

PERSISTENCE WITH DISEASE-MODIFYING THERAPY IN MULTIPLE SCLEROSIS PATIENTS

Narrillos Moraza A¹, Martín Barbero M.L.¹, Gómez Costas D¹, García Domínguez J.M.², Herranz Alonso A.¹, Sanjurjo-Sáez M¹

¹ Pharmacy Department. Hospital General Universitario Gregorio Marañón. Madrid, Spain. ² Neurology Department. Hospital General Universitario Gregorio Marañón. Madrid, Spain.

OBJECTIVES

Given the difficulty of measuring the health outcome of disease-modifying therapies (DMTs), persistence to DMTs could be a good indirect measure. Our purpose is to analyze persistence and time to discontinuation (TD) of DMTs in patients with Relapsing-Remitting Multiple Sclerosis (RRMS) in a tertiary hospital.

MATERIALS AND METHODS

DESIGN: retrospective, observational study was conducted in patients with RRMS who started DMTs with interferon- β (INF- β), glatiramer acetate (GA), teriflunomide, dimethyl fumarate (DF), fingolimod, natalizumab and alemtuzumab between 2016 and 2019. Persistence to DMTs was calculated until April 2020 and defined as the length of time on the drug.

VARIABLES: demographics (sex, age), Expanded Disability Status Scale (EDSS) at baseline, number of previous DMTs, TD, global persistence and persistence to DMT and causes of discontinuation. Data were obtained from electronic health record.

RESULTS

492 patients were followed for a median time of **19.6 months**, **69.3% women**, **median age 40 years**.

250 (50.8%) were naïve and **242 (49.2%)** pretreated. Median EDSS was **1(0-6)** in naïve patients and **2(0-7)** in pretreated patients. DMTs prescribed are shown in [figure 1](#).

Global persistence was 66.2% ([figure 2](#)).

Time to discontinuation (TD) was considered in those patients who discontinued DMT during the study (89, 18,1%).

Median TD (months (range)) **was 14** (1-35). Natalizumab showed the longest TD (29 (27-31)), and DF the shortest TD (7,5 (1-11)) ([figure 3](#)).

Main reasons for discontinuation were “**intolerance/adverse effects**” (**46,51%**) and “**lack of efficacy**” (**32.56%**), as displayed on [figure 4](#).

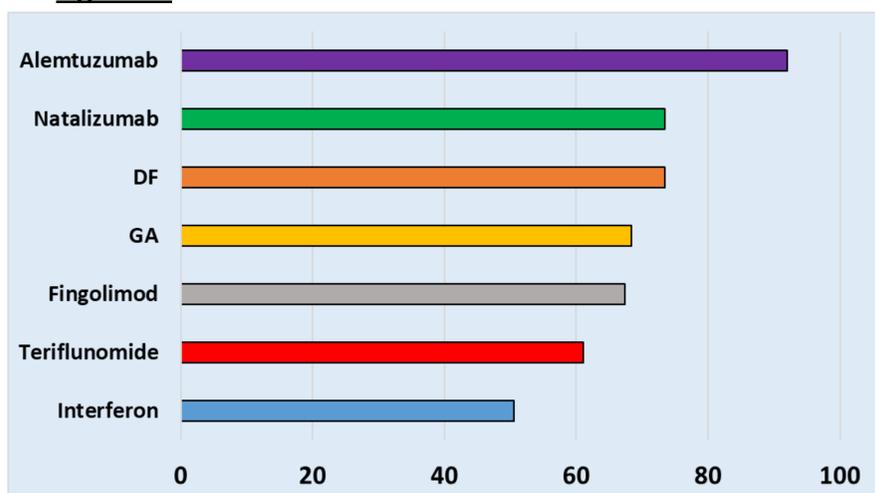


Figure 1: Persistence (%)

