

## **ACR Convergence 2022**

12S142. Abstracts: Spondyloarthritis Including PsA – Treatment I: Axial Spondyloarthritis (0542–0547)

0543. An Exploratory Analysis of the Potential Disconnect between Objective Inflammatory Response and Clinical Response following Certolizumab Pegol Treatment in Patients with Active Axial Spondyloarthritis.

Presented by Dr. Martin Rudwaleit, University of Bielefeld.

This abstract explored the hypothesis that patient-reported outcomes may not reflect the degree of reduction in inflammation after treatment with certolizumab pegol (CZP) as evaluated by MRI of the SIJ and CRP levels.

Martin explained the study design, methodology, and patient demographics, then used Manhattan Plots to show patient characteristics and the results of the analysis.

The patient-reported outcomes were measured by ASDAS and BASDAI while the objective measures of inflammation used were CRP, ASspinMRI-Berlin Score, and SPARCC MRI SIJ Score.

There were some improvements but mixed results with patient-reported outcomes. But looking at the objective measures, there were dramatic improvements.

The conclusions of this post hoc analysis were that:

- differences in the impact of CZP on objectives measures of inflammation, as measured by MRI and CRP, and clinical measures of disease activity were observed, including at an individual patient level in patients with axSpA.
- CZP treatment resulted in a greater proportion of patients showing reductions in objective measures of inflammation compared with improvements in clinical symptoms and measures of disease activity.



• The use of clinical measures of disease activity as clinical endpoints may, therefore, underestimate object anti-inflammatory treatment effects. This may have implications for clinical evaluations and clinical trials.

During the Q&A following his presentation, Martin said that the results were not really surprising to the investigators because this is what is seen in clinical practice. Martin also said that there is more work to do on the analysis, such as stratifying for age, gender, etc.