Switching to alemtuzumab from fingolimod or other therapies: impact of wash-out period on disease activity

Abstract: P1881

Type: Poster

Abstract Category: Late breaking news

Objective: To evaluate the ARR during alemtuzumab administered after fingolimod and after other disease modifying therapies (DMTs).
Background: Recently, an unexpected high disease activity during alemtuzumab was described in MS patients switching from fingolimod. The authors suggested that the lack of alemtuzumab efficacy could be due to the prolonged sequestration of lymphocytes inducted by fingolimod.
Methods: Patients who started alemtuzumab after fingolimod or other DMTs were included in this retrospective multicentric analysis. Previous therapy, wash-out period duration and relapses occurrence (during previous therapy, in the wash-out period and during alemtuzumab) were retrospectively assessed and analysed by a negative binomial model. Time to relapse or to new T2 lesions or time to disability progression (NEDA), whatever occurred first, was analysed using Cox model.
Results: 159 patients who started alemtuzumab in 12 MS centers in Italy were included in this study (Age: 37.6 years, SD: 9.3; 73.6% females; median EDSS: 3.5, range: 0-8; mean disease duration: 9.8 years, SD: 6.2; median follow-up 319 days). Seventy-two patients (44.4%) were previously treated with fingolimod (pre-FTY; mean duration time: 2.3 years, SD: 1.3), 78 (48.1%) were previously treated with other therapies (pre-other; 44 natalizumab) and 12 (7.5%) were naïve patients. The mean number of relapses in the year pre-discontinuation of last treatment was 1.18 (SD: 1.03) in pre-FTY and 0.94 (SD: 1.61) in pre-other (p=0.086). Eight pre-FTY patients (11.1%; ARR=0.183, SD: 0.47) and eight pre-other patients (10.3%; ARR=0.14, SD: 0.46) showed at least one relapse during alemtuzumab without significant differences between the two groups (p=0.41). A longer washout period was associated with a higher ARR on alemtuzumab (p=0.044) independent from previous therapy (p for interaction = 0.43). Previous treatment did not impact on time to first event (p=0.85; either relapse, disease progression, or MRI activity), as did not washout time (p=0.70), or their interaction (p=0.78).
Conclusions: In this cohort, the previous DMTs did not influence the ARR during alemtuzumab. Moreover, the longer the washout, the higher the ARR, regardless of prior therapy. According to these results, a previous fingolimod treatment does not impact on alemtuzumab efficacy.
Disclosure: Francesco Saccà received personal compensation from Novartis, Almirall, Genzyme, Biogen, Forward Pharma and TEVA for public speaking, editorial work and advisory boards.
Maria Pia Sormani received personal compensation for consulting services and for speaking activities from Merck Serono, Teva, Novartis, Roche, Genzyme and Biogen.
Alessio Signori received teaching honoraria from Novartis.
Roberta Lanzillo received personal compensation from Merck Serono, Biogen, Novartis, Almirall, Genzyme, and TEVA for public speaking, editorial work and advisory boards.
Damiano Baroncini received honoraria from Almirall for the creation of editorial publications, and travel grants for participation to international congresses from Genzyme and TEVA.
Pietro Annovazzi served as advisor and received speaking honoraria from Novartis, Merck Serono, Genzyme, Biogen and Teva Italia.
Elisabetta Signoriello received personal compensation from Almirall, Biogen, Genzyme, Novartis and Teva for traveling and advisory boards.
Alice Laroni has received personal compensation from Novartis, Genzyme, Biogen and TEVA for public speaking and advisory boards.
Marco Capobianco has nothing to disclose.
Arianna Sartori has received funding for travel and/or speaker honoraria from Novartis, Teva, Merck-Serono and Genzyme.
Sara La Gioia has nothing to disclose.
Giorgia T. Maniscalco received personal compensation from Serono, Biogen and TEVA for public speaking and advisory boards.
Cinzia Cordioli received personal compensations for consultanting from MerkSerono and Novartis.
Sarah Rasia has nothing to disclose.
Marinella Clerico received personal compensation for participating to advisory boards by Merck Serono and Biogen; travel expenses for congresses paid by Merck, Biogen, Novartis and Genzyme.
Eleonora Cocco received personal compensation from Almirall, Bayer, Biogen, Genzyme, Novartis, Serono and TEVA for public speaking, editorial work and advisory boards.
Jessica Frau serves on scientific advisory boards for Biogen, received honoraria for speaking from Merck Serono, Biogen and Teva and received a research grant from Merk Serono.