





# DRUG SURVIVAL OF BIOLOGICAL THERAPY IN RHEUMATOID ARTHRITIS FROM BRAZILIAN PUBLIC HEALTH SYSTEM – SISTEMA UNICO DE SAUDE (SUS)

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# BACKGROUND

Biological therapies for rheumatoid arthritis (RA) are of high cost and resources of Public Health System (SUS) in Brazil. Studies on treatment survival and switching strategies are important for public health assistance system planning.

### MATERIALS AND METHODS

All RA patients that received biological therapy from public pharmacies of Espírito Santo State (SUS), between January/2010 -April/2017 was analyzed about biological prescription frequency and drug survival (DS).

### RESULTS

84% were female aged 50-70 years. The anti-TNF was the main biological prescribed as first line when compared to non-aTNF (92,3% vs. 7.5%, p < 0.05). The median DS for the first biological was 59,61 months (CI 95%; 56.69-62.52) and was similar between groups (p=0.517). The three most prescribed were adalimumab (ADA) 40% (n= 361), infliximab (IFX) 20% (n= 180) and etanercept (ETN) 19% (n=168), however IFX had the lowest DS when compared to ADA and ETA ( 50.06 vs 61.64 vs 60.14 months, p =0.01). Regarding to non-aTNF, tocilizumab (TOCI) had the lowest frequency of failure 7%(n=1) as first line. About 27% patients had switched to a second biological, the anti-TNF was the main biological prescribed vs. non-aTNF (65% vs 35%, p<0.05). The three most were ADA (25%, n=60), ETA (23%, n =57) and ABA (19%, n=46). DS for the second biological therapy (p=0.412). TOCI had the lower frequency of failure 16% (n=5) as a second line therapy. About 24.5% had switched to a third biological, the non-aTNF was the main biological prescribed vs. anti-TNF (68.63% vs 31.67%, p<0.05). The three most were ABA (15%, n=18), TOCI (27%, n=16) and ETA (15%, n=9). The DS for third biological was 28 months (CI 95%; 23.12-33.33), and there was no difference between groups and each biological second biological (p> 0.05).

# CONCLUSION

The anti-TNF was the most prescribed biological as first and second line, reflecting its accessibility in SUS, once only these biological were available before 2015. The non-aTNF were the most prescribed as third line therapy reflecting better access after 2015 and previous failure to anti-TNF. IFX had the lowest DS as first line, but we had no information regarding doses and reason to discontinuation. TOCI had the lowest frequency of failure, but the number of patients was the small to take conclusion. Prospective studies are needed to compare drug survival between biologicals aiming better public health assistance planning.