

GeNeuro, Genzyme, Merck, MedImmune, Novartis, Octapharma, Roche, Sanofi, and Teva.

XM: Received speaking honoraria and travel expenses for participation in scientific meetings, has been a steering committee member of clinical trials, or participated in advisory boards of clinical trials in the past 3 years with Actelion, Alexion, Bayer, Biogen, Bristol Myers Squibb/Celgene, EMD Serono, EXCEMED, Genzyme, Hoffmann-La Roche, Immunic, Janssen Pharmaceuticals, MedDay, Merck, Mylan, MSIF, Nervgen, NMSS, Novartis, Roche, Sanofi-Genzyme, Teva Pharmaceuticals, and TG Therapeutics.

EKH: Personal compensation for consulting and speaking for Actelion, Biogen, Celgene, Merck, Novartis, Roche, Sanofi, and Teva.

HD, JKS, NM, CYC, and DS: Employees and shareholders of Bristol Myers Squibb.

LK: Institutional research support, steering committee, advisory board, consultancy fees: Actelion, Bayer HealthCare, Biogen, Bristol Myers Squibb, Genzyme, Janssen, Japan Tobacco, Merck, Novartis, Roche, Sanofi, Santhera, Shionogi, and TG Therapeutics; speaker fees: Bayer HealthCare, Biogen, Merck, Novartis, Roche, and Sanofi; support of educational activities: Allergan, Bayer HealthCare, Biogen, CSL Behring, Desitin, Genzyme, Merck, Novartis, Roche, Pfizer, Sanofi, Shire, and Teva; license fees for Neurostatus products and grants: Bayer HealthCare, Biogen, European Union, Innosuisse, Merck, Novartis, Roche, Swiss MS Society, and Swiss National Research Foundation.

JAC: Personal compensation for consulting for Biogen, Bristol Myers Squibb, Convelo, Genentech, Janssen, NervGen, Novartis, and PSI; speaking for H3 Communications; and serving as an Editor of *Multiple Sclerosis Journal*.

P388

A multi-stakeholder survey on multiple sclerosis multidisciplinary care: The situation in Belgium and lessons for the global community

L. Van Hijfte¹, M. Cambron², B. Capron³, B. Dachy⁴, D. Decoo⁵, D. Dive⁶, B. Dubois⁷, S. El Sankari⁸, F. London⁹, G. Perrotta¹⁰, V. Popescu^{11,12}, V. Van Pesch¹³, B. Van Wijmeersch^{11,12}, B. Willekens^{14,15}, G. Laureys¹

¹Ghent University Hospital, ⁴Brain, department of Neurology, Gent, Belgium, ²Sint-Jan Bruges Hospital, Department of Neurology, Brugge, Belgium, ³CHU de Charleroi, Department of Neurology, Lodelinsart, Belgium, ⁴Hôpital Brugmann, Université Libre de Bruxelles, Department of Neurology, Brussels, Belgium, ⁵AZ Alma, Department of Neurology, Eeklo, Belgium, ⁶CHU Liège, Department of Neurology, Esneux, Belgium, ⁷University Hospitals Leuven, Department of Neurology, Leuven, Belgium, ⁸Cliniques Universitaires Saint-Luc, Université Catholique de Louvain, Department of Neurology, Brussels, Belgium, ⁹Université catholique de Louvain, CHU UCL, Department of Neurology, Yvoir, Belgium, ¹⁰Hôpital Erasme, Université Libre de Bruxelles, Department of Neurology, Brussels, Belgium, ¹¹Hasselt University, Biomed, Diepenbeek, Belgium, ¹²Revalidation and MS Center Pelt, Pelt, Belgium, ¹³Clinique Universitaire Saint-Luc, Department of Neurology,

Brussels, Belgium, ¹⁴Antwerp University Hospital, Department of Neurology, Edegem, Belgium, ¹⁵University of Antwerp, Translational Neurosciences Research Group, Wilrijk, Belgium

Introduction: Multiple sclerosis (MS) is a multifaceted disease requiring a multidisciplinary approach. Due to lack of clear evidence, the Belgian health care system does not implement standardized reimbursed MS multidisciplinary teams (MDT).

Objective: To frame the current care for People with MS (PwMS) in Belgium and to identify needs and future perspectives.

