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AB0318

CHARACTERISTICS OF PATIENTS WITH RHEUMATOID ARTHRITIS WHO HAVE WITHDRAWN THE LAST BIOLOGICAL DRUG: REAL-LIFE RESULTS FROM A LOCAL REGISTRY

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Objectives: To assess the characteristics of patients with rheumatoid arthritis (RA), who have withdrawn the last biological drug (bDMARD), and to know the reasons for withdrawal of treatment.

Methods: Retrospective and cross-sectional study on December 31, 2019, of patients with RA, treated with any of the bDMARDs, including JAK (JAKi) inhibitor drugs, commonly used, from 1/1/2000 to 12/31/2019. General data were collected from patients, and RA: time of evolution, presence of rheumatoid factor (RF) and anti-citrullinated peptide antibodies (ACPA), type of bDMARD, time in bDMARD, and cause of withdrawal.

Results: Of 252 patients, who have received some bDMARD, 81 (32%) patients had withdrawn on 12/31/2019. 62 (77%) patients were women, with a mean age at diagnosis of RA of 48 years (SD: 16.5 years) and 59.5 (15) years at the beginning of the first bDMARD (F1), with an average evolution of RA 10.2 (2.5) years. 68% and 74% of patients were positive for RF and ACPA, respectively.

In 64 (79%) patients, bDMARD was withdrawn as second to fifth bDMARD received (F2 to F5): as F2: 37/81 (46%) patients, F3: 14 (18%), F4: 8 (10%) and as F5: (6%) patients.

When comparing the last bDMARD received, before the suspension as F1 vs F2-F5, 95% vs. 61% of patients ($p < 0.0001$), the drug was an anti-TNF (TNFi); Abatacept: 1 (1%) vs 9 (14%); Tocilizumab: 0% vs 8 (12%); Rituximab: 1 (1%) vs 5 (8%) and JAKi: 4 (5%) vs 3 (5%). The mean time in treatment with some bDMARD was 2.6 (SD: 3) years in the F1 group vs 1.7 (2) years in the F2-F5 group ($p = 0.034$). Among the F3-F5 patients, 9 (14%) patients had failed at 2 different previous therapeutic targets and 6 (9%) at 3 targets.

No differences were detected between the F1 group vs F2-F5, regarding the causes of withdrawal of bDMARD: whether it had occurred due to 1) loss of efficacy (25/31% patients vs 19/30%); 2) adverse events (31/38% vs. 29/45%): infection: 18/81 (22%) patients, malignancy: 5 (6%), malaise/pain: 11 (14%), laboratory parameters alteration: 7 (9%), death: 5 (6%), others: 14 (17%); 3) change of address/loss of follow-up (20/25% vs. 7/11%) or by 4) voluntary abandonment of treatment by the patient (5/6% vs. 9/14%).

Conclusion: 1. 32% of patients with RA withdraw the bDMARD. 2. The group treated with TNFi withdraws it significantly higher among the F1 group. 3. Survival of bDMARD is significantly higher in group F1 compared to F2-F5. 4. No differences were detected between the groups regarding the cause of withdrawal of bDMARD. 25% -30% of patients withdraw it due to loss of follow-up or voluntary abandonment of bDMARD.

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AB0319

DRUG SURVIVAL OF BIOLOGICS IN RHEUMATOID ARTHRITIS: PRELIMINARY DATA FROM THE TUNISIAN BINAR REGISTRY

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Background: The arrival of Biotherapy has changed the management and prognosis of rheumatoid arthritis (RA). However, drug survival of the first biotherapy is changing according to the studies.

Objectives: We aimed to report the data on the drug survival of biotherapies in RA, collected from the Tunisian Biologics National Registry (BINAR)

Methods: BINAR is a multicenter non-interventional and prospective study, conducted in Tunisia with 80 rheumatologists over a period of three years. It included patients with RA (ACR / EULAR 2010 criteria) and refractory to conventional background treatments (csDMARDs), who required the use of biological treatment of anti TNF, anti IL6 or Rituximab type. Data were collected and analyzed through an electronic platform managed by DACIMA. Sociodemographic data (age, gender, body mass index (BMI), smoking) and characteristics of RA (duration of evolution, erosive character) were collected. RA activity was studied by the DAS28-VS score and drug survival was evaluated by the duration of the biologics.

