SAT0438 REAL-WORLD TREATMENT PERSISTENCE WITH BIOLOGIC DISEASE MODIFYING ANTI-RHEUMATIC DRUGS AMONG GERMAN PATIENTS WITH PSORIATIC ARTHRITIS

P. Sewerin1, K. Borchert2, D. Meise2, J. Mahlich3,4, 1Heinrich-Heine University, Department for Rheumatology, Duesseldorf, Germany; 2Xendra GmbH, Hannover, Germany; 3Janssen-Cilag GmbH, Neuss, Germany; 4Heinrich-Heine University, Duesseldorf Institute for Competition Economics (DICE), Duesseldorf, Germany

Background: Persistence rates of biologic disease modifying antirheumatic drugs (bDMARDs), which refer to the duration of time from initiation to discontinuation or switch of therapy, have been shown to vary considerably depending on the country, types of health centers, as well as the specific drug being investigated. Evidence on treatment persistence of psoriatic arthritis (PsA) patients in Germany is scarce.

Objectives: Our aim was to study drug survival of bDMARDs in a German real-world cohort of adult biologic-naive psoriatic arthritis patients.

Methods: We utilized the German “Institut für angewandte Gesundheitsforschung Berlin” (InGef) research database consisting of about 4 million covered lives to represent the German population in terms of age and gender according to the Federal Office of Statistics (DESTATIS). Thereof, 2.9 million patients were continuously enrolled in the study period spanning from January 1 st, 2013 and December 31 st, 2018. For the analysis of persistence rates, the study population was identified based on the International Classification of Diseases, German Modification (ICD-10-GM) and claims records of biologic prescriptions based on ATC codes. Adult patients who had a diagnosis of psoriasis arthritis (L40.5 in combination with M07.0 or M07.1 or M07.3) in the inpatient or outpatient setting, and a claims record of biologic treatment licensed for psoriasis arthritis between January 1 st, 2014 to December 31 st, 2017 were included. Patients with Crohn’s disease (K50), ulcerative colitis (K51), ankylosing spondylitis (M45), and rheumatoid arthritis (M05-M07) were excluded. Biologic-naive patients were identified as those who had no prior record of bDMARDs prescription during the 12 months before the index date (washout). The index date was defined as the first claim for a biologic agent. Non-persistence occurred if a treatment gap exceeding the days of supply plus 60 days or a switch to a bDMARD other than the index therapy was observed. Days of supply were calculated based on the daily defined doses defined by the WHO for the respective bDMARDs. Kaplan-Meier curves were plotted to show the persistence of different biologics. The log-rank test was used to test for differences in the 1-year persistence rate.

Results: Among 10,954 patients with a diagnosis of PsA, 348 biologic-naive patients aged 18 years or above were identified. The one-year overall persistence rate was 57.5% for all bDMARD compounds. Reasons for non-persistence were switches to a different bDMARD agent in 15.8% of patients and 26.7% discontinued treatment. The highest persistence rate was observed for ustekinumab (81.3%), which was significantly higher than the respective rates for adalimumab (58.1%), certolizumab pegol (51.7%), etanercept (51.0%), or secukinumab (54.7%).

Conclusion: Persistent rates for a real-world cohort of German PsA patients are modest with significant variations among different bDMARD therapies.

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SAT0439 POWER DOPPLER ULTRASOUND ASSESSMENT OF A1 PULLEY: A NEW TARGET IN PSORIATIC ARTHRITIS?

G. Smerilli1, E. Cipolletta1, M. Di Carlo1, A. Di Matteo1, W. Grassi1, E. Filippucci1, 1Polytechnic University of Marche, Rheumatology Unit, Department of Clinical and Molecular Sciences, “Carlo Urbani” Hospital, Jesi, Italy

Background: In the last few years annual pulleys inflammation has been highlighted as a possible key pathogenic factor in psoriatic dactylitis, first with magnetic resonance imaging (MRI), then, in a very recent paper, with power Doppler (PD) ultrasound (US). However, the prevalence of PD US inflammation of annular pulleys in psoriatic arthritis (PsA) patients compared to rheumatoid arthritis (RA) patients has not been investigated yet.

Objectives: To determine the prevalence of PD US findings indicative of A1 pulley inflammation in PsA patients and in controls with RA and to preliminarily investigate the correlation between A1 pulley inflammation and disease activity (DAPSA).

