Median (range) number of swollen joints (hands and feet) 1 (0–28)</p> <p>Median (range) ESR rate 22.5 (0–105)</p> <p>Functional class</p> <p>Good (I) 29.3% (183)</p> <p>Medium (II) 59.2% (370)</p> <p>Poor (III, IV) 11.5% (72)</p> <p>Damaged joints (all joints)</p> <p>None 62.2% (389)</p> <p>1–4 20.8% (130)</p> <p>5–9 5.9% (37)</p> <p>>9 11.1% (69)</p> <p>Damaged joints (hands and feet)</p> <p>None 68.3% (427)</p> <p>1–4 17.3% (108)</p>				
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			<p>5–9 5% (31)</p> <p>>9 9.4% (59)</p> <p>Drugs</p> <p>None 24.3% (152)</p> <p>NSAIDs 30.6% (191)</p> <p>DMARDs 40.5% (253)</p> <p>Steroids 4.6% (29)</p>				
<p>Effect size</p> <p>Clinical damage: presence of a limitation of range of movement of >20% of the range not related to the presence of joint effusion, the presence of joint deformities, subluxation, loosening or ankylosis.</p> <p>Radiological damage: Each joint is scored as 1, normal (with possible soft tissue swelling); 2, surface or pocket erosions; 3, erosion and joint space narrowing; and 4, disorganisation (including ankylosis, pencil-in-cup change or total joint destruction) or as requiring surgery. Radiological damage is assessed only in the joints of the hands (wrists, all metacarpophalangeals, PIPs and distal interphalangeals) and feet (MTPs and interphalangeal fist toes); 42 joints in total</p> <p>Strong relationships were identified between clinical damage development and swollen joints, ESR and arthritis duration</p>							

PROGRESSION OF CLINICAL DAMAGE (outcome = change in clinically damaged joint count):

Factor	Single-factor analyses		All factors included	
	Relative damage rate (95% CI)	p Value	Relative damage rate (95% CI)	p Value
Functional class		<0.001		0.1
Good (I)	1		1	
Medium (II)	1.56 (1.24 to 1.96)		1.16 (0.89 to 1.5)	
Poor (III, IV)	1.37 (0.96 to 1.91)		0.87 (0.59 to 1.28)	
Tender joints		<0.001		0.2
None (0)	1		1	
Low (1–4)	1.45 (1.13 to 1.86)		1.15 (0.89 to 1.51)	
Medium (5–9)	1.63 (1.19 to 2.24)		1.27 (0.91 to 1.78)	
High (>9)	2.09 (1.54 to 2.85)		1.37 (0.97 to 1.95)	
Effusions		<0.001		<0.001
None (0)	1		1	
Low (1–4)	1.32 (1.07 to 1.63)		1.12 (0.89 to 1.42)	
Medium (5–9)	1.84 (1.33 to 2.55)		1.48 (1.02 to 2.13)	
High (>9)	2.95 (1.82 to 4.78)		2.6 (1.56 to 4.36)	

ESR		0.17		0.75
Low (<15)	1		1	
Medium (15–30)	1.05 (0.82 to 1.39)		0.99 (0.77 to 1.28)	
High (>30)	1.27 (0.94 to 1.73)		1.09 (0.8 to 1.48)	
Arthritis duration	0.67 (0.55 to 0.8) per extra decade in clinic	<0.001	0.73 (0.6 to 0.89)	<0.001
Drugs		0.143		0.044
None	1		1	
NSAIDs	0.72 (0.44 to 1.18)		1.11 (0.65 to 1.91)	
DMARDs	0.89 (0.6 to 1.32)		1.32 (0.84 to 2.07)	
Steroids	1.04 (0.68 to 1.6)		1.64 (1.02 to 2.68)	

DMARD, disease-modifying antirheumatic drug; ESR, erythrocyte sedimentation rate; NSAID, non-steroidal anti-inflammatory drug.

Change in clinically damaged joint count for all joints

Before entry to the clinic, the longer the duration, the more damage caused by arthritis, but during duration the more damage in the clinic the effect is the opposite: the longer the follow-up, the lesser the damage

Arthritis duration at first visit is a predictor for progression in patients who do not have damage at the first visit, but once a patient has a damaged joint

the predictive power of arthritis duration evaporates

Factor	Relative damage rate	Lower 95% CI	Upper 95% CI	p Value
Clinical damage				
Arthritis duration at first visit				
Damaged	1.06 per decade	0.92	1.22	0.39
Undamaged	1.54 per decade	1.22	1.96	<0.001
Radiological damage				
Arthritis duration at first visit				
Damaged	0.99 per decade	0.81	1.19	0.88
Undamaged	0.84 per decade	0.63	1.12	0.23

