Table 1. Patient baseline characteristics

<table>
<thead>
<tr>
<th>RA (N=43)</th>
<th>axSpA (N=42)</th>
<th>PsA (N=38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD)</td>
<td>Q1, Q3</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>58.7 (11.3)</td>
<td>53, 64</td>
</tr>
<tr>
<td>Duration of disease (years)</td>
<td>6.8 (9.5)</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Women

Dosing regimen ADA to SB5:
- 40mg Q2W: 34, 85.0, 36, 85.7, 34, 89.5
- Other: 6, 15.0, 6, 14.3, 4, 10.5

Stable disease (physician opinion)
- 34, 9.1, 27, 65.9, 30, 85.7

DAS28 Disease Activity Score: Mean (SD) 95% CI
- BASDAI (n = 31) 2.71 (0.88) 2.36, 3.06
- PsA (n = 23) 0.3 (0.9)

Swollen joint: 2.9 (5.7) -0.1, 0.8

Tender joint: 0.4, 5.4

Patient Awareness: n % n % n %

Instructed in self-administration
- 43, 100.0, 37, 90.2, 35, 94.6

Know to remove SB5: 43, 100.0, 38, 95.0, 36, 97.3

Know SB5 can be stored out of fridge ≤2°C for 28 days: 42, 97.7, 33, 82.5, 28, 75.7

Conclusion: This interim analysis provides a first insight into a contemporary cohort of EU patients with established RA, axSpA, and PsA, switched from reference to biosimilar ADA in clinical practice. The majority of patients have stable disease at transition, 85% or more of each cohort transitioned to the same dose regimen of biosimilar as received for the reference prior to transition, and most are aware of correct storage and self-administration of their biosimilar medication. With ongoing enrolment and longer follow-up, the study will provide pertinent information about clinical outcomes of transition from reference to biosimilar adalimumab in real-world practice and in indications not investigated in controlled studies.

Disclosure of Interests: Ulf Müller-Ladner Speakers bureau: Biogen, Karl Gafney Grant/research support from: AbbVie, Celgene, MSD, Novartis, Pfizer, and UCB Pharma, Consultant of: AbbVie, Celgene, MSD, Novartis, Pfizer, and UCB Pharma, Speakers bureau: AbbVie, Celgene, MSD, Novartis, Pfizer, and UCB Pharma, Deepak Jadon: None declared, Ulrich Freudensprung Shareholder of: Biogen International GmbH, Employee of: Biogen International GmbH, Janet Addison Shareholder of: Biogen Idec, Employee of: Biogen Idec

AB0312 REAL-LIFE DATA ON THE USE OF BIOLOGICAL DMARDS IN RHEUMATOID ARTHRITIS IN AUSTRIA WITH SPECIAL ATTENTION TO SWITCHING AFTER FIRST DMARD FAILURE

V. Nell-Duexner1,2, B. Reichardt1, T. Stamm3,4, 1Austrian Social Health Insurance Fund (Österreichische Gesundheitskasse), Baden, Austria; 2Institute of Rheumatologie (IFR), Baden, Austria; 3Ludwig Boltzmann Institute Arthritis und Rehabilitation, Epidemiology, Vienna, Austria; 4Austrian Social Health Insurance Fund (Österreichische Gesundheitskasse), Eisenstadt, Austria; 5Institute of Outcomes Research, Medical University of Vienna, Vienna, Austria

Background: The introduction of biological disease modifying anti- rheumatic drugs (bDMARDs) offered new dimensions in controlling disease progress for patients with Rheumatoid Arthritis (RA). According to the recommendations by EULAR, treatment should be commenced with a conventional synthetic DMARD as soon as diagnosis is made, followed by a bDMARD after treatment failure. The choice of drug is done in respect to comorbidities, preference of the patient and costs.

Objectives: Drug expenditure data of 2012-2016 were retrieved to evaluate frequency of prescription and drug survival with special focus on switching habits after first bDMARD failure.

