

# Comparison of patients with axial PsA and patients with axSpA with concomitant psoriasis

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## Background

Psoriatic arthritis (PsA) is a chronic inflammatory disease affecting the peripheral and axial musculoskeletal system as well as skin and nails. Diagnostic criteria of axial PsA (axPsA) are not well defined. Treatment strategy is mostly based on evidence generated for axial spondyloarthritis (axSpA), as only rare clinical trial data for axPsA exist. However, it is still unclear whether axSpA with concomitant psoriasis (axSpA/psO) is the same as axPsA.

**Objectives:** To compare PsA patients with axial manifestations with axSpA patients with concomitant psoriasis.

## Patients & Methods

RABBIT-SpA is a prospective longitudinal cohort study including PsA and axSpA patients enrolled at start of a new conventional treatment or b/tsDMARD treatment. Two definitions of axPsA were used:

- Clinical definition: documentation of axial manifestation as diagnosed by a rheumatologist
- Radiographic definition: presence of sacroiliitis according to modified NY criteria (mNYC).

axSpA patients were stratified into axSpA/psO (with psoriasis either in patient history or present) and axSpA.

Depending on type of data, chi-square-test or t-test were used for comparison. P-values <0.05 are considered statistically significant.

## Conclusion

- Regardless whether clinical or radiographic definitions of axPsA were used, differences to axSpA/psO patients were identified.
- These data indicate a need for a specific diagnostic, and a potentially more targeted treatment approach for axPsA.

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## Results

Psoriasis was documented in 182/1407 axSpA patients (13%). 325/1350 PsA patients (24%) fulfilled clinical and/or radiographic definition (table 1).

295 (22%) fulfilled the clinical definition of axPsA. Using the radiographic definition, 127 (9%) PsA patients fulfilled mNYC, 230 (17%) did not fulfil mNYC and 993 (73%) did not undergo radiographic evaluation.

axSpA/psO patients differed from axPsA regardless of the definition (table 2). axPsA patients were older, less often HLA-B27 positive, and peripheral manifestations were much more often present in axPsA than in axSpA/psO. Uveitis and inflammatory bowel disease were more common in axSpA/psO.

In contrast, disease activity measured by physician global as well as patient global, and patient pain were similar in axSpA/psO and axPsA (table 2).

axPsA	Clinical criteria		
	yes	no	total
Radiographic criteria			
yes	97	30	127
no	76	154	230
missing	122	871	993
total	295	1055	1350

Table 3: Cross table of axPsA using clinical and radiographic definition, n

The cross table of the axPsA patients shows, that only 97/295 (33%) patients with clinical criteria fulfil mNYC. 30/127 (24%) patients of the patients fulfilling mNYC do not have clinical axial disease (table 3).

	axSpA with PsO (n=182)	axSpA without PsO (n=1225)	PsA with ax (n=325)	PsA without ax (n=1025)
female gender, n (%)	80 (44)	554 (45)	197 (61)	606 (59)
age, mean (SD)	47 (12.8)	44 (13)	51.4 (11.5)	52.3 (12.3)
Symptom duration [y], mean (SD)	13.9 (11.6)	11.6 (10.7)	10.6 (10.7)	8.6 (8.5)
HLA-B27 positive, n (%)	106 (67)	868 (76)	49 (23)	83 (16)
CRP ≥5 mg/l, n (%)	70 (42)	573 (55)	125 (43)	380 (43)
PhGA, mean (SD)	5.6 (2.1)	5.3 (1.9)	5.6 (1.9)	5.1 (1.8)
PtGA, mean (SD)	5.4 (2.6)	5.8 (2.3)	5.9 (2.3)	5.7 (2.4)

Table 1: Baseline criteria of axSpA and PsA patients

	axSpA with PsO (n=182)	PsA with ax (clinical) (n=295)	PsA with ax (radiographic) (n=127)
female gender, n (%)	80 (44)	178 (60)	80 (63)
age, mean (SD)	47 (12.8)	51.1 (11.3) *	51.6 (11.4) *
HLA-B27 positive, n (%)	106 (67.1)	44 (23) *	28 (32.9) *
CRP mg/l, mean (SD)	9.9 (15.2)	8.5 (12.5)	6.9 (11.5)
CRP ≥5 mg/l, n (%)	70 (42)	106 (40) *	50 (45.9) *
uveitis ever, n (%)	26 (14)	10 (3) *	7 (5.5) *
IBD ever, n (%)	13 (7)	14 (5) *	7 (5.5) *
peripheral manifestations, n (%)	65 (36)	251 (85) *	109 (85.8) *
PhGA, mean (SD)	5.6 (2.1)	5.6 (1.9)	5.6 (2)
PtGA, mean (SD)	5.4 (2.6)	5.9 (2.3)	5.8 (2.2)
Pt: pain, mean (SD)	5.5 (2.6)	5.7 (2.3)	5.7 (2.2)

Table 2: Comparison of axSpA/psO with axPsA with either clinical or radiographic definition; \*p<0.05