Improving Drug Solubility for Inflammatory Arthritis Treatment: Sulfasalazine Niosome

**AB0393**

**Scientific Abstracts**

**Background:** Adalimumab significantly reduces the activity of rheumatoid arthritis (RA), but reliable biomarkers of inflammation are still lacking to predict and evaluate the therapeutic response. Serum calprotectin is a mainstay of endogenous activation of the inflammatory response that can be used as a marker of response to treatment in RA.

**Objectives:** To compare the evolution over time of serum calprotectin and C-Reactive Protein (CRP) after initiation of adalimumab.

**Methods:** Serum levels of calprotectin, CRP and adalimumab concentration were measured at visits V1 (week 0), V2 (week 4), V3 (week 8), V4 (week 12) and V5 (week 26). Changes of calprotectin were analyzed at each visit and each variable was compared to each other using a correlation test. Receiving operating characteristic curves were used to estimate the predictive value of response at V5 for calprotectin and CRP at each visit.

**Results:** Data from 66 patients were analyzed. Serum calprotectin level decreased from V1 to V5 (3.76 μg/mL [0 – 17.47] to 2.74 μg/mL [0 – 18.83]; p < 0.05). A positive correlation was observed between serum calprotectin and DSAS[8]ESR (Spearman 0.244; p < 0.01), and between CRP and DSAS[8]ESR (Spearman 0.512; p < 0.01) for all visits combined. In contrast to CRP, serum calprotectin and serum calprotectin variation from V1 at each visit, were not predictive of DSAS[8]ESR at V5.

**Conclusion:** Serum calprotectin after initiation of adalimumab in RA but was weakly correlated with disease activity at week 26. Serum calprotectin cannot be considered as superior to CRP as predictive marker of therapeutic response in RA after initiation of adalimumab.