Background: Juvenile Idiopathic Arthritis (JIA) is the most common auto-immune disease in children and pain is a common symptom. Despite treatment advances in recent years, pain often persists when the disease is inactive. Treating JIA to target has been widely recommended\(^1\), but effectiveness in pain reduction to 1 of 3 different treatment groups; 1) initial sequential DMARD monotherapy (e.g. DMARD naïve children who participated in the BeSt for kids study\(^2\)) with oligoarticular JIA, RF negative polyarticular JIA and juvenile psoriatic arthritis: 24-month clinical outcomes of a three-armed randomised trial. Ann Rheum Dis. 2019 Jan;78(1):51-59.


Results: 92 patients were randomized into the three treatment groups. Overall, pain scores over time reduced from mean 55.3 (SD 21.7) at baseline to 19.5 (SD 25.3) after 24 months. When comparing pain over time per arm, pain scores decreased significantly over time \(\beta \sim 1.37 \) (95% CI 1.726; -1.022). No significant difference was found in pain over time between treatment groups (interaction term treatment arm*time (months) \(\beta \sim 1.30 \) (95% CI 0.25; 0.65), VAS physician (scale 0-100) with \(\beta \sim 0.44 \) (95% CI 0.25; 0.65), VAS patient/parent and NSAID use were no significant predictors, Table 1.

Conclusion: Treatment to target seems effective in pain reduction in non-systemic JIA patients irrespective of initial treatment strategy. Several baseline predictors for pain over time were identified, which could serve as an initial indication for non-systemic JIA-patients with a high risk of pain despite a strict treat-to-target strategy.

REFERENCES:


Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.988

Table 1. Baseline Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>(\beta)</th>
<th>p-value</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAS Pain</td>
<td>0.45</td>
<td>0.000</td>
<td>0.25 to 0.65</td>
</tr>
<tr>
<td>VAS Physician</td>
<td>-0.31</td>
<td>0.014</td>
<td>-0.55 to -0.06</td>
</tr>
<tr>
<td>VAS Patient/parent</td>
<td>-0.02</td>
<td>0.873</td>
<td>-0.21 to 0.18</td>
</tr>
<tr>
<td>No. of active joints</td>
<td>0.77</td>
<td>0.009</td>
<td>0.19 to 1.34</td>
</tr>
<tr>
<td>Symptom duration (mo.)</td>
<td>-0.42</td>
<td>0.008</td>
<td>-0.72 to -0.11</td>
</tr>
<tr>
<td>PsS**</td>
<td>-0.42</td>
<td>0.022</td>
<td>-0.77 to -0.06</td>
</tr>
<tr>
<td>NSAID use</td>
<td>-1.50</td>
<td>0.791</td>
<td>-10.91 to 8.31</td>
</tr>
</tbody>
</table>

Figure 1 | VAS pain over time. Linear mixed models with random intercept and random slope for visits clustered within patients. VAS pain measured on a 100mm scale. Error bars indicate 95% confidence intervals.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.857

POS1300

PAIN IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS TREATED TO TARGET: 24 MONTH RESULTS FROM A RANDOMISED TRIAL

K. Spijkink, P. De Boer, S. A. Bergstra, B. A. van den Berg, D. Schonenberg-Meinema, L. A. W. van Suijlekom-Smit, M. Van Rossum, Y. Koopman-Kaemink, R. Ten Cate, C. Aillaart, D. M. C. Brinkman, P. C. E. Hiissink Muller, Leiden University Medical Center, Department of Pediatric Rheumatology, Leiden, Netherlands; Leiden University Medical Center, Department of Rheumatology, Leiden, Netherlands; Emma Children’s Hospital, Amsterdam University Medical Centers, Department of Pediatrics, Immunology, Rheumatology and Infectious Diseases, Amsterdam, Netherlands; Sophia Children’s Hospital Erasmus Medical Center, Department of Pediatrics/ Pediatric Rheumatology, Rotterdam, Netherlands; Emma Children’s Hospital, Amsterdam University Medical Centers, Department of Pediatrics, Amsterdam, Netherlands; Amsterdam Rheumatology and Immunology Center | Reade, Department of Pediatric Rheumatology, Amsterdam, Netherlands; Hagaziekenhuis Juliana Children’s Hospital, Department of Pediatrics, the Hague, Netherlands

Methods: predicting unfavorable pain outcomes.

