

# OBSERVATIONAL STUDY ON THE USE OF THE DIFFERENT THERAPEUTIC ALTERNATIVES FOR MULTIPLE SCLEROSIS TREATMENT

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## Background

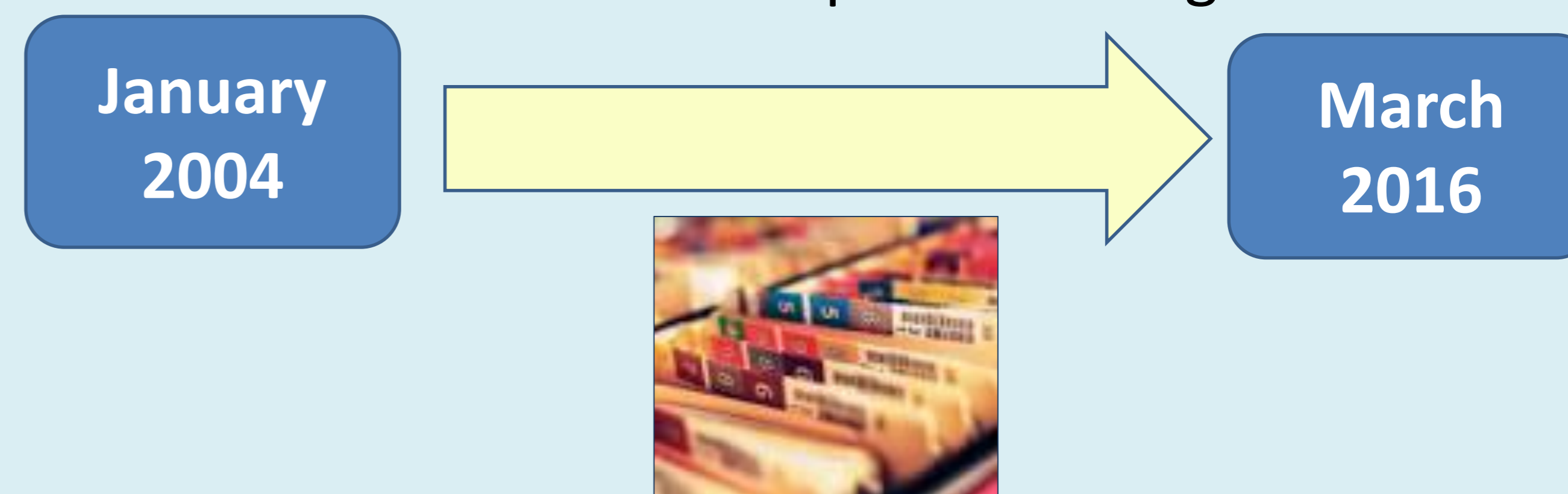
Multiple sclerosis (MS) is a chronic demyelinating CNS disease. The recent commercialization of new drugs for its treatment can change the prescribers and patients' treatment preferences.

## Objectives

- To determinate the most prescribed drugs at the beginning of the disease
- To observe if the emergence of new drugs for MS (Dimethylfumarate, Alemtuzumab, Pegylated interferon and Teriflunomide) has changed the prescription tendency
- To quantify the outbreaks/year, the discontinuations and the adverse events