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Gladman DD, Thavaneswaran A, Chandran V, Cook RJ. Do patients with psoriatic arthritis who present early	Prospective cohort University of Toronto PsA clinic	1077 patients (436 within 2 years of diagnosis and	Patients referred to University of Toronto PsA Clinic; divided into those first seen within 2 years of diagnosis and those first seen with more than 2 years since diagnosis	Disease duration	32 years	Change in number of permanently damaged joints between visits (clinically): defined as a limitation of movement of more than 20% of the	None

<p>fare better than those presenting later in the disease? <i>Ann Rheum Dis.</i> 70: 2152 – 2154 2011</p> <p>REF ID: GLADMAN2011A</p>	<p>1978 – 2011</p> <p>Analysis: multivariable analysis using a negative binomial model</p> <p>Adjusted for: Sex, age, arthritis duration, number of damaged joints at first visit, NSAID use at first visit; DMARD use at first visit; treatment with biologics after first visit; calendar effect (based on decade of entry into clinic)</p>	<p>641 with disease duration >2 years</p>	<p>Baseline characteristics:</p> <p>See below</p>		<p>range that is not related to a joint effusion, the presence of flexion contractures, fused or flail joints or evidence of surgery at a particular joint</p>	
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Effect size

Demographic and disease characteristics at first visit

Variable	Early PsA (n=436)	Late PsA (n=641)	p-value
Sex F/M (%)	42.4/57.6	44.8/55.2	0.447
Age at PsA diagnosis	40.3	34.2	<0.0001
Age at first visit	41.1	45.2	<0.0001

Duration of PsA at first visit	0.92	11.0	<0.0001
Mean number of actively inflamed joints	10.5	11.7	0.239
Mean number of damaged joints	3.5	9.2	<0.0001
Mean PASI	6.2	5.5	0.254
Treatment at first visit	56.4%	61.6%	0.089
NSAID	28.0%	56.8%	<0.0001
DMARD biological agents	4.1%	6.7%	0.061
Multivariate analysis of progression of clinical damage			
Relative rate of joint damage progression (>2 years vs <2 years disease duration at first visit): 1.38 (1.08-1.77); p=0.01			
Stratification by duration of disease at clinic entry			
Duration of disease at first visit	N	Relative rate of joint damage progression (95% CI)	P value
1-2 years vs <1 year	212	1.53 (0.99-2.36)	0.05
2-4 years vs <1 year	248	1.70 (1.11-2.62)	0.01
5-9 years vs <1 year	201	1.83 (1.16-2.88)	0.009
10-20 years vs <1 year	204	1.83 (1.14-2.96)	0.01
>20 years vs <1 year	86	2.96 (1.64-5.34)	0.0003

Authors' conclusions:

Disease progression is more marked in patients presenting with established disease of more than 2 years' duration; there is also a clear dose/exposure-response relationship with respect to the duration of disease. These results suggest that patients with PsA should be treated earlier in the course of their disease

Reference	Study type	Number of patients	Patient characteristics	Prognostic factors	Length of follow-up	Outcome measures	Source of funding
J.A. Husted, B.D. Tom, V.T. Farewell, C.T. Schentag, D.D.Gladman. Description and prediction of physical functional disability in psoriatic arthritis: a longitudinal analysis using a markov model	Prospective cohort Toronto 1993 – 2003 Markov model used to characterise disability process in PsA – transitions only between no disability (1) and moderate disability (2) and between moderate	341 patients	Patients attending University of Toronto PsA Clinic. Newly diagnosed and established PsA. 201 men, 140 women Mean age 45.9 ±12.4 years Mean duration of PsA 10.6 ±8.4 years 157 patients (46%) initial HAQ score <0.5 and thus	Disease duration	Mean ±SD follow-up 5.2 ±3.04 years	HAQ Disability state	Canadian Institute of Health Research and the Krembil Foundation

<p>approach. <i>Arthritis & Rheumatism.</i> 52(3):404-409.2005</p> <p>REF ID: HUSTED2005</p>	<p>disability (2) and severe disability (3)</p> <p>The variables included were sex, age, duration of PsA, psoriasis severity as measured by the PASI, the number of clinically deformed or damaged joints, and the number of actively inflamed joints updated at each HAQ visit.</p>		<p>assigned an initial disability state of 1</p> <p>134 patients (39%) had a score between 0.5 and 1.5 inclusive and were assigned disability state 2</p> <p>50 patients (15%) had a score > 1.5 and were assigned to disability state 3</p>				
<p>Effect size</p> <p>Patients with duration of PsA less than 2 years were found to have more frequent transitions to different states (either to better or worse states).</p> <p>Patients with duration of PsA 2-5 years and >5 years had a reduction in transition rates of 56-70% compared with those patients with PsA duration <2 years</p> <p>Multivariate model of predictors of transitions between disability states:</p> <p>RR transition from 1-2 or 2-3 (worsening)</p> <p>< 2 years RR = 1</p> <p>2-5 years RR = 0.42 (0.16-1.09)</p> <p>>5 years RR 0.33 (0.14-0.76)</p>							

i.e. significantly lower rate of transition state worsening in patients with PsA duration >5 years compared to those with duration <2 years

