P140 AS WE MOVE TO USING SHORT-ACTING DRUGS FOR THE TREATMENT OF RA IN THE TIME OF A PANDEMIC, DOES BARICITINIB LIVE UP TO ITS TRIAL DATA IN CLINICAL PRACTICE?

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Background/Aims
Baricitinib is an oral, reversible and selective inhibitor of JAK1 and JAK2 tyrosine kinases. It was approved for use in 2017 by NICE for the treatment of moderate to severe rheumatoid arthritis (RA). Considering the current risk of COVID-19, the BSR have advocated the use of short-acting drugs such as baricitinib when escalating treatment in RA. As real-world data is limited, we aimed to explore the efficacy of baricitinib in clinical practice.
Methods
Observational data was collected retrospectively for patients at the Dudley Group NHSFT with RA (ACR/EULAR criteria) who had received at least one dose of baricitinib prior to 1st October 2019, with a follow up period to 1st October 2020. Patients were identified from a local biologics database. Further data was identified from patients' medical records including, demographics, features of RA, previous RA therapy history and disease activity scores (DAS28) at 0, 6 and 12 months. Data was input into an Excel spreadsheet with subsequent analysis conducted using SPSS Version26.
Results
We identified 26 RA patients (77% female) treated with baricitinib; mean age 61.6 (SD 14.6) years and median disease duration of 12.1 (IQR 5.8-18.4) years. Rheumatoid factor and anti-CCP antibody were positive in 73% and 65% respectively. 35% ($n = 9$) of patients were biologically naïve, in whom baricitinib was chosen due to needle-phobia ($n = 7$), or where anti-TNF drugs were considered inappropriate (bronchiectasis, ANA positivity). Mean DAS28 (SD) scores at baseline, 6 and 12 months were 5.9(0.8), 2.8(0.9) and 2.7(1.3) respectively, with significant reduction from baseline to both 6 and 12 months ($P < 0.001$). A drop of ≥ 1.2 in DAS28 was recorded in 94% of patients with complete data at 6 months ($n = 18$, 4 missing, 4 discontinued). At 6 and 12 months, 85% and 81% of patients remained on Baricitinib. In total five patients discontinued Baricitinib due to side effects or tolerability issues. Reasons for discontinuation did not include thromboembolic events, zoster or serious infections. When comparing naïve and non-naïve groups, there was no significant difference in age, sex or disease duration. The number of previous biologics used by patients were 1($n = 6$), 2($n = 3$), ≥ 3($n = 8$). Biologically naive compared to non-naïve patients had a higher DAS28 at baseline, (Mean [SD]) (6.2[0.9] versus 5.7[0.8] NS) but lower at 6 months (2.1[1.6] versus 3.1[1.1] $P = 0.023$) and greater DAS improvement at 6months (-4.4[1.2] versus -2.5[0.9] $P < 0.002$).
Conclusion
We observed that up to 94% of patients responded to baricitinib with a mean DAS improvement at 6 months of -3.1, biologic naïve patients doing best. Drug survival at 12 months was 81%. These trends are comparable to findings in clinical trials. However, due to our small sample size, the findings are vulnerable to type 1 and 2 errors and should be interpreted with caution.
Disclosure
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