ASSESSMENT OF STRUCTURAL BENEFITS OF SC ABATACEPT USING MRI IN PATIENTS WITH RA WHO HAVE FAILED 1 OR 2 TNFS AND CORRELATED WITH CLINICAL OUTCOMES AS MEASURED BY DAS28(ESR)

Background

Previous studies\(^1\)^\(^2\) suggest the structural benefit of IV abatacept in patients with RA who have previously failed MTX, TNF therapy or both.

Objectives

This study evaluates the structural benefit of SC abatacept in a cohort of patients with RA, comparing the structural findings with clinical outcomes and measuring any difference between 1 or 2 TNF failure cohorts on stable MTX. average 17 mg/wk.

Methods

34 patients were enrolled over 18-months into an open-label 1-year trial. Patients received SC abatacept 125 mg/week on background MTX. Patients on prednisone remained on a stable dose <10 mg. daily. MRIs of the hands/wrists were performed on a 0.3T Esaote S-Scan and scored blinded using a modified OMERACT/RAMRIS scoring system at Baseline, Wks. 12, 24 and 48. A global response of progression, regression, or no change was calculated for each time point. Clinical outcomes were measured by a DAS28(ESR) at similar time points.

Results

27 patients completed; 7 patients discontinued including 3 treatment failures. Of the 27 patients who completed the trial, 15 patients had prior exposure to 1 TNF and 12 patients had prior exposure to 2 TNFs. The clinical and structural findings of each group were analyzed independently with respect to synovitis and osteitis. At the time of trial entry, and prior drug exposure. Structurally, there were patients in both groups who showed improvement in synovitis and osteitis by MRI, however, the patients who had only 1 prior TNF exposure had a more robust response overall for both synovitis and osteitis. Of the 27 completed patients, 25 were positive DAS28 responders. 2 patients were non-responders. Clinical remission was achieved in 4 patients, low disease activity in 8 patients, moderate disease activity in 6 patients, and high disease activity remained in 7 patients. Clinically, there was no clear trend to distinguish any difference between the two groups. In most of the patients both clinical and structural responses occurred within 6-months. 2 patients who had a clinical response at 6 months failed to sustain a response at 12 months. No adverse events were noted.

Conclusions

Overall, this small cohort of patients suggests that SC abatacept has clinical and structural benefit in patients who have had treatment with either 1 or 2 TNF’s and is a viable choice of therapy. The structural findings were comparable to the benefits of IV abatacept which have been previously published.\(^1\) The group that had 1 TNF exposure showed a greater improvement with respect to synovitis and osteitis than the population with 2 TNF exposure. It is possible that the structural benefit may be more robust when a switch from TNF therapy to an alternative mechanism of action such as abatacept is made after only 1 TNF failure. Further analysis is needed to determine if 6 months can be used as a cut-off point that prognosticates the value of continuing further therapy in the face of a lack of clinical and/or structural response; however this study suggests that if a response is not obtained at 6 months, it will not be obtained. In addition, a better understanding of the clinical/structural disconnect demonstrated is necessary to provide optimal management of RA patients.


\(^{2}\) Gaylis N, Needell S, EULAR 2010 Rome, Italy