



Failure Predictors to Anti-Tumor Necrosis Antagonists in Patients with Chronic Arthritis: Results of a National Registry BIOBADASAR

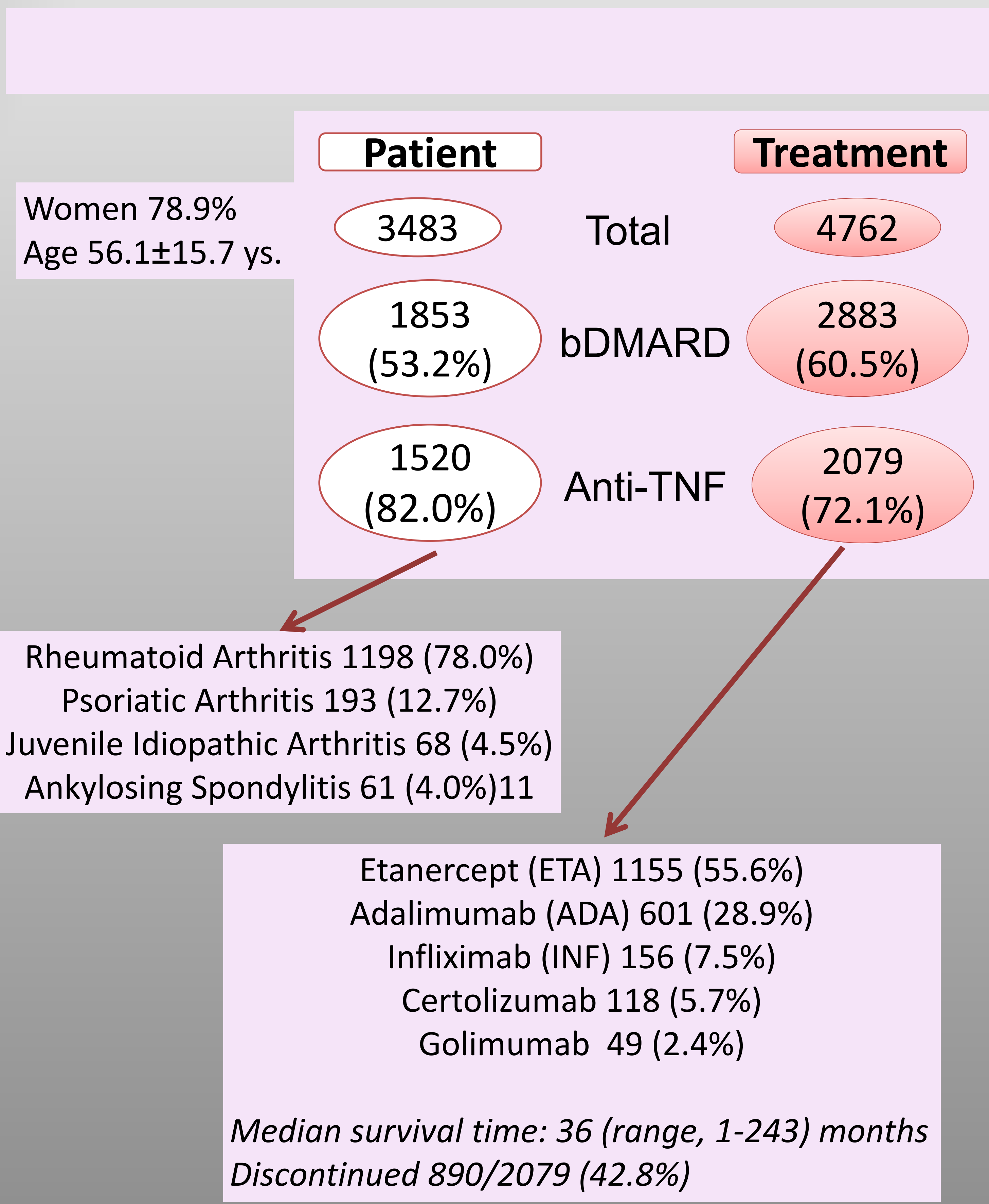
Haye Salinas MJ, Retamozo S, Alvarellos A, Caeiro F, Pirola JP, Baenas DF, De la Vega MC, Casado G, Gómez G, Robertti JR, Cerda OL, Gandino IJ, Quinteros A, Exeni I, Barrios B, Barreira JC, Gobbi C, Alvarez A, Granel A, Peluzzon A, Cappuccio AM, Nieto R, Quintana R, Mussano E, Scarafia S, García M, De la Sota M, Kirmayr K, Velozo E, Agüero S, Battagliotti C, Soares de Souza S, Cavillon E, Bohr A, Smichowski A, Benitez A, Vidal D, Pereira D, Martinez L, Somma LF, Zalazar M, Curi PF, Carlevaris L, Berbotto G, Saurit V.

