

Time to discontinuation of Tofacitinib in patients with rheumatoid arthritis with and without methotrexate: results from the Ontario Best Practices Research Initiative (OBRI)

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Background:

Tofacitinib (TOFA) is an oral, small molecule drug which can be used as an alternative to biologic disease modifying antirheumatic drugs (bDMARDs) for rheumatoid arthritis (RA) treatment and is prescribed alone or with methotrexate (MTX).

Objectives:

We aimed to evaluate the discontinuation rate of this drug, with and without concurrent MTX, with and without prior biologic use, in patients with RA using real world data from a Canadian (Ontario) observational cohort.

Methods:

Patients enrolled in the Ontario Best Practices Research Initiative (OBRI) who started TOFA after its approval in Canada (June 2014) were included in the analysis. Patients were followed from TOFA initiation until discontinuation, death, lost to follow-up, or last visit, whichever came first. Time to discontinuation of TOFA, due to any reason, in patients 1) with or without concurrent MTX use; 2) with or without prior biologic use was assessed using Kaplan-Meier survival analysis.

Results:

Among the 131 patients, 70 (53.4%) received TOFA without MTX and 61 (46.6%) TOFA with MTX. Mean (SD) age and disease duration were 60.2 (0.90) years and 13.7 (0.80) years, respectively. The majority were females (89.3%) and most had prior biologic use history (74.0%). At baseline, no significant differences in disease activity and sociodemographic profiles were found between the two groups of patients with and without concurrent MTX use. Discontinuation was reported in 44 (33.6%) of all TOFA patients with a median survival of 31.3 months. Overall retention of TOFA at 6, 12 and 24 months was 80.5%, 63.1% and 53.5% respectively. These findings are very similar to the results reported from the RHUMADATA registry at ACR 2018.¹ Fifteen (34.0%) patients stopped their TOFA due to non-response/loss of response, 22 (50.0%) due to adverse events, and 7 (16%) due to other reasons.

At 6 and 12 months' follow-up, more patients remained on TOFA in the 'TOFA with MTX' group (88.3% and 73.1%, respectively) compared to the 'TOFA without MTX' group (73.9% and 54.6%, respectively) (Logrank $p=0.05$). There was no significant difference in TOFA discontinuation between the two groups of patients with and without prior biologic use (Logrank $p=0.77$).

Conclusions:

We found that half of the RA patients remained on TOFA 31 months after initiation. Patients also stayed on TOFA longer when they concurrently used MTX compared to TOFA without MTX.

References:

1. Choquette D, Bessette L, Brown J, Haraoui B, Massicotte F, Pelletier JP, Raynauld JP, Rémillard MA, Sauvageau D, Turcotte A, Villeneuve É, Coupal L. Tofacitinib Show Similar Retention When Used with and without Methotrexate. Analysis from the Rhumadata® Clinical Database and Registry [abstract]. *Arthritis Rheumatol*. 2018; 70 (suppl 10).