

# DURABILITY OF TREATMENT AND REASONS FOR DISCONTINUATION OF DIMETHYL FUMARATE AND TERIFLUNOMIDE IN PATIENTS WITH MULTIPLE SCLEROSIS

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## BACKGROUND AND IMPORTANCE

Dimethyl fumarate (DMF) and teriflunomide (TRF) are oral immunomodulatory drugs used in the treatment of relapsing-remitting multiple sclerosis (RRMS) since 2015.

## OBJECTIVES

- ✓ Determine the durability of treatment
- ✓ Analyse the reasons for discontinuation of DMF and TRF in patients with RRMS.

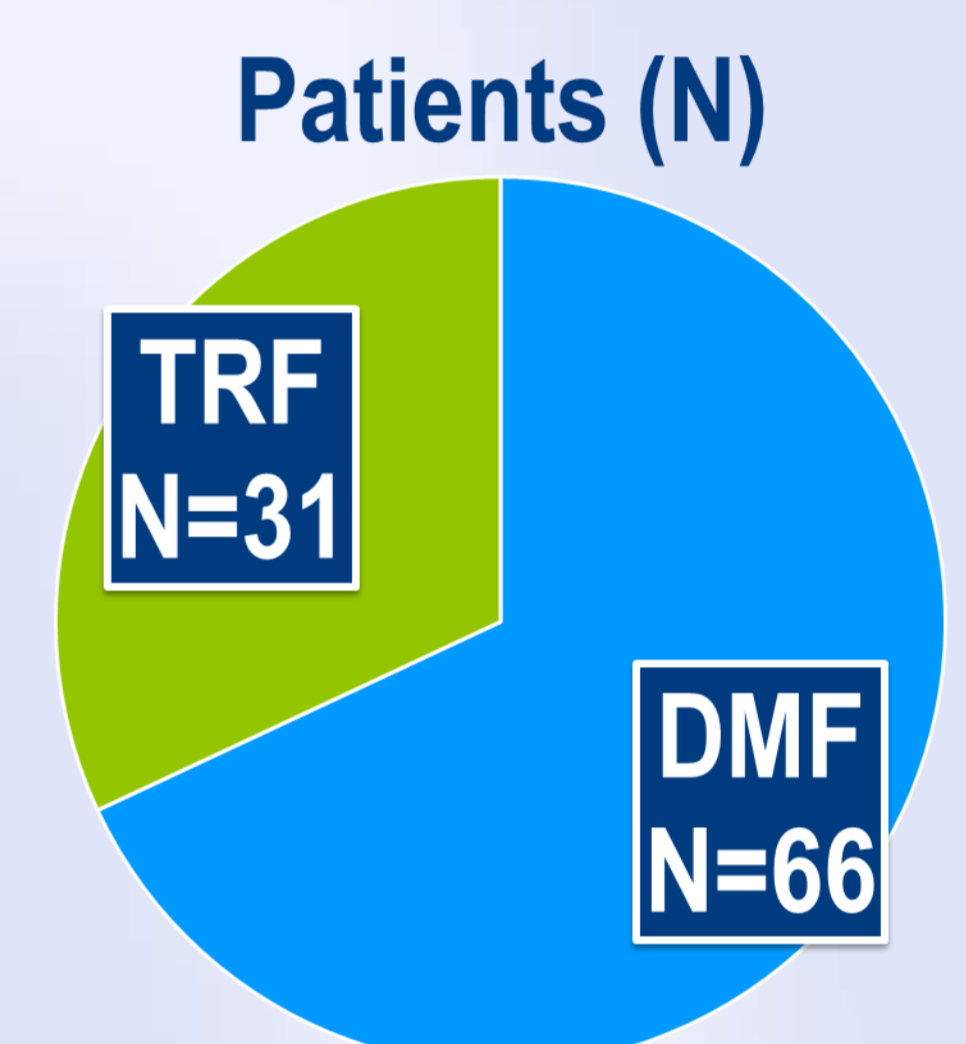
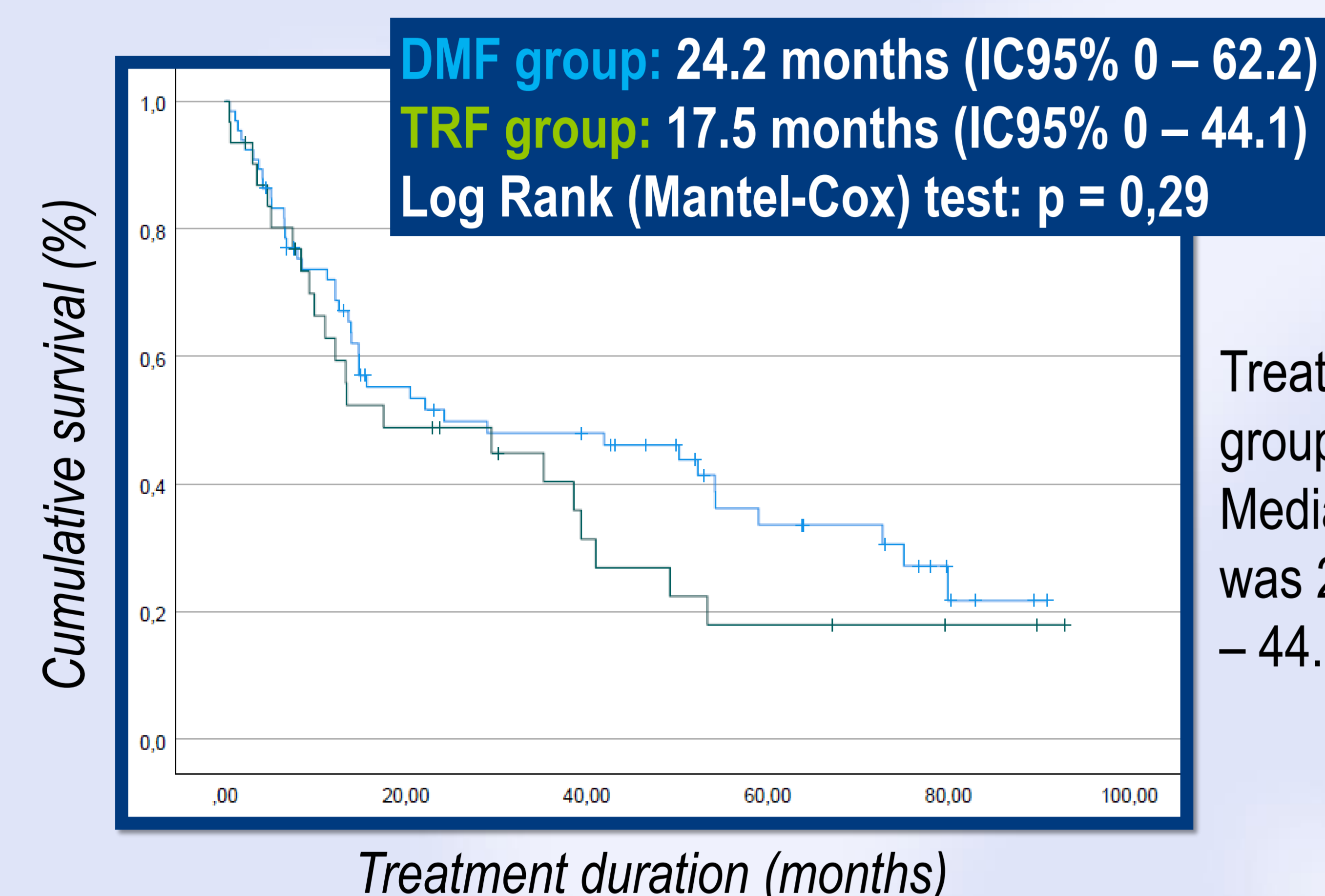
## MATERIAL AND METHODS

