Hello, my name is Esther Beckers and on behalf of my coworkers I will present our recently published paper titled ‘Performance of 3 Composite Measures for Disease Activity in peripheral spondyloarthritis’.

Currently, there is no comprehensive tool available to assess disease activity in patients with peripheral SpA in clinical practice. In research settings, composite scores from related rheumatic diseases were used to assess disease activity in peripheral SpA. This included the DAPSA and PASDAS, that were developed for psoriatic arthritis, and the ASDAS that was developed for axial spondyloarthritis. Both the DAPSA and PASDAS are joint-based composite scores, while the ASDAS includes one general question related to peripheral joint pain and swelling.

The primary objective of this study was therefore to investigate the performance of these measures in peripheral SpA in clinical practice. This was done by studying their concurrent validity and discrimination across thresholds of disease activity. In addition, we performed subgroup analyses in patients with peripheral SpA with and without psoriasis.

Patients were included from an ongoing, disease-specific registry for SpA in daily practice in the Netherlands. We included 304 patients with peripheral SpA based on their current and past SpA features. Of these, 222 patients also had psoriasis. On average, the disease activity in these patients was low according to the DAPSA, moderate according to the PASDAS and high according to the ASDAS.

The validity was assessed by Spearman correlations of the three composite scores with other outcome measures for disease activity, functioning and health-related quality of life. Our results showed that the validity was acceptable for all three composite scores, as our hypotheses on the strength of association were correct in more than 75% of the correlations.

Discrimination was assessed by stratifying patients in predefined disease activity states of the composite scores and studying mean differences in other health outcomes by one-way ANOVA analyses. Our results for the discrimination showed that with worsening DAPSA, PASDAS or ASDAS disease activity states, significant worsening for nearly all other outcome measures was found. Subgroup analyses in patients with and without psoriasis showed that nearly all results for the validity and discrimination were comparable to the total peripheral SpA population.

Lastly, we studied the discrimination by determining the concordance in disease activity states among the three composite scores. We found that the ASDAS classified 48.4% of the patients as having high or very disease activity, which is shown in the blue box. While the PASDAS classified 4.0% of the patients as having high disease
activity, which is shown in the orange box, and the DAPSA classified only 0.8% of the patients as having HAD, which is shown in the red box.

When we also included patients with moderate disease activity by the DAPSA, we found that 21.8% of the patients were classified as having moderate or high disease activity and the difference compared to the ASDAS remained substantial.

Whereas when we included patients with moderate disease activity by the PASDAS, we found that 56.4% of the patients were classified as having moderate or high disease activity, which was higher compared to the ASDAS.

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In conclusion, based on results of clinical trial data and our results in daily practice, the DAPSA, PASDAS and ASDAS could be useful for measuring disease activity in peripheral SpA. However, the classification of individual patients in disease activity states, currently limits their use in clinical practice.

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If you would like to read more on this topic and on the findings of our study, I encourage you to read our full manuscript and the recently published editorial of Laura Coates and William Tillett at the Journal’s website. Thank you very much.