HPR Patients’ perspectives, functioning and health (descriptive: qualitative or quantitative).

Keywords: bDMARD, Patient reported outcomes, Rheumatoid arthritis

Objectives: Management of rheumatoid arthritis (RA) though continued use beyond initial failure

Methods: Data: PIONEER-Rheumatology, an EMR and open text-extracted database specific to care given by the American Rheumatology Network (ARN). Study population: Adult (18+ years) old patients with RA, TNFi-treated in 2018 to 2021. Full histories were assessed for each patient and index was set as the initiation date of the last TNFi observed for each patient prior to 2022. Reasons for discontinuation were extracted from chart notes and broadly classified (and sub-classified) as attrition (death, moved/lost practice, non-clinical reasons), lost to follow up (LTU, patient diseased), or clinical (treatment goal achieved, lack/loss of efficacy, or condition resulting from disease, treatment, or patient burden).

Results: 13994 patients and 19925 episodes (defined as distinct patient & TNFi drug) were examined. Of 13994 patients, 9399 (67%) received 1 TNFi, 3527 (25%) 2 TNFi, 1068 (8%) ≥3 TNFi; treatment patterns may have included intervening non-TNFi treatment cycles. [TABLE]

Background: Inhibitors of tumor necrosis factor-alpha (TNFi) are central to management of rheumatoid arthritis (RA) though continued use beyond initial failure is negatively associated with response to subsequent TNFi treatment.

Reasons for discontinuation/switch were available for 4254/4595 (93%) patients treated with 2+ or 3+ distinct TNFi, respectively. Lack of efficacy was the reason for 1 or more TNFi discontinuations prior to the last TNFi received for 2689/4254 (63%) and 829/998 (83%) of patients with 2+ or 3+ TNFi, respectively. For a patient subset with ≥1 year history pre-index, prior failure of 1 TNFi was observed for 2690/3765 (71%) and 814/936 (87%) patients who received 2+ or 3+ TNFi, respectively.

Conclusion: A third of TNFi-treated study patients received >1 TNFi with most (67%, 100%) patients treated with 2+ or 3+ distinct TNFi, respectively. Lack of efficacy was the reason for 1 or more TNFi discontinuations prior to the last TNFi received for 2689/4254 (63%) and 829/998 (83%) of patients with 2+ or 3+ TNFi, respectively. For a patient subset with ≥1 year history pre-index, prior failure of 1 TNFi was observed for 2690/3765 (71%) and 814/936 (87%) patients who received 2+ or 3+ TNFi, respectively.

REFERENCE:


Acknowledgements: This study was supported by Scipher Medicine.

Keywords: bDMARD, Real-world evidence, Rheumatoid arthritis

Methods: Data: PIONEER-Rheumatology, an EMR and open text-extracted database specific to care given by the American Rheumatology Network (ARN). Study population: Adult RA patients who received TNFi as initial targeted synthetic or bDMARD treatment between Jan 2014 to Apr 2022 after csDMARDs. Assessments: CDAI, RAPID3, DAS28 (includes DAS28-CP, DAS28-ESR), tender/swollen joints (TSJ), pain score, and HAQ; closest to but within -180 days of TNFi initiation. Paired (± 30 days) CDAI, RAPID3, and DAS28 assessed via Pearson correlation.

Results: 2811/3682 (76%) patients had 1+ DAM prior to TNFi initiation; 2332/3682 (63%) pain score, 2047/3682 (56%) TSJ, 1570/3682 (43%) DAS28, 1442/3682 (39%) RAPID3, 1430/3682 (39%) CDAI, and 143 (4%) HAQ; Of the 2331/3682 patients with RAPID3, DAS28, or CDAI, 982/2331 (42%) had near-remission/low disease activity by at least 1 DAM prior to index. 582 patients had paired CDAI and RAPID3 scores; moderate/severe disease was indicated for 474/582 (81%) by CDAI and 395/582 (68%) by RAPID3 (p<0.001) and 163/582 (28%) of patients were indicated as near-remission/low by one DAM but as moderate/severe by the other. Correlations between paired DAMs: strong for CDAI:DAS28 (n=1063, r=0.788) and moderate for CDAI:RAPID3 (n=582, r=0.399) and for RAPID3:DAS28 (n=637, r=0.331) and RAPID3:HAQ (n=143, r=0.157).

Conclusion: DAMs were not present for 24% of study patients at initiation of TNFi. Of patients with RAPID3, DAS28, or CDAI, 42% patients started TNFi despite near-remission/low disease activity. Where conducted, paired DAS28-RAPID3 and CDAI-RAPID3 scores were moderately correlated though severity categories for CDAI:RAPID3 were discordant for 28% of evaluated patients. These results suggest that clinical decision-making to initiate TNFi does not rely solely on standard DAMs.