



POSTER PRESENTATION

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Interleukin (IL)- 6 inhibition - Follow-up data of the German AID-registry¹

M Bielak^{1*}, E Husmann¹, N Weyandt¹, JP Haas², G Horneff³, T Lutz⁴, E Lilienthal⁵, T Kallinich⁶, K Tenbrock⁷, R Berendes⁸, G Dückers⁹, H Wittkowski¹⁰, E Weißbarth-Riedel¹¹, G Heubner¹², PT Oommen¹³, J Klotsche¹⁴, U Neudorf¹, D Föll¹⁰, T Niehues⁹, E Lainka¹

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Introduction

Systemic juvenile idiopathic arthritis (SJIA) is regarded as an autoinflammatory disease (AID) of unknown etiology related to abnormalities of the innate immune system. A major role in the pathogenesis has been ascribed to proinflammatory cytokines as interleukin (IL)-6 and IL-1.

Objectives

Analysis of treatment results with the IL-6 inhibitor tocilizumab

Patients and methods

From 7/2009 to 4/2014 200 patients with SJIA were documented in the AID-registry. 46 of 200 patients (19 m, 27 f) at the age of 1-18 years (median 9) received therapy with tocilizumab (median 13 months, range 1-48). 24 of 46 patients received long term treatment (median 23 months, range 12-48) and were evaluated concerning Wallace criteria [1]. Different clinical courses were continuous (C) n=12, polycyclic (PC) n=16, arthritic (A) n=18. Besides we estimated a response rate (definition: no clinical manifestation and no inflammation parameters) in the first 12 weeks of treatment. Data are based on the AID-Registry (<http://www.aid-register.de>).

Results

According to Kaplan-Meier analysis 30% reached inactive disease or remission after the first 12 weeks of treatment. A rapid response to tocilizumab seems to be related to long term inactivity of SJIA. Comparison of the three disease courses (PC, C, A) revealed significant differences in the outcome; polycyclic courses show the

fastest response followed by continuous courses. Worst outcome was evaluated in arthritic courses. Wallace criteria measured after at least 12 months: remission 54%, active disease 25%, inactive disease 21%. 4 (9%) patients were non-responders over the whole time. 60% of the patients showed no measurable CRP within the first 4 weeks and during tocilizumab therapy. Adverse events were reported in 11 (24%) patients: most leukopenia, infections and elevated transaminases, one Hodgkin's lymphoma, one gut perforation.

Conclusion

A significant proportion of patients documented with SJIA in der German AID-registry is treated with tocilizumab (23%). We estimated a good response in the first 12 weeks of therapy of 30% and also by Wallace of 76% (inactive disease or remission). The response appears to depend on different disease phenotypes.

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Authors' details

¹Universitätsklinikum Essen, Kinderklinik, Essen, Germany. ²Klinik, Kinder- und Jugendrheumatologie, Garmisch-Partenkirchen, Germany. ³Asklepios Klinik St. Augustin, Pädiatrie, St. Augustin, Germany. ⁴Universitätsklinikum, Pädiatrie, Heidelberg, Germany. ⁵Ruhr-Universität Bochum, Pädiatrie, Bochum, Germany. ⁶Universitätsklinikum, Pädiatrie, Berlin, Germany. ⁷Universitätsklinikum, Pädiatrie, Aachen, Germany. ⁸Klinik, Pädiatrie, Landshut, Germany. ⁹Helios Klinik, Pädiatrie, Krefeld, Germany. ¹⁰Universitätsklinikum, Pädiatrische Rheumatologie, Münster, Germany. ¹¹Universitätsklinikum, Pädiatrische Rheumatologie, Hamburg, Germany. ¹²Städtisches Krankenhaus, Pädiatrie, Dresden, Germany. ¹³Universitätsklinikum, Pädiatrie, Düsseldorf, Germany. ¹⁴DRFZ, Epidemiologie, Berlin, Germany.

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¹Universitätsklinikum Essen, Kinderklinik, Essen, Germany
Full list of author information is available at the end of the article

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