Background and purposes

The beneficial effect of anti-tumor necrosis antagonist (TNF) in arthritis has been well documented in several studies clinics. However, in some cases anti-TNF are not effective or are interrupted by side effects; a series of studies of clinical practice indicate that up to 50% of all patients discontinue their anti-TNF α treatment during the first 3 years. Aim objective is analyze failure predictors to anti-TNF in patients who have switched these drugs during the treatment of chronic arthritis.

Methods and Materials

Biobadasar is database of rheumatic diseases patients treated with biologic drugs in Argentina. Created in 2010, it includes patients with a diagnosis according to accepted criteria treated with biologic drug therapy and controls not treated with biologic drugs. Using this registry (January 2016), we have analyzed patient switching of TNF antagonists. The log-rank test was used to compare survival curves, and Cox regression models were used to assess independent factors associated with discontinuing medication.

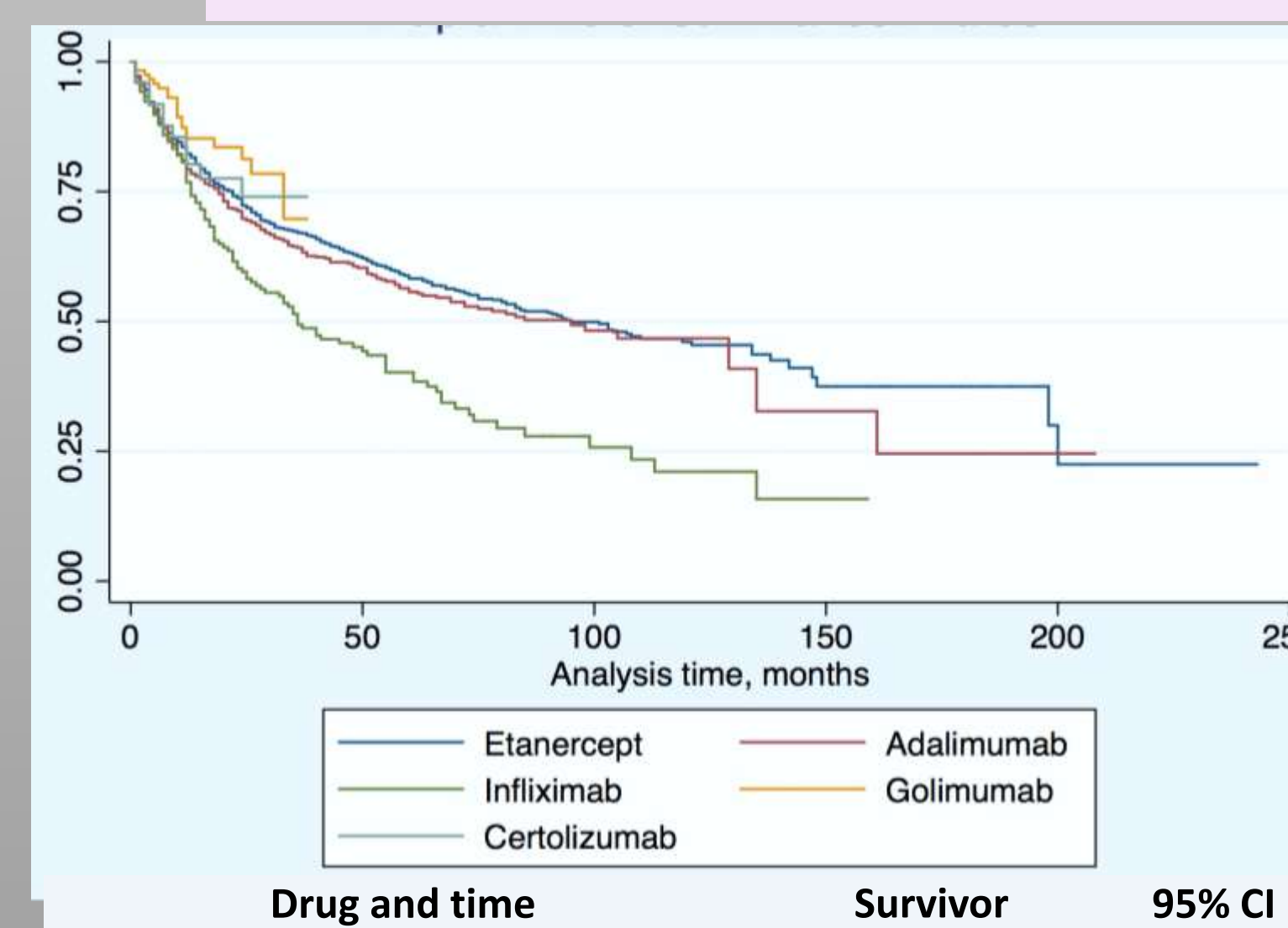


Result

Table 1. Reasons for Discontinuation of Anti-tumor Necrosis Antagonists Treatments

Reason	Etanercept	Adalimumab	Infliximab	Certolizumab	Golimumab	Total
Lack of efficacy, n(%)	183(36.5)	101(39.9)	54(51.9)*	8(40.0)	4(36.4)	350(39.3)
Adverse events, n(%)	147(29.3)	83(32.8)	31(29.8)	8(40)	5(45.5)	274(30.8)