## Methods and study design

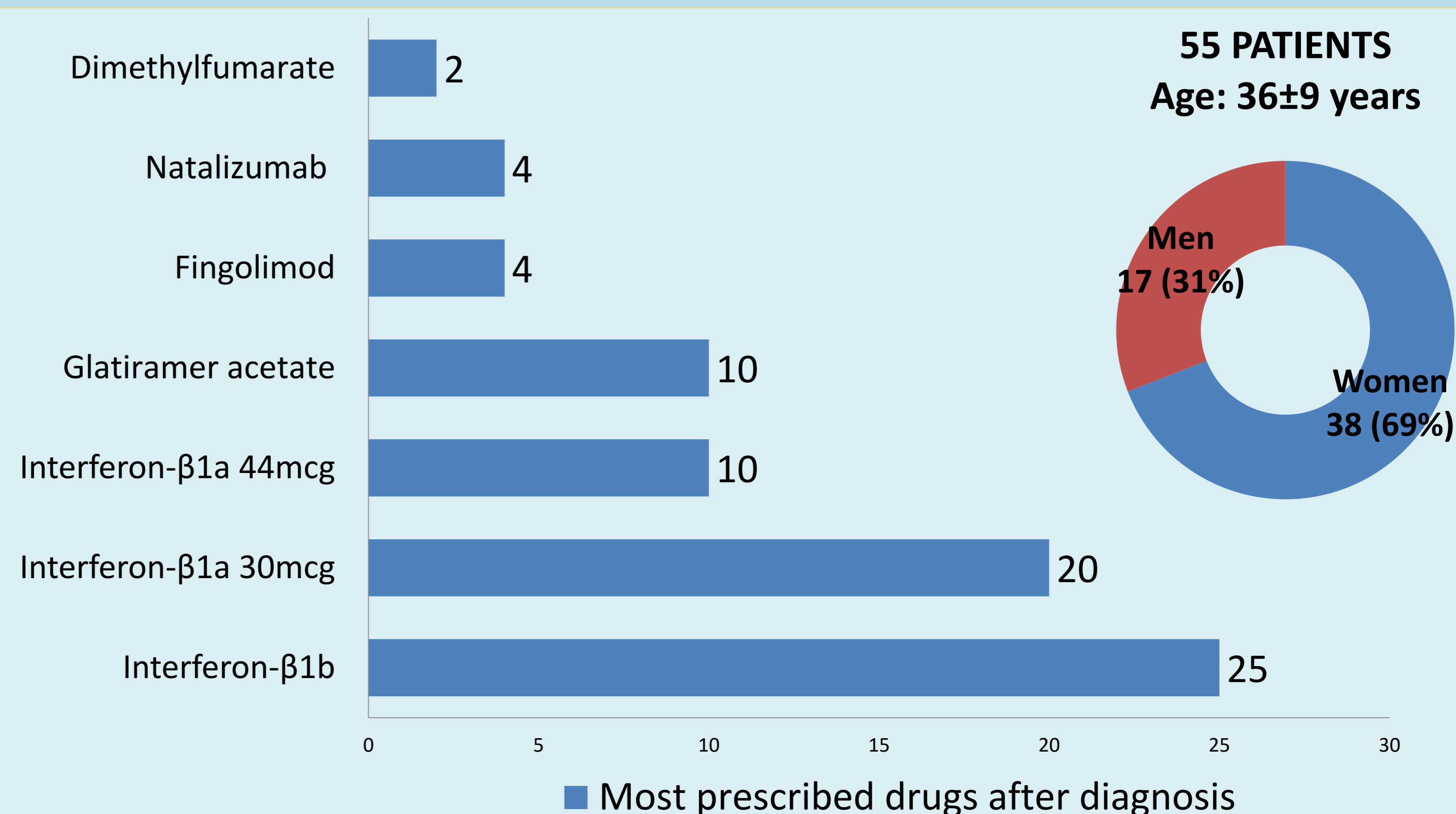
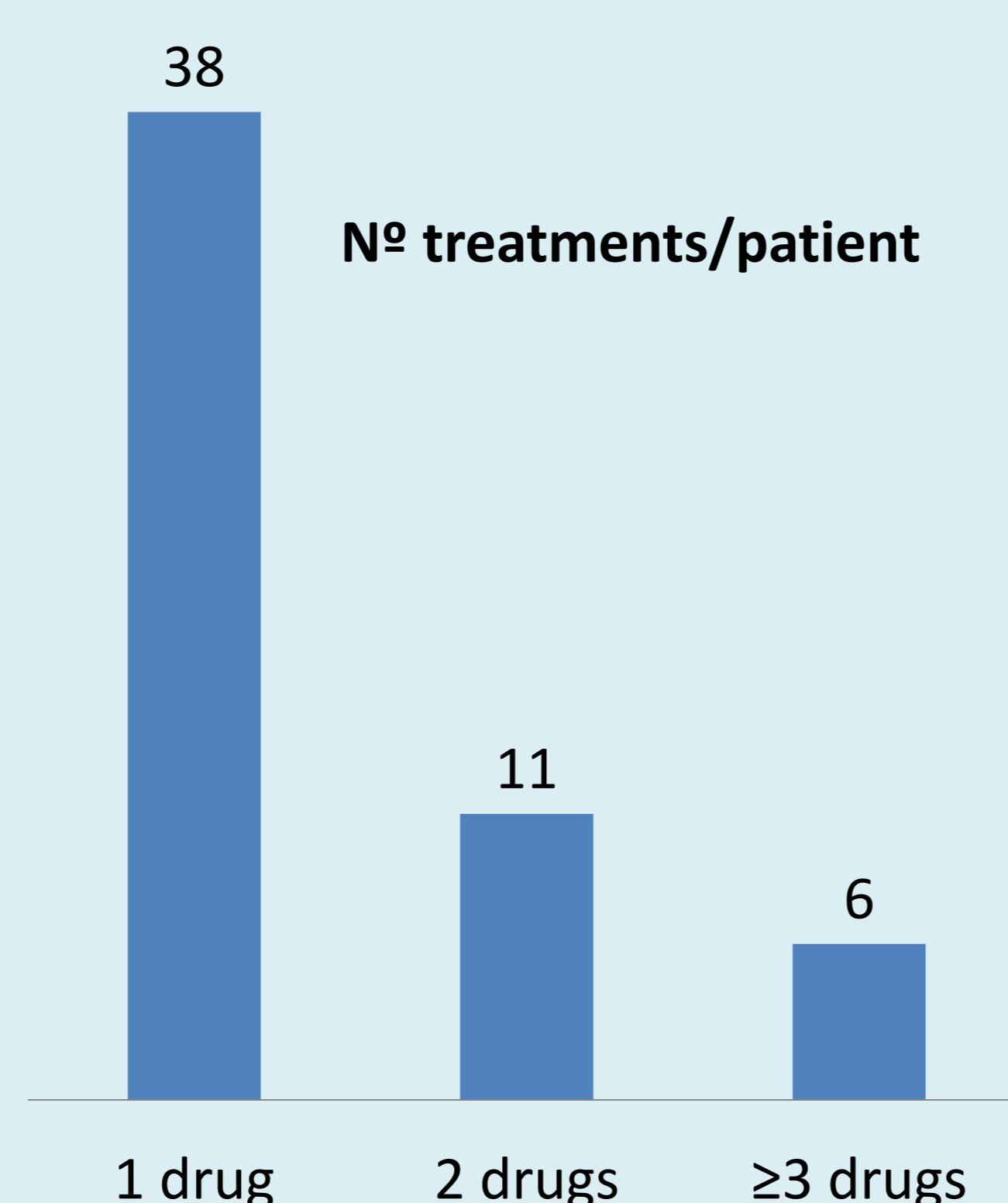
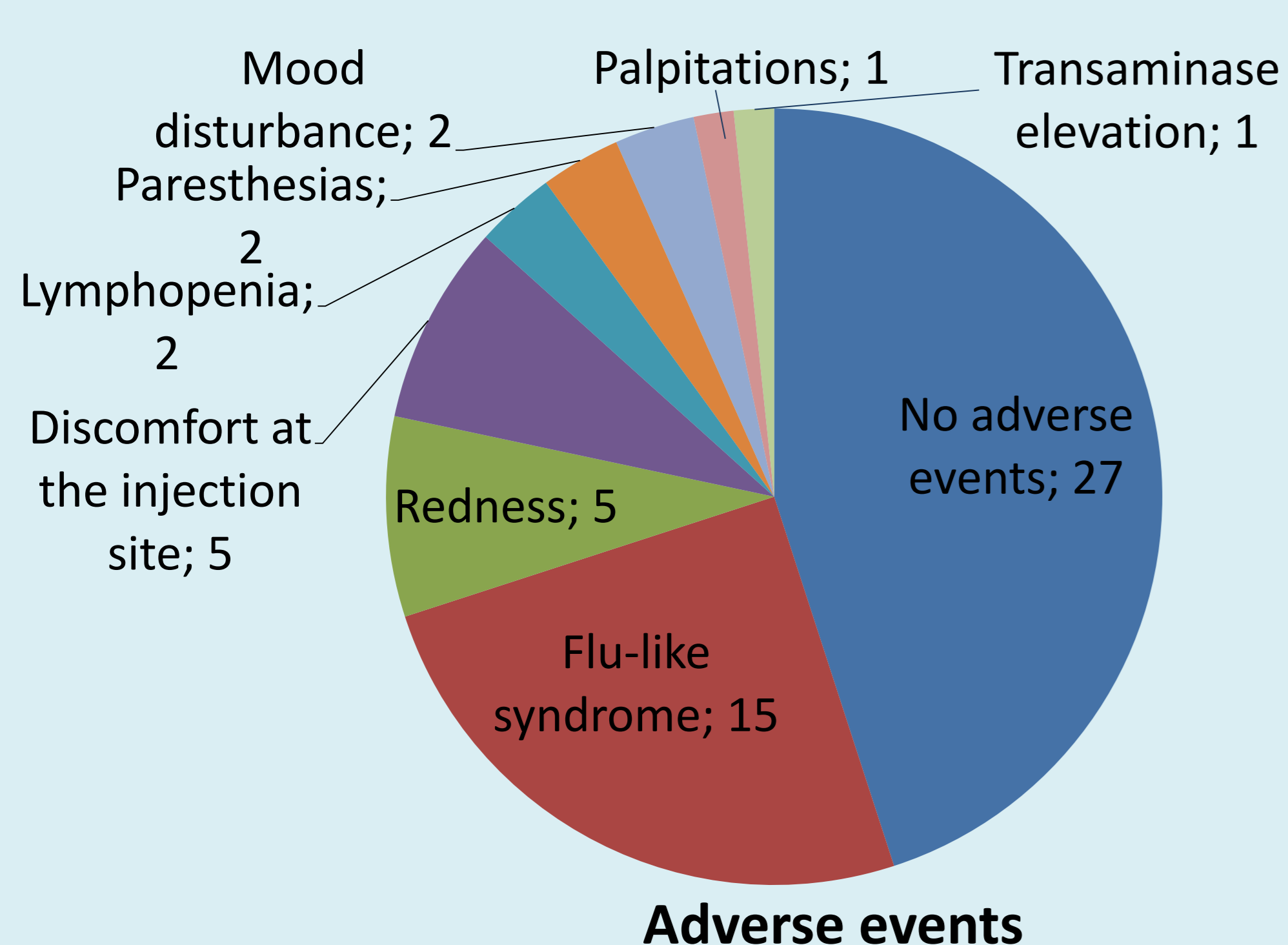
Retrospective observational study including all the treated MS patients (January 2004-March 2016). The data was obtained from their medical records and the dispensation register.



