(0.6%)]. Relapses were observed in 24 (14.4%) patients while on biologic therapy optimization, being more frequent with certolizumab and abatacept. The lowest rates of relapse were observed with infliximab, adalimumab and etanercept, while certolizumab and abatacept had the shorter time to relapse (table 1). Overall, the relapse rate was 5.5 per 100 patient-years with RA at risk (p=0.021) (figure 1).

Conclusion: Tapering bDMARD strategy was effective in our large RA cohort with 85.6% of patients remaining in remission during the follow up. Adalimumab, etanercept and tocilizumab were the bDMARDs with the longest time to relapse. These findings support the use of the tapering strategy in patients with established RA.

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Table 1. Median (IQR) time to relapse (years) according to bDMARD

Total (n=167)	2.5 (1.2 a 3.3)
Abatacept (n=14)	1.9 (1.4 a 2.9)
Adalimumab (n=27)	2.8 (1.6 a 3.0)
Certolizumab (n=7)	1.1 (0.7 a 1.6)
Etanercept (n=57)	3.2 (1.8 a 3.7)
Golimumab (n=11)	1.2 (1.1 a 2.7)
Infliximab (n=1)	8.2 (8.2 a 8.3)
Rituximab (n=4)	1.4 (1.2 a 1.8)
Tocilizumab (n=46)	1.7 (1.2 a 3.2)

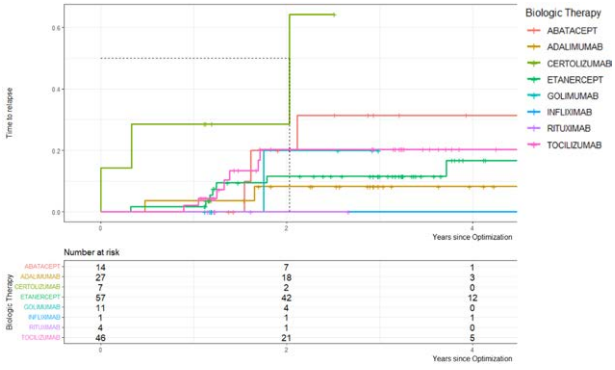

Figure 1. Relapse rate according to bDMARD

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AB0439 ADALIMUMAB AND NUMBER OF PREVIOUS BIOLOGICAL DISEASE-MODIFYING ANTIRHEUMATIC DRUGS AS PREDICTIVE FACTORS FOR THE DEVELOPMENT OF IMMUNE-MEDIATED SKIN LESIONS

Keywords: Skin, bDMARD

A. Martins[1,2], D. Santos Oliveira[1,2,3], F. R. Martins[4], R. Nicolau[5], F. Oliveira Pinheiro[1], M. Rato[1], A. Bernardo[1], S. Pimenta[1,2], M. Bernardes[1,2], L. Costa[1]. *[1]São João Universitary Hospital Center, Rheumatology, Porto, Portugal*; *[2]Faculdade de Medicina da Universidade do Porto - FMUP, Medicine, Porto, Portugal*; *[3]Faculdade de Medicina da Universidade do Porto - FMUP, CINTESIS, Porto, Portugal*; *[4]University Hospital Center of Algarve, Faro, Rheumatology, Faro, Portugal*; *[5]Centro Hospitalar Tondela - Viseu, Epe, Rheumatology, Viseu, Portugal*

Background: Treatment of inflammatory rheumatic diseases has dramatically changed with the introduction of biologic disease modifying anti-rheumatic drugs (bDMARDs). However, these drugs aren't exempt from risks and skin lesions are the most frequent adverse reactions. Among the possible adverse skin reactions, immune-mediated skin lesions (IMSL) may occur. Risk factors associated with the occurrence of IMSL in rheumatic patients under bDMARDs are poorly known and studied.

Objectives: To identify predictive factors for IMSL in patients with rheumatoid arthritis (RA), axial spondyloarthritis (axSpA) and psoriatic arthritis (PsA) under bDMARD therapy.