An observational, retrospective and longitudinal study was conducted. All patients with RRMS treated with DMF and TRF from 2015 to September 2022 were included.

The variables analyzed were sex, age, initial Expanded Disability Status Scale (EDSS) score, previous treatments, treatment starting date and treatment discontinuation date, reasons for discontinuation and adverse reactions that led to treatment discontinuation. Treatment discontinuation free-survival was calculated using a Kaplan-Meier method and survival curves were compared using log-rank test. Statistical significance was set at  $p < 0.05$ .

## RESULTS

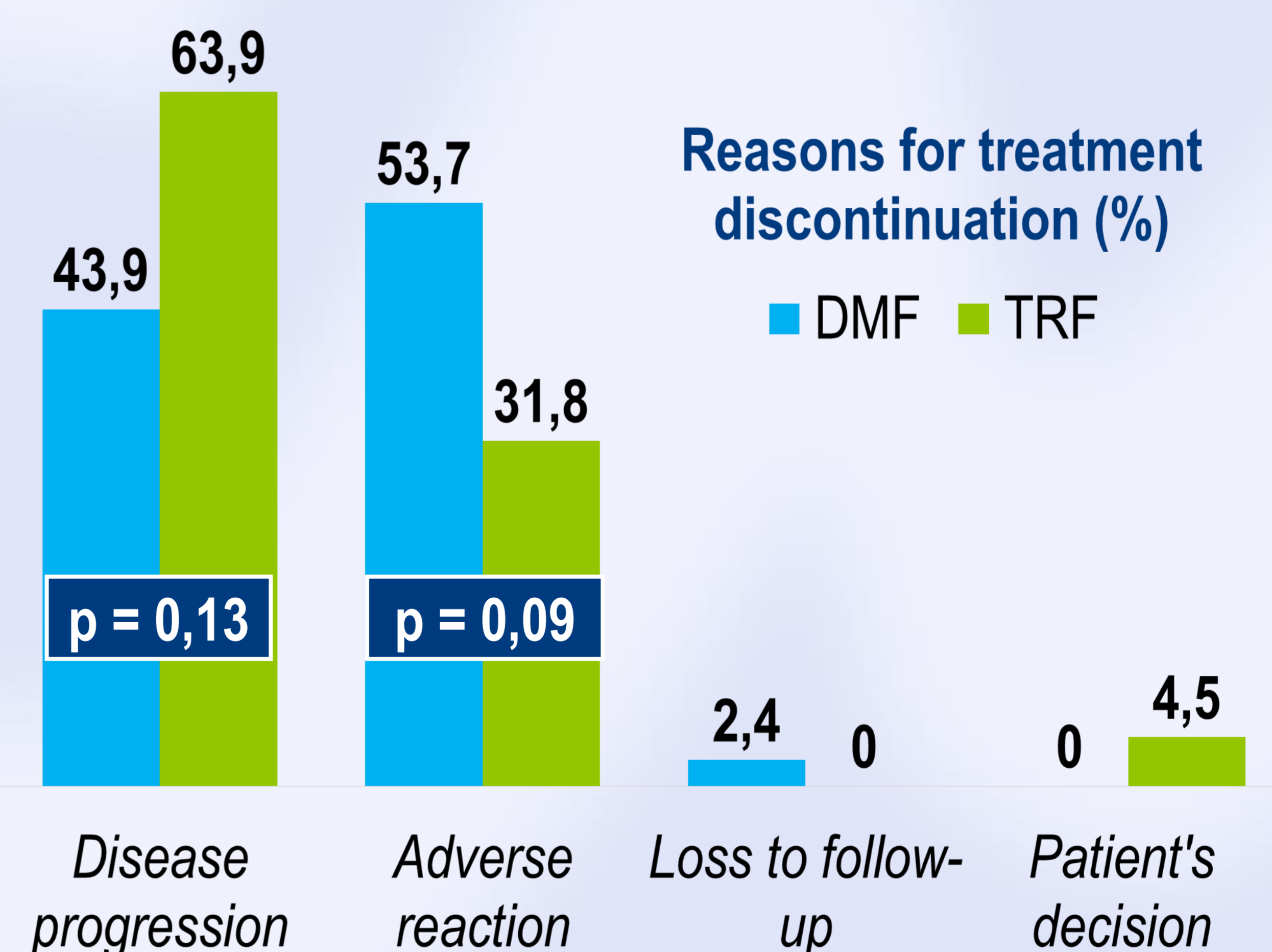
97 patients were included, 66 treated with DMF (median age  $43.6 \pm 10.5$  years, women 57.6%,  $2 \pm 1.4$  EDSS at baseline) and 31 treated with TRF (median age  $49.1 \pm 8.9$  years, women 58.1%,  $1.5 \pm 1.6$  EDSS at baseline).



Treatment was discontinued by 41 patients (62.1%) in the DMF group and 22 patients (70.9%) in the TRF group ( $p = 0.27$ ). Median of treatment discontinuation free-survival in DMF group was 24.2 months (IC95% 0 – 62.2) and 17.5 months (IC95% 0 – 44.1) in TRF group ( $p = 0.29$ ).

Reasons for treatment discontinuation were due to disease progression (43.9% in DMF vs 63.9% in TRF,  $p = 0.13$ ), adverse reaction (53.7% in DMF group vs 31.8% in TRF group,  $p = 0.09$ ), loss to follow-up (2.4% in DMF group) and patient's decision (4.5% in TRF group).

Adverse reactions leading to discontinuation of treatment in the DMF group were lymphopenia (36.6%), gastrointestinal intolerance (9.7%), diarrhoea (2.4%), generalized severe pruritus (2.4%) and hypotension (2.4%). Adverse reactions that led to treatment discontinuation in the TRF group were diarrhoea (13.6%), elevated transaminases (9.1%), allergy (4.5%) and alopecia (4.5%).



## CONCLUSIONS

- ✓ In this study, no statistically significant differences were found in the durability of DMF and TRF treatments in patients with RRMS.
- ✓ Patients with DMF tend to discontinue more due to adverse reactions and patients with TRF more due to disease progression.