RR transition from 2-1 or 3-2 (improving)

<2 years RR = 1

2-5 years RR = 0.33 (0.14-0.77)

>5 years RR = 0.44 (0.21-0.90)

i.e. significantly lower rate of transition state improvement in patients with PsA duration >2 years compared to those with duration <2 years

Mean length of follow-up with HAQ 5.2 years

Number and type of disability transition states (HAQ)

Of 341 patients, 95 (28%) were in state 1 (no disability) throughout follow-up

42 (12%) were in state 2

20 (6%) in state 3

91 patients (26.7%) encountered a single transition to either a lower or higher disability state.

93 patients (27.3%) experienced 2 or more observed transitions

Reference	Study type	Number of patients	Patient characteristics	Prognostic factors	Length of follow-up	Outcome measures	Source of funding
<p>U.R.C. Lindqvist, G.-M. Alenius, T. Husmark, E. Theander, G. Holmstrom, P.T. Larsson. The Swedish early psoriatic arthritis register – 2-year followup: a comparison with early rheumatoid arthritis. <i>J Rheumatol.</i> 35:668-7. 2008</p> <p>REF ID: LINDQVIST2008</p>	<p>Prospective cohort</p> <p>Sweden</p>	135 patients	<p>Patients with PsA (meeting CASPAR criteria) referred to rheumatology outpatients within 2 years of onset</p> <p>Assessed on inclusion and at follow-up after 2 years of conventional care.</p> <p>58% female, 42% male</p> <p>Mean age \pmSD: 47.3 \pm15.2 years</p> <p>Mean duration of psoriasis \pmSD: 11.4 \pm6.6 months</p> <p>DMARD on inclusion: 51 patients (38%)</p>	Disease duration	2 years	<p>Joint count</p> <p>PASI</p> <p>Lab values</p> <p>VAS</p> <p>HAQ</p> <p>Radiographs</p>	Not stated

Effect size

Radiological examination performed in 120 patients on inclusion: proliferation/destruction indicating PsA found in 24 patients (20%). 79 patients examined radiographically at 2 year follow-up, 23 (32%) of patients exhibited radiological changes consistent with PsA.

60 patients classified as mono/oligoarthritis at inclusion, 36 of those classified as mono/olgi at 2 years, 8 as polyarticular, 1 as axial, 1 as DIP and 14 as remission

64 polyarticular at inclusion, 26 mono/oligo at 2 years, 28 poly, 0 axial, 1 DIP, 9 remission

Significant reduction in:

Number of swollen joints, no of tender joints, ESR/CRP, pain (VAS), PGA

No significant change in HAQ, PASI

Mean \pm SD HAQ score at inclusion: 0.66 \pm 0.56, at 2 year follow-up 0.55 \pm 0.79

Outcome	Baseline	Follow-up	p-value (paired t-test)
N swollen joints	4.4 \pm 4.5	1.8 \pm 3.4	\leq 0.05
N tender joints	5.8 \pm 6.7	3.6 \pm 6.7	\leq 0.05
HAQ	0.43 \pm 0.26	0.25 \pm 0.29	NS
ESR (mm/h)	17.3 \pm 17.9	11.2 \pm 10.2	\leq 0.05

CRP (mg/l)	41.7±21.9	7.2±7.6	≤0.05
N with radiological damage compatible with PsA	24	33	NS
Pain VAS (mm)	44±24	34±26	≤0.05
17% in remission, radiological damage verified on inclusion or at follow-up in 31% of PsA patients			

Reference	Study type	Number of patients	Patient characteristics	Prognostic factors	Length of follow-up	Outcome measures	Source of funding
F. Cantini, L. Niccoli, C. Nannini, E. Cassara, P. Pasquetti, I. Olivieri, C. Salvarani. Frequency and duration of clinical remission in patients with peripheral psoriatic	Prospective case-control (comparison with RA not relevant to question; therefore cohort data used) Consecutive series Italy	236 (6/251 lost to follow-up)	All consecutive outpatients with peripheral PsA requiring second-line drugs observed between Jan 2000 and Dec 2005 at Rheumatology Unit Mean disease duration: 13 ±7.1 months	Disease duration	Mean 38 months	Clinical remission DMARD/biologic use	None declared

<p>arthritis requiring second-line drugs. <i>Rheumatology.</i> 47:872- 876.2008 REF ID: 268</p>							
<p>Effect size</p> <p>32.6% of patients were in remission after an average follow-up time of 38 months</p> <p>68% were on DMARD therapy and 32% were on anti-TNF-α biologic therapy (plus methorexate) after an average follow-up time of 38 months</p>							