

## **POSTER PRESENTATION**

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# Efficacy of adalimumab in sarcoidosis

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#### Introduction

Adverse effects and lack of specificity often hamper the use of conventional immunosuppressives in patients with systemic sarcoidosis. Adalimumab, a monoclonal antibody directed against the key cytokine involved in sarcoidosis, TNF- $\alpha$ , is used in patients with various immunological disorders [1]. Improved specificity, hence less adverse effects are the major advantages of this new class of drugs leading to an exponentially increasing role in their clinical use. However, few reports involving adalimumab in patients with sarcoidosis have been published so far and are restricted to case reports.

#### Aim

To investigate the effects of adalimumab in systemic sarcoidosis patients.

## **Methods**

Five patients with active, symptomatic and biopsy-proven systemic sarcoidosis received adalimumab in this proof of principle study. Therapeutic efficacy was monitored by CT-scans, somatostatin receptor-scintigraphy, pulmonary function tests and various inflammatory parameters.

## Results

Therapeutic and symptomatic response was seen in four out of five (80%) patients in the observational period of 12 weeks. This could be monitored by diminishing lymphadenopathy on the scans accompanied by a fall of inflammatory parameters (sIL-2R and IL-8). Increased serum levels of sIL-2R, IFN- $\gamma$  and IL-8 decreased in a fraction of the patients after treatment. Further cytokine analyses revealed that VEGF-C and DcR3 were initially elevated in sera of all patients, followed by decreasing levels after 12 weeks.

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### **Conclusions**

Most (80%) patients were considered to benefit from the adalimumab treatment.

Decrease of sIL-2R and IL-8 correlated with improvement on the scans and clinical symptoms.

Important and novel cytokines are VEGF-C and DcR3. These might play a major role in the pathogenesis and provide a basis for possible targets for new cytokine-directed therapy.

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