

# Medical or Research Professionals / Clinicians - Abstract Submission

## Rheumatoid arthritis - prognosis, predictors and outcome

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### RADIOLOGICAL PROGRESSION IN REMISSION BY THE NEW ACR/EULAR CRITERIA FOR REMISSION: A COMPARISON TO OTHER ESTABLISHED REMISSION CRITERIA

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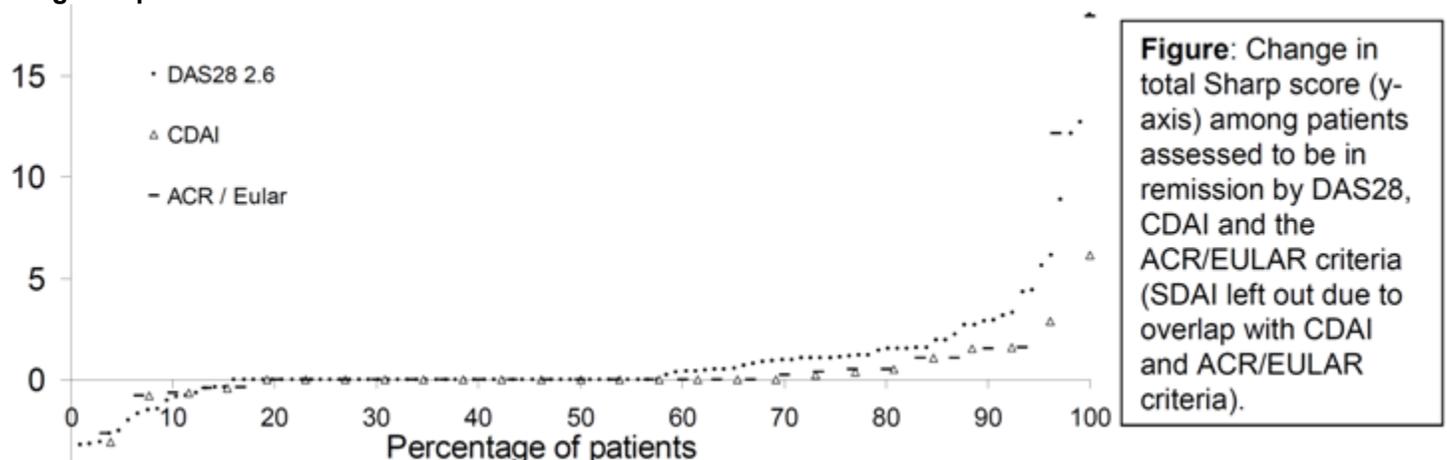
**Background:** New RA remission criteria were proposed by EULAR and ACR in 2010, aiming to identify patients with good functional and radiological outcomes.

**Objectives:** The objective of this study was to compare the subsequent rate of erosion progression among RA patients assessed to be in remission by common remission criteria, focusing on the performance of the new ACR/EULAR criteria.

**Methods:** 535 RA patients from BRASS, a single-centre prospective observational cohort, were included in the study. Disease activity was assessed at baseline, and X-rays at baseline and 2 years. The patients were treated according to clinical practice. X-rays were scored (Sharp method) by trained readers. A change of  $\geq 1$  unit/year in the total Sharp score was classified as progression. Remission threshold for DAS28 (calculated with CRP and 4 variables) was 2.6, SDAI 3.3, and CDAI 2.8. ACR/EULAR criteria require all of the following to be  $\leq 1$ : CRP in mg/dL, tender / swollen joints and patient global assessment (latter on a 0-10 scale). Patients were grouped according to remission status at baseline. Mean (SD) and median progression in Sharp score over two years and positive likelihood ratios for absence of progression were calculated for each remission criteria.

**Results:** The mean (SD) age for all 535 patients was 57.6 (12.7) years, disease duration was 14.2 (12.3) years, 442 (82.6%) were female, 359 (67%) were anti-CCP positive, 205 (38%) were on biologic therapy, and 339 (63%) were rheumatoid factor positive. The number of patients in remission at baseline was 106 (20%) for DAS28, 37 (7%) for SDAI, 26 (5%) for CDAI, and 30 (6%) for EULAR-ACR criteria. The percentages of biologic treatment among patients in remission ranged from 43% (DAS28) to 57% (SDAI). The mean (SD) annual change in Sharp score was 0.93 (2.9) for DAS28, 0.65 (2.4) for SDAI, 0.37(1.5) for CDAI and 1.08 (3.9) for ACR/EULAR criteria, although this was influenced by the distribution of the patients (see Figure). The median change in Sharp score was 0 for all groups. 30% (DAS28), 24% (SDAI), 19% (CDAI) and 20% (ACR/EULAR) were classified as progressors. The LR+ for good outcome (lack of radiological progression) was 1.5 for DAS28, 2.1 for SDAI, 2.8 for CDAI and 2.6 for ACR/EULAR criteria. The figure shows a cumulative probability plot for patients fulfilling the different remission criteria at baseline.

**Image/Graph:**



**Conclusions:** In this observational cohort, the new ACR/EULAR criteria performed similarly to established remission criteria with regards to subsequent 2-year change in Sharp score.

**Disclosure of Interest:** S. Lillegraven: None Declared, F. Prince Consultant for: Bristol-Myers Squibb, V. Bykerk: None Declared, N. Shadick Grant / Research support from: Crescendo Bioscience, Biogen Idec, Amgen, B. Lu: None Declared, M. Frits: None Declared, C. Iannaccone: None Declared, E. Haavardsholm: None Declared, T. Kvien: None Declared, M. Weinblatt Grant / Research support from: Crescendo Bioscience, Biogen Idec, Consultant for: Crescendo Bioscience, Biogen Idec, D. Solomon Grant / Research support from: Amgen, Abbott