Results: We included 175 patients with a sex ratio of 5.7 and a mean age of 54.1 ± 12.6 years [19-79]. Patients were smoking in 6.7% of cases and mean BMI was 27.9 ± 5.2 kg/m² [15.1-45.2]. RA was erosive in 73.1% of cases and the mean disease duration was 6.7±3.5 years. Disease activity was moderate (mean DAS28vs: 4.9±1.5). Concerning the treatments, 139 (79.4%) of the patients received TNFα inhibitor, 31 (17.7%) of the patients were on IL6 inhibitor and 15 (8.6%) were on Rituximab.

The mean duration of drug survival for TNFα inhibitor agents was 15.2 months, 18 months for anti IL6 and 16.3 months for Rituximab. The drug was discontinued by 19 patients (10.8%). The causes of discontinuation were primary failure in 31.8% (7 subjects), secondary escape in 9.1% (4 subjects), the occurrence of adverse effects in 31.8% (7 subjects), intolerance to drug in 9.1% (2 subjects), non-compliance for one patient and for other reasons in one case.

The drug survival of TNF inhibitor was not associated with socio-demographic data (gender ($p=0.9$), age ($p=0.4$), smoking ($p=0.9$), BMI ($p=0.9$)), nor with the characteristics of the disease duration ($p = 0.5$), DAS28 vs ($p = 0.9$), association with a csDMARDs ($p = 0.2$) except the presence of erosion ($p = 0.013$).

Also, drug survival of IL6 inhibitor drugs was not associated with socio-demographic parameters (gender ($p = 0.1$), age ($p= 0.6$), smoking ($p= 0.6$), BMI ($p = 0.4$)) and the characteristics of the disease (duration ($p = 0.9$), erosive character ($p = 0.6$), DASvs ($p = 0.1$), association with a csDMARDs ($p = 0.2$)).

Similarly, drug survival of Rituximab was not associated with socio-demographic data (gender ($p = 0.6$), age ($p = 0.7$), BMI ($p = 0.7$)) or with the characteristics of RA (duration of evolution ($p= 0.5$), erosive character ($p = 0.6$), DASvs ($p = 0.08$), association with a csDMARDs ($p = 0.5$)).

Conclusion: Our study demonstrated that IL6 inhibitor had the longest duration of drug survival (18 months). The major causes of cessation were dominated by primary failure and the occurrence of an adverse event. Finally, the drug survival of TNF inhibitor agents was associated with the erosive character.

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AB0320

BDMARDS SURVIVAL: THE TUNISIAN DATA

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Background: The advent of biotherapies in the late 90s radically changed the face of inflammatory diseases including rheumatoid arthritis. The survival of these innovative therapies is an indicator, in clinical practice, of their long-term efficacy and safety.

Objectives: The objective of this study was to assess their use in Tunisia through their survival during rheumatoid arthritis as well as to determine the factors that may influence their therapeutic maintenance in real life.

Methods: This is a retrospective study including RA patients (ACR/EULAR 2010 criteria) and putted on biotherapy between 01-01-2014 and 12-31-2016. They were followed until 12-31-2018. The therapeutic maintenance rate at 12, 24, 36 and 48 months as well as the survival curves of biotherapies were analyzed using the Kaplan-Meier survival curves and compared by the Log-rank test. Reasons for interruption and patterns of biological change have been reported. Finally, an analysis of factors influencing survival was performed using Cox regression. A $p < 0.05$ was considered statistically significant.

Results: Three hundred seventy-four patients were included in the study; sex ratio was 0,147. The baseline age was 55 ± 12.5 years [20 – 90] and the average disease duration was 11.7 ± 6.7 years [2 – 41]. Rheumatoid factor and ACPA were positive respectively in 79% and 71% cases. After failure of cDMARD, the first biotherapy prescribed was etanercept in 54%