

# REAL-WORLD PERSISTENCE WITH FAMPRIDINE AMONG MULTIPLE SCLEROSIS PATIENTS

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## Background and Importance

 Fampridine is the only pharmacological agent approved for walking impairment in multiple sclerosis. Medication persistence is an important element in determining the success of any long-term therapy and real-life utilization data are especially important to optimize resources.

## Aim and Objectives

 To evaluate the persistence of fampridine in multiple sclerosis patients, reasons for discontinuation and the influence of predictive factors.

## Materials and Methods



Observational  
Retrospective  
Longitudinal



All adults with multiple sclerosis treated with fampridine



Start of treatment – end observation period (August 2021)



**Persistence:**  
Duration of time from initiation to discontinuation of therapy.

Calculated as the count of days from the index prescription to the date of the final dispensing or end of the observation period. Persistence after the first year of treatment was also assessed.

**Adherence** was measured as medication possession ratio (MPR). Data were collected from drug dispensation records (Farmatools®).

**Sociodemographic and clinical factors** were collected from medical record

- Age at the start of fampridine
- Age of diagnosis multiple sclerosis
- Phenotype
- Baseline Expanded disability status scale (EDDS)
- Treatment with disease-modifying therapies (DMTs)
- Treatment with anti-spasticity agents
- Walking support request

For the analysis of persistence a survival analysis with the Kaplan–Meier estimator was performed. Influence of covariates was evaluated according to a Cox-regression model. All statistical analyses were performed using SPSS®V24.0. Significance level was 0.05.

## Results

 **51**  
62.7% female  
Baseline EDDS=5±1.3

Age	mean±SD years
MS diagnosis	37.3±12.6
Start with fampridine	49.7±10.0

DM Phenotype	%
Relapsing remitting	49.0
Secondary progressive	41.2
Primary progressive	9.8

	%
DMTs	68.6
Anti-spasticity agents	60.8
Walking support	58.8

**Median adherence first year 98.5±4.5%**  
**Median persistence duration 1.756 days**  
**Median time to suspension 84 days (IQR=28-262)**  
**Medication suspension rate on first year 31.4%**  
**Overall medication suspension rate 13/100 patients-year (IC95% 8.1-17.9)**

**Predictive factors:**  
**Age of DM diagnosis**  
 HR=1.05  
 (CI95% 1.01-1.07:  
 p=0.007).

Discontinuation reasons	%
Lack of efficacy	57.9
Adverse effects	23.1
Both	14.3

## Conclusion and Relevance

A high percentage of patients discontinued treatment with fampridine, mainly due to lack of efficacy. Most discontinuations occur in the first year of treatment.