## Results

55 patients were included: 69% women. Their average age was 36±9 years.

The most prescribed drugs after the diagnosis were: Interferon-β1b(25%), Interferon-β1a 30mcg(20%), Interferon-β1a 44mcg(18%), Glatiramer acetate (GA)(18%), Natalizumab(7%), Fingolimod(7%) and Dimethylfumarate(5%). From those, there were 8 prescriptions after the commercialization of the new MS drugs: 3 Dimethylfumarate, 2 Interferon-β1a 44mcg, 1 GA, 1 Fingolimod and 1 Natalizumab. With those initial treatments, 27(49%) patients did not have outbreaks, 17(31%) had 1 outbreak/year, 8(15%) had 2 outbreaks/year and 3(6%) had 3 outbreaks/year.



69% of the patients were treated with 1 drug, 20% with 2 different drugs and 11% were treated with ≥3 drugs. The reasons for the change were: disease progression (52%), adverse events (47%) and patient's decision (1%).

27 patients did not present adverse events, 15 had flu-like syndrome, 5 redness, 5 discomfort at the injection site, 2 lymphopenia, 2 paresthesias, 2 mood disturbance, 1 transaminase elevation and 1 palpitations.

## Conclusions

- ✓ MS affects young adults, especially women.
- ✓ Interferon and GA are the most common initial treatments but with the apparition of new MS drugs, the use of Dimethylfumarate increased.
- ✓ New MS drugs are mostly used as a second line treatments but Natalizumab is still the most used when there is no response to initial treatment.
- ✓ An 85% of the patients tolerated the treatment and no medication change was necessary.
- ✓ This drugs demonstrated to be effectives because 69% of the patients needed one treatment line to control their illness.