



# Severe infections in patients with multiple sclerosis: a nationwide registry study in Argentina

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# Severe infections in patients with multiple sclerosis: a nationwide registry study in Argentina



## Conflicts of interest

The authors do not have any potential financial conflict of interest relating to this poster.

Unrestrictive research grants from Biogen Argentina, Genzyme Argentina, Merck Argentina, Novartis Argentina and Roche Argentina allowed the development and implementation of the Registry (RelevarEM). Those grants did not interfere in the development plan, variables, PI selection, patient information nor other aspects of the Registry.

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## Introduction and objectives

Data on the rates of infections among patients with multiple sclerosis (MS) are sparse and even more from Latin American countries.

The aim of the present study was to quantify the incidence of severe infections (SI) in patients with MS included in the Argentinean MS and NMOSD registry (RelevarEM, NCT 03375177).

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## Methods

RelevarEM is a longitudinal, strictly observational MS and NMOSD registry in Argentina. From May 2018 to March 2020, the centers and principal investigators were contacted and incorporated into the Registry.

SI were defined as those that required intravenous treatment or that led to hospitalization or death.



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## Results

A total of 2158 patients with MS were included, mean age 42 (IIQ 34-52), 65,5% (1576) were female, 82,3% were Relapsing Remitting MS. During the period (May 2018-March 2020), 28 SI were reported (IR 1.16, 95%CI 0.77-1.68). In patients with SI, the mean age was 54 (min 43- max 63,  $p < 0.01$ ) years), 11 (39%) were secondary progressive MS ( $p < 0.01$ ), the mean EDSS was 6.5 (range 5-8) ( $p < 0.01$ ), mean disease duration 12 years ( $p < 0.01$ ). 42% of patients were free of MS treatment while 17% were on injectables, 25% on orals and 10% on monoclonal antibodies ( $p = 0.24$ ). The most common sites of severe infection were the lower respiratory tract (39%).

# Results



Variables	Patients (n=28)
<b>Age</b>	54 (43-63)
<b>Female gender</b>	15 (53,57%)
<b>Diagnosis:</b>	
- Relapsing remiting multiple sclerosis	11 (39,29%)
- Secondary progresive multiple sclerosis	11 (39,29%)
- Primary progresive multiple sclerosis	3 (10,71%)
- Neuromielitis optica spectrum disorders	3 (10,71%)
<b>Evolution of the disease in years</b>	12 (6,5-22)
<b>EDSS</b>	6,75 (5,25-8)
<b>Relationship with treatment:</b>	
•No relation	21 (75%)
•Related	4 (14,3%)
•Probable relationship	3 (10,7%)
<b>Disease modifying therapies:</b>	
Interferón Beta 1a	2 (7,14%)
Glatiramer acetate	3 (10,71%)
Teriflunomide	3 (10,71%)
Fingolimod	4 (14,29%)
Natalizumab	2 (7,14%)
Rituximab	1 (3,57%)
No treatment	12 (42,86%)
Mycophenolate Mofetil	1 (3,57%)

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## Conclusions

IR of severe infection during the study period was 1.16 (95% CI 0.77-1.68).

Most frequent SI were in SPMS and older patients while no relation was observed regarding MS treatment.