

Burden of treatment and quality of life in relapsing remitting multiple sclerosis patients under early high efficacy therapy in Argentina: data from the Argentinean registry

Juan I. Rojas¹, Edgar Carnero Contentti², Ricardo Alonso^{3,4}, Dario Tavolini⁵, Marcos Burgos⁶, Belén Federico⁷, Liliana Patrucco¹, Edgardo Cristiano¹.

- 1- **Centro de Esclerosis Múltiple de Buenos Aires (CEMBA), Argentina**
- 2- **Unidad de Neuroinmunología, Servicio de Neurología, Hospital Alemán de Buenos Aires, Argentina**
- 3- **Hospital Ramos Mejía, Buenos Aires, Argentina**
- 4- **Fundación Sanatorio Güemes, Buenos Aires, Argentina**
- 5- **Fundación INECO Oroño, Rosario, Argentina**
- 6- **Hospital San Bernardo de Salta, Argentina**
- 7- **Novartis Argentina S.A., Buenos Aires, Argentina**

The benefit of early high efficacy therapy (HET) was postulated not only in a clinical aspect as well as in patient reported outcomes (PRO) perspective. The objective of this study was to describe and compare the burden of treatment (BOT) and the quality of life (QoL) in early HET vs. escalation therapy in RRMS patients included in RelevarEM, the Argentinean registry of MS (RelevarEM, NCT 03375177). **Methods:** cross sectional study conducted between September and December 2022. Participating patients were adults, RRMS patients who initiated (during the last three years) their treatment with a HET (natalizumab, ocrelizumab, rituximab, alemtuzumab, cladribine) or with escalation treatment (beta interferon, glatiramer acetate, teriflunomide, dimethyl fumarate or fingolimod). Clinical and demographic aspect were collected. QoL and BOT was measured with the validated to Spanish MusiQoL and BOT questionnaire. Propensity score (PS)-based nearest-neighbor matching was applied to homogenize groups. Comparisons were be done using a linear regression analysis model stratified by matched pairs, with BOT and QoL assessments as main outcomes. P value < 0.05 was considered significant. **Results:** 269 patients were included, mean age 33.7±5.7 years, mean disease duration 2.1 ± 0.5 years, 193 (71.7%) were female, median EDSS of 3. A

total of 136 patients were on early HET while 133 were on escalation therapy. In the entire group the BOT (\pm SD) was 48.5 ± 15.3 while in the group of patients receiving early HET we observed that the BOT (\pm SD) was 43.5 ± 12.2 vs. 54.3 ± 13.3 in escalation treatment ($p < 0.0001$). Regarding QoL (\pm SD), in the entire sample we observed a global score of 77.4 ± 11.2 . When we stratified groups, in HET (\pm SD) it was 81.3 ± 14 vs. 74.1 ± 18.3 in escalation therapy ($p = 0.0003$). **Conclusion:** in this multicenter study that included 269 patients from Argentina we observed in early HET a significantly lower BOT and higher QoL than patients receiving escalation therapy.