Other, no coverage, n(%)	117(23.3)*	44(17.4)	9(8.7)*	2(10.0)	1(9.1)	173(19.4)
Lost to follow-up, n(%)	33(6.6)	17(6.7)	7(6.7)	0(0)	0(0)	57(6.4)
Pregnancy, n(%)	10(2.0)	3(1.2)	0(0)	2(10.0)*	0(0)	15(1.7)
Unknown, n(%)	8(1.6)	3(1.2)	1(1.0)	0(0)	1(9.1)	13(1.5)
Remission, n(%)	4(0.8)	2(0.8)	2(1.9)	0(0)	0(0)	8(0.9)

*P<0.05



Drug and time	Survivor function	95% CI
Etanercept	12 months	0.82
	24 months	0.72
Adalimumab	12 months	0.79
	24 months	0.70
Infliximab	12 months	0.77
	24 months	0.60
Certolizumab	12 months	0.85
	24 months	0.81
Golimumab	12 months	0.80
	24 months	0.74

Table 2. Failure Predictors of Discontinuation. Logistic Regression Model

	OD (95%CI)	P
Infliximab	2.394 (1.669-3.434)	< 0.001
Corticosteroid Concomitant use	1.998 (1.654-2.414)	< 0.001
Smoking	1.461 (1.076-1.984)	0.015
Age, ≥ 60 years.	1.012 (1.005-1.018)	< 0.001
Methotrexate Concomitant use	0.702 (0.575-0.858)	0.001
Golimumab	0.358 (0.179-0.713)	0.003
Certolizumab	0.261 (0.158-0.431)	< 0.001

Conclusions

We found higher rates of discontinuation of Anti-TNF. Higher frequency of discontinuation due to inefficacy in INF and lack of coverage by insurance in ETA. Specific analysis of failure predictors identified being a ≥60 years old, a smoker and use of corticoids and INF in patients with chronic arthritis. On the other hand, the concomitant use of Methotrexate had a protective effect.

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