Methods: Online surveys were sent out to PwMS, MS specialist nurses and MS-neurologists. The survey for PwMS asked for specific MS parameters (e.g. MS type, treatment, availability of an MDT and MS nurse) and their view on current care. The topics in the surveys for MS nurses and neurologists were employment status, education, job content, MS care organization, future perspectives. Statistics include demographic data, T/Mann-Whitney U/ Fisher exact tests.

Results: We received responses from 916 PwMS, 22 MS nurses and 62 neurologists. The PwMS cohort is representative with a mean age of 46 ± 12.7 , mainly relapsing remitting MS (60,8%) and a mean patient determined disease step of 2.5 ± 2.05 , which did not differ with or without nurse/MDT. Whilst 45.5% of the MS nurses are employed in a university hospital, 75.8% of the neurologists work in a general hospital. 65.3% and 60.4% of the PwMS reported to have access to an MDT or an MS nurse. The funding for MS nurses is diverse (hospital budget 19.4%, grants 4.8%, clinical trials 11.3%, budget within association 21%). Considering symptomatic treatment, the proportion of PwMS who receive spasticity ($X^2(1, 748)=4.15, P=.042$) and gait treatment ($X^2(1, 748)=4.43, P=.035$) is higher with access to a nurse and treatment for bladder problems was higher in PwMS with access to an MDT ($X^2(1, 810)=4.96, P=.047$). Work adjustments were higher with a nurse ($X^2(1, 748)=5.64, p=.018$) and MDT ($X^2(1, 810)=9.64, P=.002$) availability. PwMS were significantly more likely to be in order with driving regulation with access to a nurse ($X^2(1, 748)=25.35, P<.001$) or MDT ($X^2(1, 755)=27.64, p<.001$). Finally, 69% and 75% neurologists working without a nurse or MDT state a need of such support, mainly in centres with a follow up of over 200 PwMS. Preference for care at a hospital network level was advocated by a majority of neurologists (61%).

Conclusion: Belgian neurologists offer a variety of multidisciplinary initiatives for MS. Alignment and reimbursement are much needed as our data may suggest MDT's and nurses might provide better support for symptomatic care, work and legal aspects.

Disclosure

L. Van Hijfte: Nothing to disclose, disclosures non-relevant to the topic

G. Laureys: Nothing to disclose, disclosures non-relevant to the topic

B. Willekens: has received honoraria for acting as a member of Scientific Advisory Boards for Almirall, Biogen, Celgene/BMS, Merck Serono, Novartis, Roche, Sanofi-Genzyme and speaker honoraria and travel support from Biogen, Merck Serono, Novartis, Roche, Sanofi-Genzyme; research and/or patient support grants

from Roche, Biogen, Merck-Serono, Sanofi-Genzyme. Honoraria and grants were paid to UZA/UZA Foundation.

V. Van Pesch: has received travel grants from Merck Healthcare KGaA (Darmstadt, Germany), Biogen, Sanofi, Bristol Meyer Squibb, Almirall and Roche.

His institution has received research grants and consultancy fees from Roche, Biogen, Sanofi, Merck Healthcare KGaA (Darmstadt, Germany), Bristol Meyer Squibb, Janssen, Almirall and Novartis Pharma.

B. Van Wijmeersch: Has received Speaker Fees, Research Support and Honoraria for Expert Advice from: Almirall, Actelion/Janssen, Bayer, Biogen, Celgene/BMS, Imcyse, Merck, Novartis, Roche, Sanofi-Genzyme and Teva

G. Perrotta: Nothing to disclose, disclosures non-relevant to the topic

D. Decoo: Nothing to disclose, disclosures non-relevant to the topic

V. Popescu: Nothing to disclose, disclosures non-relevant to the topic

S. El Sankari: Nothing to disclose, disclosures non-relevant to the topic

B. Dachy: Nothing to disclose, disclosures non-relevant to the topic

M. Cambron: Nothing to disclose, disclosures non-relevant to the topic

B. Capron: Nothing to disclose, disclosures non-relevant to the topic

F. London: Nothing to disclose, disclosures non-relevant to the topic

Dominique Dive: Nothing to disclose, disclosures non-relevant to the topic

B. Dubois: Nothing to disclose, disclosures non-relevant to the topic

Acknowledgements: B. Dubois is a Clinical Investigator of the Research Fund Flanders (FWO-Vlaanderen)

P389

Comparing the risk and severity of infusion-related reactions in patients premedicated with cetirizine versus diphenhydramine prior to ocrelizumab infusions (PRECEPT)

K. Smoot¹, H. Marginean¹, T. Gervasi-Follmar¹, C. Chen¹, S. Cohan¹

¹Providence Brain and Spine Institute, Portland, United States

Introduction: In the phase III trials, at least one infusion-related reaction (IRR) occurred in 34% of patients. Pre-medication with methylprednisolone, an analgesic/antipyretic, and an oral antihistamine commonly diphenhydramine (DPH) was recommended to minimize IRRs. Since drowsiness is commonly associated with DPH, newer antihistamines such as cetirizine (CTZ) may be tolerated better without an increase in IRRs.

Objective: The primary objective of this study is to evaluate whether CTZ is non-inferior to DPH in limiting the proportion and severity of reactions from OCR infusions (IRR). The secondary objective of this study is to evaluate patient reported

outcomes after receiving CTZ or DPH as premedication for OCR infusions.

Methods: Adult patients with relapsing or progressive MS, starting OCR were eligible to enroll. Patients were randomized 1:1 to DPH 25mg or CTZ 10mg.

Patients completed Modified Fatigue Impact Scale (MFIS) and Multiple Sclerosis Impact Scale (MSIS-29) prior to starting OCR and after the 2nd dose. Stanford Sleepiness Scale (SSS), Visual Analogue Scale-Fatigue (VAS-F), and Treatment Satisfaction Questionnaire for Medication (TSQM) were completed prior to starting OCR and within 2 hours after each OCR infusion.

Results: 19 of the 20 patients have completed the study. 75 % were female; median age at OCR start was 47.5 (range 29-63); 17 (85%) with RRMS. IRRs occurred in 14 (67%) patients following the 1st two infusions of dose 1, 6 (60%) in CTZ group and 8 (73%) in DPH group. IRRs occurred in 5 (18%) patients with dose 2, 3 (23%) in the CTZ group and 2 (13%) in the DPH group. MFIS and MSIS-29 at screening were higher in the patients randomized to DPH, with no significant change after the 2nd dose. There was significant difference in VAS-F Fatigue domain favoring patients pretreated with CTZ ($p=0.001$), but no difference in the Energy domain. Patients on CTZ achieved significant improvement in SSS across the 4 assessments ($p=0.001$). While there was no significant difference of TSQM Global Satisfaction, subscales of effectiveness, side effects and convenience favored CTZ, p -, 0.02, 0.04, 0.06, respectively. Incidence of AEs were balanced between groups. 1 SAE was reported in the DPH group but it was not related to DPH. No discontinuation due to AEs.

Discussion: IRRs were similar across arms with no significant difference in the number of AEs related to the premedication. However, patient reported outcomes favored CTZ.

Disclosure

KS - Consulting and speaking honoraria from Biogen, Bristol Myers Squibb, EMD Serono, Janssen, Roche, Sanofi Genzyme, and TG Therapeutics. SC - Institutional Research Support from AbbVie, Biogen, Bristol Myers Squibb, EMDSerono, Novartis, Roche Genentech and Sanofi Genzyme. Consulting or speaking honoraria from Biogen, Bristol Myers Squibb, & EMDSerono. CC, HM, TGG - no disclosures. Study was funded by Roche.

RIMS - Biological effect of rehabilitation

P390

The effect of aerobic training on neuro-specific blood-based biomarkers in people with multiple sclerosis – a secondary analysis of a randomized clinical trial

A. Gravesteijn¹, H. Beckerman¹, E. Willems^{2,3}, H. Hulst^{4,5}, B. de Jong⁶, C. Teunissen², V. de Groot¹
¹MS Center Amsterdam, Vrije Universiteit Amsterdam, Amsterdam Neuroscience, Amsterdam UMC location VUmc, Rehabilitation Medicine, Amsterdam, Netherlands,
²MS Center Amsterdam, Vrije Universiteit Amsterdam, Amsterdam Neuroscience, Amsterdam UMC location VUmc, Clinical Chemistry, Amsterdam, Netherlands,