Table 2.

Disease-modifying drug	<70 years old	≥70 years old	p
Methotrexate	72 (53.73%)	9 (40.91%)	0.667
Leflunomide	22 (16.42%)	5 (22.73%)	
Sulfasalazine	2 (1.49%)	1 (4.55%)	
Hydroxychloroquine	6 (4.48%)	0 (0%)	
At least two of the above	7 (5.22%)	1 (4.55%)	

Conclusion: DMARD concomitant treatment has been related to a higher second biological treatment survival. This beneficial effect was not observed in RA patients ≥70 years of age whose second biological agent withdrawal cause was failure. In this age group, withdrawal related to adverse events was more frequent.

References:

- [1] Kalden JR, Schulze-Koops H. Immunogenicity and loss of response to TNF inhibitors: implications for rheumatoid arthritis treatment. *Nature reviews Rheumatology*. 2017;13(12):707-718.

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AB0280

SURVIVAL ANALYSIS ON SECOND BIOLOGIC THERAPY IN PATIENTS WITH RHEUMATOID ARTHRITIS OLDER THAN 65 YEARS

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Background: Patients with Rheumatoid Arthritis (RA) ≥65 years old constitute an important and not very well studied group. Even though the course of the disease may be similar to that of younger patients, treatment is usually less aggressive given the limited information on efficacy, especially of biological treatments, in this age group.

Objectives: To describe the characteristics of patients with RA ≥65 years old who started a second biological agent. To compare the survival of this second-line treatment between patients ≥65 and <65 years old.

Methods: Retrospective, observational and longitudinal study. Patients diagnosed of RA, who started a second biological agent between 2000 and 2019, who discontinued a first-line TNF inhibitor, were included. Demographic, clinical and analytical data were obtained. The sample was divided in 2 groups: <65 and ≥65 years old. Kaplan Meier and Log-rank survival analysis were performed, as well as Cox regression to identify related factors.

Results: 157 patients were identified, 42 (26.8%) were ≥65 years old. In this group, 73.8% were women, with a mean age at the beginning of second biological treatment of 71.43±4.76 years. Demographic and clinical data of ≥65 years old patients are shown in the table. The most frequent second biological agent was Rituximab (23.8%), followed by Adalimumab (21.4%) and Tocilizumab (19%). 76.2% of patients had a disease-modifying drug associated, being Methotrexate the most frequent (45.2%). Discontinuation of second biological agent occurred in 30 patients (71.42%) ≥65 years old, which is similar to the percentage found in patients <65 years old (66.96%; p=0.70). The main causes of withdrawal of second-line agent in patients ≥65 years were adverse effects (23.8%) and secondary failure (23.8%), whereas in <65 years were primary and secondary failure (18.3% in both). Infections were more frequent in patients ≥65 years (14.3%) in comparison with patients <65 years (6.1%). In the survival analysis of the second biological agent, patients ≥65 years presented a median survival of 45 months (IC-95%=14.10-75.90); while patients <65 years had a median survival of 47 months (IC-95%=29.55-64.46), without statistically significant differences (p=0.803) (See Figure). Among elderly patients no statistically significant differences were found after comparison of survival curves in the subgroups: 65-69, 70-74 and ≥75 years. Rituximab presented a higher survival rate in patients ≥65 years (84.3 months; p<0.001), followed by Abatacept (58.5 months). Smoking (HR=13.96; IC-95%=2.12-91.93), erosions (HR=7.04; IC-95%=1.05-47.31) and diabetes mellitus (HR=13.37; IC-95%=1.25-143.46) were identified as risk factors for discontinuation of second biologic agent.

Conclusion: The survival of second biological agent after the failure of a first TNF inhibitor in patients ≥65 years is similar to the survival in younger patients, although there was a higher percentage of adverse effects in the first group. Rituximab and Abatacept showed a higher survival in patients ≥65 years. Smoking, erosions and diabetes mellitus were associated with an increased risk for the withdrawal of the second-line biological therapy.

References:

- [1] Richter M, Matteson E, Davis III J, Achenbach S, Crowson C. Comparison of Biologic Discontinuation in Patients With Elderly-Onset Versus Younger-Onset Rheumatoid Arthritis. *ACR Open Rheumatology*. 2019; 1(10): 627-631.

Variables	n= 42 (mean ± SD or %)
Age at diagnosis (years)	56.48 ± 9.94
Age at the beginning of the treatment (years)	71.43 ± 4.76
Women	31 (73.8%)
Smokers	11 (26.2%)
RF (+)	35 (83.3%)
ACPA (+)	30 (71.4%)
Erosions	29 (69%)
Arterial hypertension	21 (50%)
Diabetes mellitus	4 (9.5%)
Dyslipidemia	11 (26.2%)
Disease-modifying drug	
Methotrexate	19 (45.2%)
Leflunomide	10 (23.8%)
Sulfasalazine	1 (2.4%)
Hydroxychloroquine	0 (0%)
Infections	
Respiratory infection	3 (7.1%)
Skin/Soft tissues infections	2 (4.8%)
Herpes zoster	1 (2.4%)

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AB0281

SAFETY AND RETENTION RATE AFTER SWITCHING FROM ETANERCEPT ORIGINATOR (ETN) TO ETANERCEPT BIOSIMILAR (SB4) IN INFLAMMATORY JOINT DISEASES: DATA FROM REAL LIFE.

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Background: SB4 is now commonly used in the treatment of inflammatory joint diseases, with evidence of efficacy and persistence up to 12 months from switching in both randomized controlled trials in Rheumatoid Arthritis (RA), Psoriatic Arthritis (PsA) and Ankylosing Spondylitis (AS).

Objectives: we investigated the safety and retention rate of SB4 at 6, 12 and 18 months after switching from ETN in two rheumatology departments in our region.

Methods: adult patients with RA, PsA, AS, Juvenile Idiopathic Arthritis (JIA) and other rheumatic diseases treated with ETN for at least 6 months, switched to SB4 in stable clinical conditions, were eligible for this retrospective evaluation. Data on adverse events (in particular infectious events), loss of efficacy (articular, cutaneous, ocular or intestinal disease re-activation) and persistence on treatment were collected since latest available follow-up. Retention rate, reason for discontinuation and subsequent management data were collected at 6, 12, 18 months.

Results: 220 patients (142 females, mean age 58±7 years, disease duration 12±4 years, ETN duration 7±4 years) were enrolled, with median follow up of 12.1 (9.7-15.8) months duration; ETN was used in different biologic DMARDs treatment lines (first 76.8%, second 17.7%, third 3.2 %, fourth 2.3%). Study