Conclusion: These newly developed and preliminary validated msk-US activity and damage scores could be used in patients with PsA in the context of observational and controlled trials.

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OP0224

CONTINUOUS COMPOSITE MEASURES FOR ROUTINE CARE IN PSORIATIC ARTHRITIS: THRESHOLDS OF MEANING AND CLINICALLY IMPORTANT DIFFERENCE ESTIMATES FOR THE 3 AND 4 VAS SCALES FROM A UK MULTICENTRE STUDY

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Background: There is a recognised need for a continuous composite measure of disease activity for the assessment of Psoriatic Arthritis (PsA) in routine clinical settings to allow objective assessment of response and implementation of treat to target.¹ Longer multidimensional measures are considered less feasible in routine care and a number of shorter measures have been proposed including, the Disease Activity Score for Psoriatic Arthritis (DAPSA), Disease Activity Score 28 (DAS28), the 3 Visual Analogue Scale (VAS) (comprising physician global VAS, patient global VAS and patient skin VAS) or 4 VAS (comprising physician global VAS, patient pain VAS, joint VAS and patient skin VAS). Testing of these measures in clinical trial datasets has been suggested but thresholds of meaning have not been established.²

Objectives: To estimate clinically relevant thresholds of disease activity and improvement for composite measures for routine clinical practice in PsA.

Methods: Clinical and patient reported outcome measures were assessed in patients fulfilling CASPAR criteria for PsA at three consecutive follow up visits in a UK multicentre observational study. Participants underwent clinical assessment and completed patient reported measures including health anchor questions. Estimates for Minimal Detectable Change (MDC) were derived using $1.96 \times 2 \times \text{Standard Error of the Mean (SEM)}$. Minimal Clinically Important Difference (MCID) for improvement were derived using the health anchor method and two distribution methods (Table 1). Thresholds for low, moderate and high disease activity were triangulated from established cut-off values for the patient global VAS, PASDAS and DAPSA.

Table 1. Minimal Clinically Important Difference (MCID) and Minimal detectable change (MDC)

	ANCHOR (MEDIAN)	DISTRIBUTION#1	DISTRIBUTION #2	MDC
CPDAI	0.5	1.49	1.5	4.16
GRACE	0.26	0.6	0.77	2.18
PASDAS	1.22	0.64	0.76	1.58
DAS28	0.2	0.85	0.62	1.46
3VAS	1.13	1.16	0.91	3.12
4VAS	1.11	0.96	0.94	2.45
DAPSA	7.25	9.09	10.40	35.63

Disease Activity Score for Psoriatic Arthritis (DAPSA); Psoriatic Arthritis Disease Activity Score (PASDAS); Composite Psoriatic Arthritis Disease Activity Index (CPDAI); Disease Activity Score 28 (DAS28). Distribution #1: Baseline standard deviation (sd) $\times \sqrt{1 - \text{Cronbach's alpha}}$ Distribution #2: $0.5 \times \text{baseline sd}$ Minimal detectable change (MDC): $1.96 \times 2 \times \text{SEM}$ where SEM = baseline sd $\times \sqrt{1 - \text{ICC}}$

Results: 139 subjects were recruited (59 male, 80 female, mean (range) age (years) 52.7 (19 – 83), mean (range) duration of psoriasis (years) 21.9 (2 – 71), mean (range) duration of psoriatic arthritis (years) 6.1 (0 – 41). Cut-off values for low, moderate and high disease activity were 1.3, 2.4, and 4.8 for the 3 VAS and 1.6, 2.8 and 5.0 for the 4 VAS (Figure 1). Estimates for the MCID and MDC for the continuous composite measures and are reported in Table 1.

Conclusion: We report estimates of clinically relevant improvements for continuous composite measures in PsA and estimates of low, moderate and high disease activity for the 3 and 4 VAS scales. The thresholds of meaning can now be tested in independent observational and clinical trial datasets.

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Figure 1: Thresholds of Meaning for the 3 and 4 VAS

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OP0225

DEPRESSIVE SYMPTOMS IN PSA: A CROSS-SECTIONAL ANALYSIS FROM THE NATIONAL GERMAN RABBIT-SPA REGISTRY

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Background: Psoriatic arthritis (PsA) is a chronic inflammatory disease affecting the musculoskeletal system as well as skin and nails. The prevalence of depression in psoriasis and PsA is high and ranges from 7-40% [1]. Persistent depressive mood may influence disease activity outcome in PsA, especially patient-reported outcomes.

Objectives: To assess the correlation of depressive symptoms with PsA-specific outcome parameters.

Methods: RABBIT-SpA is a prospective longitudinal cohort study including PsA patients enrolled at start of a new conventional treatment or b/tsDMARD treatment. In regularly provided follow-up questionnaires, physician- and patient-reported information on the disease course including the depression screening tool WHO-5 to assess mental health is collected. For the current analysis, the WHO-5 score was categorised into 4 groups using validated cut-offs: severe depressive symptoms <13, moderate depressive symptoms 13-28, mild depressive symptoms 29-50, well-being >50. Spearman correlation coefficient was calculated to analyse the relationship between the WHO-5 score and various PsA related outcome parameters.

Results: 936 PsA patients were included. Baseline characteristics are shown in Table 1. In 411 patients (43.9%) the WHO-5 score indicated well-being, 249