DURABILITY OF FIRST BIOLOGIC DISEASE-MODIFYING ANTIRHEUMATIC DRUG IS NOT INFLUENCED BY INITIAL/EARLY DAS28

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Background: The Ontario Best Practices Research Initiative (OBRI) collects data on RA treatment in a real-world setting. Patients are enrolled and prospectively followed to assess among other things, response to biologic Disease-Modifying Antirheumatic Drugs (bDMARDs) and conventional synthetic Disease-Modifying Antirheumatic Drug (csDMARD) therapy.

Objectives: The objective of this study was to look at a real-world population and determine if initial disease activity influences the durability of the first used biologic in RA treatment.

Methods: bDMARD-naïve RA patients were included if they started a biologic at baseline or at any time after entry into OBRI. For initial DAS, we used the DAS28 value between 6 months before and 3 months after the start of the first biologic, whichever was closer to the date of biologic use. Patients were censored at date of first biologic, or at date of last follow-up after initiation, whichever occurred first. Analysis was performed for all years of follow up, and also censored at 1.5 years. Persistence was defined as the length of time the patients continued to receive the drug, irrespective of change in dose, route, or addition of any other csDMARD or steroids. If the drug was stopped for <60 days after which the patient restarted the same medication, it was considered a continuation and the duration was calculated accordingly. Patients were divided into three groups for analysis based on initial DAS28 score: remission (≤2.60), medium to high DAS28 (2.61–5.10) and severe (>5.10). Survival was compared using KM curves.

Results: 563 patients were included. At 1 year, the survival probability was 0.78. The median survival of biologic was 57.8 (95% Confidence Interval: 42.2) months and with a mean survival of 44.5 (SE: 1.5) months. Patients who were on biologic monotherapy, with no concomitant csDMARD use, has worse persistence of their initial biologic. Figure 1 shows the KM Plot of survival on biologic stratified by DAS28. Despite the initial trend towards better survival associated with lower initial DAS, this was not statistically significant. Similarly, type of insurance (public/private) did not impact biologic survival. As seen in other studies, the only factor to impact longer persistence on initial biologic was use of a csDMARD with the bDMARD.

Conclusions: Early/initial DAS28 score did not impact patients' persistence on their initial bDMARD, nor did insurance type. This suggests that initial DAS28 score does not influence the durability of the first bDMARD in active RA. Combination of csDMARD and bDMARD was more durable than bDMARD monotherapy.

Disclosure of Interest: None declared

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