Results: pain over time were compared using linear mixed models with random intercept and random slope for visits clustered within patients. A similar multivariable mixed model was used to assess the ability of several baseline characteristics to predict the chance of high pain levels during follow-up.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.995

POS1301

DRUG SURVIVAL OF BIOLOGICS WITH RESPECT TO COMBINATION WITH METHOTREXATE IN TREATMENT OF POLYARTICULAR JIA


Results: for sex and symptom duration as possible confounders yielded similar results. Multiple baseline characteristics demonstrated a significant predictive value for pain over time: VAS pain (scale 0-100) with \(\beta \sim -0.34 \) (95% CI -0.55; -0.06), number of active joints with \(\beta \sim -0.42 \) (-0.72; -0.11) and Psychosocial summary Score \(\beta \sim -0.42 \) (-0.77; -0.06).

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.989

Table 1.

<table>
<thead>
<tr>
<th>VAS Pain</th>
<th>VAS Physician</th>
<th>VAS Patient/parent</th>
<th>No. of active joints</th>
<th>Symptom duration (mo.)</th>
<th>PsS**</th>
<th>NSAID use</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.45</td>
<td>-0.31</td>
<td>-0.02</td>
<td>0.77</td>
<td>-0.42</td>
<td>-0.42</td>
<td>-1.50</td>
</tr>
<tr>
<td>0.000</td>
<td>0.014</td>
<td>0.873</td>
<td>0.009</td>
<td>0.008</td>
<td>0.022</td>
<td>0.791</td>
</tr>
<tr>
<td>0.25 to 0.65</td>
<td>-0.55 to -0.06</td>
<td>-0.21 to 0.18</td>
<td>0.19 to 1.34</td>
<td>-0.72 to -0.11</td>
<td>-0.77 to -0.06</td>
<td>-10.91 to 8.31</td>
</tr>
</tbody>
</table>

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.995

Downloaded from http://ard.bmj.com/ on September 15, 2023 by guest. Protected by copyright.
The patients diagnosed with FMF between January 1, 2017 and June 30, 2019, and followed for at least 6 months in our pediatric rheumatology clinic. Non-specific musculoskeletal findings such as myalgia, arthralgia, transient synovitis, and more rare manifestations like protracted febrile myalgia can also be explained and recurrent musculoskeletal symptoms, especially in ethnicities with high frequency of FMF, analysis of gene can help reveal the underlying cause.

**REFERENCES:**


**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2021-eular.1169

---

**POS1303 EXPERIENCE WITH ADALIMUAB BIOSIMILAR USE IN CLINICAL PRACTICE: DATA FROM THE GERMAN BIKER-REGISTRY**


1 Asklepios Clinic Sanit Augustin, General Paediatrics, Sankt Augustin, Germany; 2 MHH, Paediatrics, Hannover, Germany; 3 Office, Paediatrics, Goettingen, Germany; 4 Office, Paediatrics, Baden-Baden, Germany

**Background:** In 2017, Adalimumab Biosimilars became approved. Comparative studies to the originator have been performed in adult patients with rheumatoid arthritis, ankylosing spondylitis and psoriasis and extrapolation led to approval for juvenile idiopathic arthritis (JIA).

**Objectives:** So far there is limited experience with biosimilars in JIA. The large national data base of the BIKER-registry was used to describe experience with Adalimumab biosimilars in clinical practice.

**Methods:** This retrospective analysis used data of the German BIKER-registry. The data basis was screened for patients exposed to Adalimumab. Subcohorts with initiation of treatment after 2017, use of the originator and of biosimilars were built. The course of JADAS10, Physician global assessment VAS 0–100- on September 15, 2023 by guest. Protected by copyright.http://ard.bmj.com/ Ann Rheum Dis: first published as 10.1136/annrheumdis-2021-eular.995 on 19 May 2021. Downloaded from