Methods: Consecutive patients with PsA and RA were included in this cross-sectional single-centre study. A rheumatologist recorded demographic and clinical data and in the same day another rheumatologist performed the US examination using a MyLab ClassC (Esaote, Genova, Italy) equipped with a 10-22 MHz linear probe. A1 pulleys of fingers 2 nd to 5 th were assessed bilaterally adopting longitudinal and transverse scans. The following pathological US findings were recorded: inflammation of the pulley (defined as the presence of PD signal within a thickened pulley) and the number of the digital flexor tendons at finger level depending on OMERACT definition.

Results: Sixty patients were enrolled: 30 with PsA and 30 with RA. Inflammation of A1 pulley was found in 15 out 240 fingers (6.3%) of 8 (26.7%) PsA patients and in 1 out of 240 fingers (0.4%) of 1 (3.3%) RA patients (p=0.01 and p=0.03 respectively). Both pulley inflammation and tenosynovitis were correlated with DAPSA (Rpb=0.56, p=0.01 and Rpb=0.48, p<0.01). In fact, 7 out 8 (88%) PsA patients with at least one inflamed A1 pulley had a moderate/high disease activity score. The regression line analysis (R2=0.36, adjusted R2=0.31) showed that A1 pulley inflammation was correlated with higher DAPSA scores (p=0.43, p=0.03). No significant association was reported between A1 pulley inflammation and past or current episodes of dactylitis (p>0.05). However, the only current dactylitis assessed showed A1 pulley inflammation.

Conclusion: This pilot study demonstrated that ultrasound A1 pulley inflammation is a possible key pathogenic factor in psoriatic dactylitis and seems to be characteristic of PsA compared to RA. In psoriatic arthritis patients, a positive significant correlation was found between ultrasound A1 pulley inflammation and disease activity.

References:

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SAT0440 METHOTREXATE SURVIVAL RATE IN PATIENTS WITH PSORIATIC ARTHRITIS FROM PSORIATIC ARTHRITIS –INTERNATIONAL DATABASE (PSART-ID) COHORT

D. Solmaz1, U. Kalyoncu2, I. Tinazzi2, O. Bayindir4, A. Dogru5, Ç. Özçiler6, G. Kimyon8, G. Yildirim Cetin9, A. Omma10, E. Fañan1, L. Kilic1, S. Akar1, S. Yamaz1, M. Can2, S. Yavuz12, O. Küçük13, G. Smerilli1, E. Cipolletta1, M. DI Carlo1, A. DI Matteo1, W. Grassi1, G. Filippucci1, 1Polytechnic University of Marche, Rheumatology Unit, Department of Clinical and Molecular Sciences, “Carlo Urbani” Hospital, Jesi, Italy

Background: Methotrexate (MTX) has been the mainstay of treatment in psoriatic arthritis (PsA) patients for over 40 years. MTX survival rates have been reported within various geographical areas, however, large, multi-center investigations are scarce. The PsART-ID study was a cross-sectional study to evaluate the MTX survival rates in PsA patients treated in various geographical areas.

Methods: Consecutive patients with PsA were included in the study. MTX survival rate was defined as the proportion of patients treated with MTX for ≥12 months. Information on patient demographics, PsA disease activity, Psoriasis Disease Area Index (PsDAI), Dactylitis Activity Index (DAI), and concomitant medications were collected. Survival rates were calculated using Kaplan-Meier analysis, and compared between centres using a log-rank test. Cox regression analysis was used to evaluate the factors affecting survival rates.

Results: A total of 1146 patients were included in the study. The 12-month MTX survival rate was 74.8% (95% CI: 71.0-78.4). The MTX survival rate was significantly higher in the Eastern European centres (79.8%) compared to the Western European centres (72.1%) (p=0.04). The MTX survival rate in patients with a DAI ≥1 was significantly lower than in those with a DAI <1 (65.9% vs. 83.0%, p<0.01). In multivariate analysis, the DAI ≥1 was the only factor significantly associated with lower MTX survival rates (HR: 0.50, 95% CI: 0.32-0.78, p=0.002).

Conclusion: The MTX survival rate in PsA patients was lower than expected and was associated with increased disease activity. These findings highlight the need for future studies to investigate the reasons for the lower MTX survival rates and to develop strategies to improve MTX adherence in PsA patients.

References:

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