Methods: A retrospective single-center cohort study including patients with RA, axSpA and PsA followed at the Department of Rheumatology of a University Hospital Center between April 2000 and December 2021, treated with at least one bDMARD for at least 6 months was conducted. Data were collected from a national register of rheumatic patients (Reuma.pt) and medical records. Sociodemographic characteristics, disease duration, age at diagnosis, smoking and drinking habits, concomitant immunosuppressive medications, type and duration of the bDMARD treatment and number of previous bDMARD were collected. IMSL development were also collected. Independent samples t-test for normally distributed continuous data and chi-square tests for categorical variables was performed. Also, a multivariate logistic regression analysis was performed to identify possible predictive factors for the occurrence of IMSL. Odds ratios (ORs) and 95% confidence intervals (CIs) were calculated. Statistical significance was set at a p-value <0.05.

Results: From a total of 441 patients with RA, 386 with axSpA and 162 with PsA, 27 developed IMSL related to bDMARD (2.7%). Comparing the groups with and without IMSL, no differences were found regarding age, gender, BMI, presence of concomitant csDMARD or type of rheumatic disease. Patients with IMSL have a significant younger age at diagnosis (p=0.038), a longer disease duration (p=0.018) and a longer duration of bDMARD treatment (p=0.008). Patients with IMSL also have a higher number of previous bDMARDs (p<0.001) and adalimumab was the bDMARD with the higher risk of IMSL development (p<0.001). Table 1 described the demographic and clinical features of these two groups.

Table 1. Demographic and clinical features in patients with and without IMSL.

	With IMSL (n=27)	Without IMSL (n=962)	p-value
Age, mean ± SD, years	55.5 ± 14.0	52.2 ± 12.7	0.605
Female, n (%)	15 (55.6)	612 (63.6)	0.391
BMI, mean ± SD	25.4 ± 4.8	27.2 ± 7.5	0.227
Current/Former smoker, n (%)	10 (37.0)	327 (34.0)	0.477
Alcohol consumption, n (%)	4 (14.8)	140 (14.6)	0.599
Disease duration, mean ± SD, years	24.4 ± 12.7	19.2 ± 11.1	**0.018**
Duration of bDMARD treatment, mean ± SD, years	9.3 ± 4.4	6.6 ± 5.3	**0.008**
Age at diagnosis, mean ± SD, years	29.4 ± 12.8	35.0 ± 13.2	**0.038**
Number of previous bDMARDs, mean ± SD	1.6 ± 1.1	0.74 ± 0.84	**<0.001**
Presence of concomitant csDMARD, n (%)	10 (37.0)	467 (48.5)	0.238
Adalimumab vs other bDMARD, n (%)	14 (51.9)	211 (21.9)	**<0.001**

In a multivariate regression model, number of previous bDMARDs (OR 2.13, 95% CI 1.47 to 3.10, p<0.001) and treatment with adalimumab (OR 4.60, 95% CI 1.96 to 10.80, p<0.001) were statistically significant predictive factors for IMSL development.

Conclusion: In our cohort, we found that a younger age at diagnosis, longer disease duration, longer duration of bDMARD treatment, higher number of previous bDMARDs and treatment with adalimumab were independently associated with an increased risk of IMSL development. In the multivariate regression model, number of previous bDMARDs and exposure to adalimumab were statistically significant predictive factors for IMSL development. Further research is required to better understand and recognize the risk factors for IMSL.

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AB0440 CHANGES IN BONE BIOCHEMICAL MARKERS DUE TO THE INFLUENCE OF RISK FACTORS FOR OSTEOPOROSIS IN PATIENTS WITH RHEUMATOID ARTHRITIS TREATED WITH TUMOR NECROSIS FACTOR INHIBITORS

Keywords: Rheumatoid arthritis, bDMARD, Biomarkers

T. Janković[1], J. Zvekic Svorcan[1], K. Boskovic[1], A. Savic[1], A. Glavčić[1], I. Minaković[2]. *[1]Faculty of Medicine, University of Novi Sad, Special Hospital for Rheumatic Diseases, Rheumatology, Novi Sad, Serbia*; *[2]Faculty of Medicine, University of Novi Sad, Health Center "Novi Sad", Health Center, Novi Sad, Serbia*