

Poster presentation

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## Abatacept treatment improves health-related quality of life, pain, and sleep quality in juvenile idiopathic arthritis patients

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### Background and purpose

Health-related Quality of Life (HRQOL) in children with juvenile idiopathic arthritis (JIA) is significantly impaired due to pain, joint damage and inflammation. The purpose of this study was to examine the effect of abatacept treatment in JIA patients on HRQOL, pain and sleep quality.

### Methods

190 JIA patients were treated with abatacept for 4 months in an open-label lead-in period (Period A). ACR Pedi 30 responders ( $n = 123$ ) were then randomized 1:1 to receive abatacept or placebo for up to 6 months in a double-blind withdrawal period (Period B). HRQOL was assessed by the Child Health Questionnaire (CHQ), sleep quality was measured by the Children's Sleep Habits Questionnaire (CSHQ), and pain by a 0–100 mm VAS. Mean change from baseline in each period was calculated and compared between the treatment groups (in Period B), and the change over time was examined.

### Results

At study entry patients had considerably lower HRQOL than the general population. After 4 months of abatacept treatment in Period A, substantial improvements were seen across all patient reported measures. Improvements in CHQ scores were statistically significant in 14 out of 15 health concepts, with the greatest increase in the physical domain. Pain and sleep problems were statistically significantly reduced. At the end of Period B, most abatacept

patients maintained or continued these improvements, while placebo patients generally experienced declining HRQOL, increased pain and sleep problems.

### Conclusion

Abatacept treatment significantly improved multiple aspects of HRQOL, pain, and sleep quality in JIA patients. Such improvements were prolonged with continued abatacept therapy.