Methods: Data were extracted from 11 Austrian social health insurance funds covering 86% of the Austrian population. Only patients with first prescriptions of bDMARDs were included. Absolute and relative frequencies of first bDMARD prescriptions, second and third courses of bDMARDs (switches) and probabilities of drug survival of first line bDMARDs were calculated. Baselines were set individually at the beginning of the first bDMARD course. A Sankey diagram was used to illustrate the relationships between first, second and third courses of bDMARDs (Figure). The left first column represents the first bDMARDs, the second and third columns the second and third switched bDMARDs, respectively. The quantity of the bDMARDs is reflected in the width of the lines.

Results: 7837 RA patients on bDMARD therapy were retrieved in total. With a presumed prevalence of 0.5% (Ref) this would account for 27% of RA patients being treated with a bDMARD. Of these, 3813 were first time prescriptions. The most commonly prescribed drug in bDMARD naïve patients was Etanercept with 26%, followed by Adalimumab with 25%. Third was Tocilizumab followed by Golimumab (16% and 15%), Abatacept with 9% and Certolizumab and Infliximab with both 4%. Tocilizumab showed the longest drug survival with 80% after one and 61% of patients still on the drug after 3 years. Golimumab was clearly favorable among TNF inhibitors with a drug survival of 71% after one and 50% after 3 years compared to Cetoliuzumab showing the lowest with 63% after one year and only 38% after three years. Tocilizumab was the drug most often switched to after first course failure, followed by Adalimumab. The choice of second bDMARD was different: After Adalimumab failure more patients were switched to another mode of action (almost 50%), predominantly Tocilizumab. This is also seen after Golimumab failure and is less pronounced in the other TNF inhibitors: they were mostly switched to second TNF inhibitor, mainly Adalimumab. The majority of patients started on Tocilizumab and Abatacept were switched to a TNF inhibitor (74% and 58%, respectively). In third DMARD choice again Tocilizumab is mostly chosen followed by Abatacept, leaving 42% to a TNF inhibitor, mostly Golimumab.

Conclusion: Patients were most often started on a TNF inhibitor as first bDMARD, namely Etanercept and Adalimumab. Golimumab was prescribed less often but covered the longest drug survival among TNF inhibitors. Tocilizumab showed the longest drug survival overall and was the bDMARD most often switched to as second bDMARD. When starting with Adalimumab or Golimumab there was a tendency towards change of mode of action, which was not as pronounced for the other three TNF inhibitors. After failing twice Tocilizumab and Abatacept were the most often prescribed drugs.

References:

Acknowledgments: Austrian Main Social Health Association (Dachverband österreichische Sozialversicherung)

Disclosure of Interests: Valerie Nell-Duexner Speakers bureau: MSD, Pfizer, Jansen, Abbvie, Lilly, Novartis, Berthold Reichardt: None declared, Tanja Stamm Grant/research support from: AbbVie, Roche, Consultant of: AbbVie, Sanofi Genzyme, Speakers bureau: AbbVie, Roche, Sanofi

DOI: 10.1136/annrheumdis-2020-eular.5723

AB0313 CLINICAL PREDICTORS OF MULTIPLE FAILURES TO BIOLOGICAL THERAPY IN PATIENTS WITH RHEUMATOID ARTHRITIS.

M. Novella-Navarro1, C. Plasencia1, C. Tornero1, K. N. Franco Gomez1, I. Monjo1, V. Navarro-Compán1, D. Peiteado1, A. Balsa1, 1Hospital Universitario La Paz, Rheumatology, Madrid, Spain

Background: Biological therapies have improved the clinical course and quality of life of Rheumatoid Arthritis (RA) patients. Despite the availability and effectiveness of these treatments, some patients present multiple failures to biologic disease-modifying anti-rheumatic drugs (bDMARDs), constituting a challenge to clinicians.