

Comparing Academic and Community Practices in the Management of Rheumatoid Arthritis: Data from the OBRI Registry

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Objectives: Rheumatologists vary in their management of rheumatoid arthritis (RA). The treat-to-target paradigm requires responsive treatment escalation to obtain low disease activity and prevent morbidity. Advanced Therapy (bDMARD or tsDMARD) initiation requires rheumatologists' time and effort. Given resources differences between settings, we aimed to determine if time to Advanced Therapy (AT) initiation, or switch, in patients with moderate-high disease activity differed between community and academic practices in Ontario.

Methods: We included adult patients enrolled in the Ontario Best Practices Research Initiative (OBRI) registry between 2008-2019 with at least 2 visits and 6 months of follow-up with moderate-high disease activity. Population A included those with at least 2 months of combined csDMARD therapy (either Methotrexate and Leflunomide; or Methotrexate, Sulfasalazine and Plaquenil) who ultimately started AT. Population B included those on any AT who ultimately switched AT. We used independent adjusted cox proportional hazards models to compare academic and community settings in time from first recorded moderate-high disease activity to initiation, or switch in AT. We completed exploratory analyses to assess disease activity at the 3 visits prior to therapy change, and time-to-therapy change between those started on bDMARDs and tsDMARDs. Results: Baseline characteristics were similar between community and academic settings in both population A (n=135) and B (n=453). Swollen joint count was 1 higher and RA duration was slightly longer in the academic setting. There was no difference between community and academic settings in time to initiation or switch in AT before and after adjustment. In both settings, there was a significant delay in starting AT: on average 241 days following first moderate-severe disease activity while on combination csDMARDs. Across three visits leading to therapy change, disease activity and swollen joint count were high (mean CDAI: 24; mean SJC: 6.3). These were lower numerically for new tsDMARD starts (mean CDAI: 5.9; mean SJC: 1.8).

Conclusion: Conclusions are limited due to the study's small sample size and observational nature. We found no difference in prescriber response to moderate-high disease activity between community and academic settings. Ontario Rheumatologists are allowing for significant delays during which disease is uncontrolled prior to initiating AT, however we could not account for therapeutic dose adjustment. We propose that paperwork burden may be contributing, thus we will next compare time to initiation between AT with and without Limited Use codes.