



POSTER PRESENTATION

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# Cytokine pattern in very early rheumatoid arthritis favours B cell activation and survival

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From 5th European Workshop on Immune-Mediated Inflammatory Diseases  
Sitges-Barcelona, Spain. 1-3 December 2010

## Introduction

B cells play an important role in the perpetuation of rheumatoid arthritis (RA), particularly as autoantibody producing cells. The immune complexes that further develop deposit in the joints and aggravate the inflammatory process. However, B cells contribution in the very early stage of the disease remains unknown.

## Aim

To determine the concentration of cytokines potentially relevant for B cell activation in serum from very early polyarthritis patients, with less than 6 weeks of disease duration, who later on evolved into RA (VERA).

## Patients and methods

APRIL, BAFF and IL-21 levels were measured by ELISA in the serum of VERA, other very early arthritis (VEA), established RA patients and controls. Synovial fluid (SF) samples of established RA were also analyzed.

## Results

VERA patients have higher levels of APRIL and BAFF as compared to VEA, established RA and controls. Furthermore, APRIL and BAFF levels are also significantly elevated in RA-SF when compared to serum.

## Conclusions

The increased levels of APRIL and BAFF in VERA patients suggests that B cell activation and the development of autoreactive B cell responses might be

crucial in early phases of RA. Therefore, APRIL and BAFF could be promising targets for therapy in the early phase of RA.

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Published: 25 November 2010

doi:10.1186/1479-5876-8-S1-P33

**Cite this article as:** Moura et al.: Cytokine pattern in very early rheumatoid arthritis favours B cell activation and survival. *Journal of Translational Medicine* 2010 **8**(Suppl 1):P33.

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