

Poster presentation

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## Analysis of the classical, alternative, and MBL pathways of the complement system in juvenile idiopathic arthritis

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from 15<sup>th</sup> Paediatric Rheumatology European Society (PreS) Congress  
London, UK. 14–17 September 2008

Published: 15 September 2008

*Pediatric Rheumatology* 2008, **6**(Suppl 1):P1 doi:10.1186/1546-0096-6-S1-P1

This abstract is available from: <http://www.ped-rheum.com/content/6/S1/P1>

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### Introduction

The complement system is involved in the host defence by recognition and elimination of potentially harmful exogenous and endogenous structures from the human body. Activation of complement may also promote inflammatory reactions and cause tissue damage if adequate control is not provided by the complement regulatory proteins. Significant amounts of biologically active products arising from complement activation have been detected in patients with rheumatoid arthritis.

### Objective

To investigate the role of complement cascade in juvenile idiopathic arthritis.

### Methods

12 serum samples and 2 samples from synovial fluid were obtained from 2 individuals with juvenile idiopathic arthritis (JIA). The complement kit for assessment of classical, alternative and MBL pathway activity was developed by the EU consortium and prepared centrally at Wieslab (Sweden).

### Results

The samples of synovial fluid showed a deficiency in the classical, alternative and MBL pathway of the complement system. The results in the sera were normal.

### Conclusion

Complement system might play a major role in the development of joint effusion in JIA.