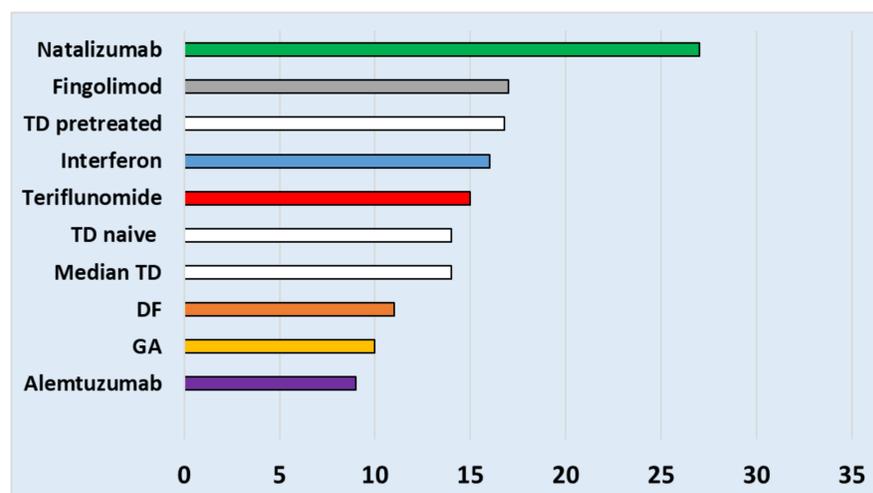


Figure 2: Time to discontinuation (months)

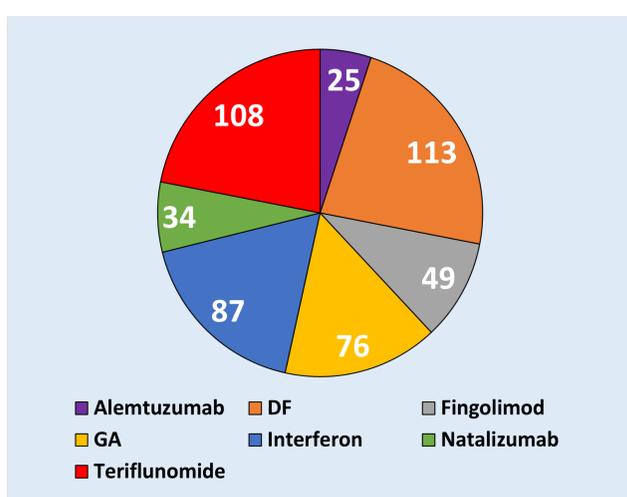


Figure 3: DMTs prescribed

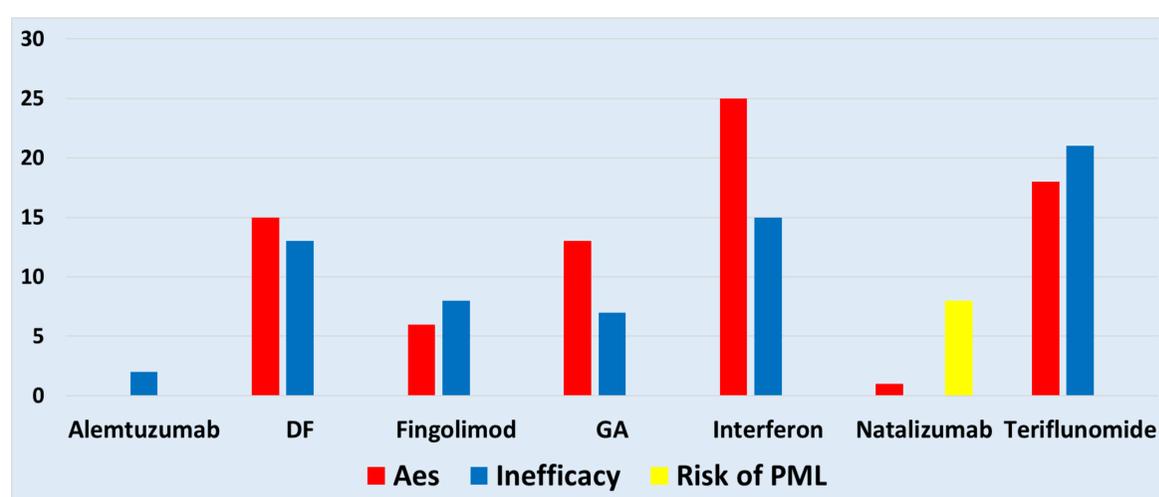


Figure 4: Reasons for discontinuation (N)

CONCLUSION AND RELEVANCE

Our cohort showed a high persistence rate. TD may be a useful indicator in order to differentiate the reason for DMTs change; higher TD may be associated with lack of efficacy and short TD with intolerance.