Reviewer's report

Title: Relationship between time-integrated disease activity estimated by DAS28-CRP and radiographic progression of anatomical damage in patients with early rheumatoid arthritis

Version: 1 Date: 24 November 2010

Reviewer: Hilde Berner Hammer

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This study assesses the time-integrated disease activity estimated by DAS28-CRP versus radiographic damage after 3 years, and found the AUC of DAS28-CRP to have the highest predictive value for progression. Similar results have been found by other groups, and it adds to the knowledge that it is of major importance to reduce the disease activity early to reduce the radiographic damage. The present study also supports other studies by finding the presence of anti-CCP and RF to be associated with worse radiographic outcome.

Some minor comments:
1. Abstract; result: “The percentage of erosive disease increased from....” The percentage of what? Number of patients? Score?
2. Patients and methods; Laboratory investigations: Last sentence; “...whereas a titre of IgM-RF of 40 UI/ml was considered as positive.” Suppose it should be # 40 UI/ml.
3. Patients and methods; Statistical analysis: “The reliability of the scores was assessed using the intraclass....” Which scores? Radiographic?
4. Results; Increase of joint destruction: The SDD for radiographic damage was calculated to be able to differentiate between progressors and not progressors. Is it then correct to assess the increase in radiographic damage for the non-progressors? Wasn’t this group defined as non-progressors?
5. Results; Relationship between...; The first sentence is difficult to understand. If the AUC:DAS-CRP (it should be DAS28-CRP) is the sum over time, why is it lowest in the group with persisting disease activity?
6. Discussion; 7.line: The sentence “…levels of acute phase reactants are example of such factors” seems to miss some explaining words

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests