

P383 - Opportunities and challenges for conducting research on Secondary Progressive Multiple Sclerosis across International Multiple Sclerosis registries through a research network collaboration

A. Glaser¹, M. Trojano², P. Laffaldano², S. Vukusic^{3,4}, D. Horakova^{5,6}, R. Nicholas⁷, R. Middleton⁸, A. Stahmann⁹, M. Soilu-Hänninen¹⁰, M. Magyari¹¹, C. Lines¹², N. Adlard¹³, J. Hillert¹ ¹Karolinska Institutet, Stockholm, Sweden, ²Department of Basic Medical Science, Neuroscience and Sense Organs, University of Bari Aldo Moro, Bari, Italy, ³Department of Neurology, Hopital Pierre Wertheimer, Hospices Civils de Lyon, ⁴Observatoire Français de la Sclérose en Plaques (OFSEP), Lyon, France, ⁵Department of Neurology and Center for Clinical Neuroscience, First Medical Faculty, Charles University, ⁶General University Hospital, Prague, Czech Republic, ⁷Centre for Neuroinflammation and Neurodegeneration, Imperial College London, London, ⁸Swansea University Medical School, Swansea, United Kingdom, ⁹MS-Register, MS Forschungs- und Projektentwicklungs-gmbH, Hannover, Germany, ¹⁰Division of Clinical Neurosciences, Turku University Hospital, Turku, Finland, ¹¹The Danish Multiple Sclerosis Registry, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark, ¹²IQVIA, ¹³Novartis Pharma AG, Basel, Switzerland

Introduction: Clinical registries provide real-world evidence (RWE) for Multiple Sclerosis (MS). However, RWE studies of secondary progressive MS (SPMS) face challenges, given the absence of consistent prevalence data and uncertain consistency in adherence to criteria by clinicians to diagnose SPMS.

Objective: To identify opportunities and challenges in RWE studies of SPMS across international MS registries, and to identify data gaps to be filled for future studies.

Methods: A survey was conducted to complement published data on data captured in registries that may be used to identify SPMS patients and the feasibility of two pilot studies was evaluated. The pilot studies aim to measure variance in SPMS prevalence as a function of diagnostic criteria/method of assignment and describe characteristics and treatment patterns of SPMS patients in routine clinical practice.

Results: Eight MS registries aspiring to join a collaborative effort on MS, a research collaboration network (RCN) were assessed. Of the clinical variables relevant for these studies, the Expanded Disability Status Scale is captured in all 8 registries, and likewise all registries have information on the number of relapses in the last 12 or 24 months and capture information on patients' current and previous treatment with DMTs. Key diagnostic data from Magnetic Resonance Imaging is captured in 7 of the registries. Relevant comorbidities are available from 7 registries, of which 5 can provide co-medication information. Mortality data is captured by all 8 registries. In some countries, some of the above information can be obtained by linkage to population-based registries. Finally, other measures such as cognition and fatigue are collected in 4 and 5 registries, respectively.

Conclusions: Most of the clinical data needed for the pilot studies are comprehensively covered in international MS registries. However, several variables that can potentially improve the identification of SPMS patients often lack. Thus, a Research Collaboration Network may shed light on SPMS already now and could facilitate future studies by prompting improvements in data collection.

Disclosure: Anna Glaser: nothing to disclose.

Maria Trojano has served on scientific Advisory Boards for Biogen, Novartis, Merck Serono, Roche and Genzyme; has received speaker honoraria from Biogen Idec, Sanofi-Aventis, Merck Serono, Roche, Teva, Genzyme and Novartis; and has received research grants for her Institution from Biogen Idec, Merck Serono, Roche and Novartis.

Pietro Iaffaldano has served on scientific advisory boards for Biogen Idec, Bayer, Teva, Roche, Merck Serono, Novartis and Genzyme and has received funding for travel and/or Speaker honoraria from Sanofi Aventis, Genzyme, Biogen Idec, Teva, Merck Serono and Novartis.

Sandra Vukusic has received consultancy fees, speaker fees, or honoraria from Biogen, Celgene, GeNeuro, MedDay, Merck Serono, Novartis, Roche, Sanofi and Teva and research support from Biogen, GeNeuro, MedDay, Merck Serono, Novartis, Roche and Sanofi.

Dana Horakova was supported by the Czech Ministry of Education project Progres Q27/LF1 and also received compensation for travel, speaker honoraria and consultant fees from Biogen Idec, Novartis, Merck, Bayer, Sanofi Genzyme, Roche, and Teva, as well as support for research activities from Biogen Idec.

Richard Nicholas has received honoraria for speaking, travel, advisory boards and participating in clinical research from Biogen, Novartis, Roche.

Rod Middleton: nothing to disclose.

Alexander Stahmann: nothing to disclose.

Merja Soilu-Hänninen has received honoraria for serving on advisory boards for Merck, Roche and Sanofi-Genzyme and speaker's fees from Biogen, Merck, Novartis, Sanofi-Genzyme and Teva and has served as P.I. or received unrestricted research support from Bayer, BiogenIdec, Merck, Roche and Sanofi-Genzyme.

Melinda Magyari has served on scientific advisory board for Biogen, Sanofi, Teva, Roche, Novartis, Merck, has received honoraria for lecturing from Biogen, Merck, Novartis, Sanofi, Genzyme, has received research support and support for congress participation from Biogen, Genzyme, Teva, Roche, Merck, Novartis.

Carol Lines is a full-time employee of IQVIA AG.

Nicholas Adlard is a full-time employee of Novartis Pharma AG.

Jan Hillert has received honoraria for serving on advisory boards for Biogen, Sanofi-Genzyme and Novartis and speaker's fees from Biogen, Novartis, Merck-Serono, Bayer-Schering, Teva and Sanofi-Genzyme and has served as P.I. for projects, or received unrestricted research support from, Biogen Idec, Merck, Novartis and Sanofi-Genzyme. This MS research was funded by the Swedish Research Council and the Swedish Brain foundation.