Conclusion: Current evidence shows an increased risk of vaccine-preventable infections in patients with AIIRD, emphasizing that prevention of infections is essential in these patients.

REFERENCES:

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REMISION PERSISTENCE IN RHEUMATOID ARTHRITIS, PSORIATIC ARTHRITIS AND AXIAL SPONDYLOARTHRITIS UNDER BIOLOGIC TREATMENT
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Background: Patients with rheumatoid arthritis (RA), psoriatic arthritis (PsA) and axial spondyloarthritis (axSpA) under biologic treatment are increasingly achieving prolonged remission and tapering treatment is becoming standard practice. However, the optimal timing to start tapering remains unclear and predictors of loss of remission (LOR) are missing. Guidelines disagree on whether to wait for 6 or 12 months of sustained remission before tapering.

Objectives: To determine whether longer sustained remission (6 versus 12 months) influences subsequent LOR rates and to identify predictors of LOR.

Methods: We used the Rheumatic Diseases Portuguese Register (Reuma.pt) to identify RA, PsA and axSpA patients on stable biologic treatment in a single center and retrospectively analyze those who achieved sustained remission for at least 6 and 12 months. Survival analysis was used to characterize stability of remission and identify predictors of LOR. The Cox proportional hazards regression was stratified by diagnosis and adjusted for age, gender, smoking, baseline disease activity, type of biologic, previous switches and starting year of biologic treatment.

Results: 195 patients (100 RA, 51 PsA and 44 AxSpA) of 1078 patients (785 RA, 116 PsA, 177 axSpA) registered in Reuma.pt at a single center and treated with biologics between 1999 and 2018, had at least one remission period with a minimal duration of 6 months. This corresponded to 310 individual remission periods longer than 6 months, 232 of which (74.8%) were longer than 12 months. Median remission time (since the start of remission period) was 78.6 weeks overall vs. 99.0 weeks for patients with a minimum 12 months remission (difference in median survival: 20.4 weeks). PsA patients showed significantly longer remission periods (p<0.0001), followed by axSpA and RA. We identified active smoking (HR 1.96, p=0.008 for the total population; HR 1.53, p=0.20; HR 7.42, p=0.01, HR 0.74, p=0.79 for RA, PsA and axSpA, respectively), and infliximab use (HR 2.23, p=0.005 for the total population; HR 4.07, p<0.001, HR 3.20, p=0.36, HR 0.62, p=0.62 for RA, PsA and axSpA, respectively; subcutaneous TNF inhibitors (TNFi) used as index category) to be significantly associated with LOR. A sensitivity analysis excluding infliximab patients further suggested female gender (HR 3.21, p=0.005) and duration of disease until first biologic (HR 1.05, p=0.031) as important co-variates.

Figure 1. – time to loss of remission considering a single flare (a) vs. persistent flare (b), all patients (minimum 150 days in remission). Number of failure events indicated in parenthesis.

Figure 2. – time to loss of remission considering a single flare (a) vs. persistent flare (b), only patients with minimum 320 days in remission. Number of failure events indicated in parenthesis.
**Background:** Evidence suggests a critical role for inflammation in the pathogenesis of coronary artery/heart disease (CAD/CHD), implicating inflammatory molecules as central mediators of chronic inflammatory processes within the vascular wall. In this regard, patients with chronic inflammatory disease such as RA and SLE are at increased risk, which was attributed to the high levels of inflammatory mediators. However, less is known about the association of low-grade systemic inflammation with the cardiovascular risk.

**Objectives:** The aim of the present study was therefore to evaluate biomarkers representing low-grade systemic inflammation and their association with mortality in a large cohort of patients.

**Methods:** The Ludwigshafen Risk and Cardiovascular Health (LURIC) study included 3316 consecutive patients undergoing coronary angiography between June 1997 and May 2001 with a median follow-up of 9.9 years. Before coronary angiography fasting blood samples were collected and plasma levels of interleukin-6 (IL-6), C-reactive protein (CRP) and serum amyloid A (SAA) were measured by immunonephelometry. IL-6 and SAA polymorphisms were genotyped.

**Results:** During a median observation time of 9.9 years 949 deaths (30.3%) occurred, of these 597 (19.2%) died from cardiovascular events. During a median observation time of 9.9 years 949 deaths (30.3%) occurred, of these 597 (19.2%) died from cardiovascular events.

**Conclusion:** 6 vs. 12 months of sustained remission did not influence the subsequent rate of LOR. Smoking, the type of TNFα, female gender and duration of disease until biologic treatment were identified as predictors of LOR.

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