

Longitudinal Observation of SPMS Patients Treated with Siponimod in Germany – Two Years Interims Data from Real World Study AMASIA

Olaf Hoffmann¹, Herbert Schreiber², Luisa Klotz³, Martin S. Weber^{4,5,6}, Caroline Baufeld⁷, Lea Leist⁷, Tjalf Ziemssen⁸

¹Department of Neurology, St. Josefs-Krankenhaus, Allee nach Sanssouci 7, 14471 Potsdam, Germany; Medizinische Hochschule Brandenburg Theodor Fontane; 16816 Neuruppin, Germany.

²Neurological Practice Center Ulm, Pfauengasse 8, 89073 Ulm, Germany.

³University Hospital Münster, Department of Neurology with Institute of Translational Neurology, Albert-Schweitzer-Campus 1, 48149 Münster, Germany.

⁴Institute of Neuropathology, University Medical Center Goettingen, Robert-Koch-Str. 40, 37075 Goettingen, Germany.

⁵Department of Neurology, University Medical Center Goettingen, Robert-Koch-Str. 40, 37075 Goettingen, Germany.

⁶Fraunhofer Institute for Translational Medicine and Pharmacology ITMP, Göttingen, Germany.

⁷Novartis Pharma GmbH, Roonstr. 25, D-90429 Nuernberg, Germany.

⁸Department of Neurology, Center of Clinical Neuroscience, Carl Gustav Carus University Clinic, University Hospital of Dresden, Fetscherstr. 74, 01307, Dresden, Germany.

Background

The selective sphingosine-1-phosphate receptor modulator siponimod is approved for the treatment of relapsing forms of MS in the US and for the treatment of active secondary progressive multiple sclerosis (SPMS) in the EU. Real-world data on the long-term effectiveness and safety of siponimod will support treatment decisions.

Objectives

The non-interventional AMASIA study aims to investigate the long-term effectiveness and safety of siponimod for the treatment of patients suffering from active SPMS in a real-world setting and provides insight into the impact on disease progression and quality of life as well as clinical routines in Germany.

Methods

In this ongoing multi-center non-interventional study in Germany, 670 siponimod-treated active SPMS patients are followed over 2-3 years. Every 6 months, disability progression and changes in cognitive performance and fatigue are evaluated by EDSS, FSMC and SDMT. The perspectives of patients, physicians, and relatives on disability progression, cognitive worsening and quality of life are documented using specific questionnaires. Here we present data from patients treated with siponimod for up to 24 months.

Results

24 months follow-up data from approximately 240 active SPMS patients receiving siponimod for the first time expand on previously presented findings and give insight into the real-world clinical practice in Germany. At baseline, AMASIA participants were already significantly impaired in the functional domains of disability, cognition and fatigue, as measured by EDSS, SDMT, and FSMC. Stabilization of these

measures indicates a sustained effectiveness of siponimod over 2 years in preventing further disease progression. Effectiveness was not restricted by patient age, baseline EDSS, or time since diagnosis of MS according to subgroup analyses. However, younger patients and patients who started siponimod treatment earlier after disease onset showed greater benefit. Regardless of age, TSQM subscores for effectiveness, convenience, and global treatment satisfaction remained on a high level throughout the observational period.

Conclusion

AMASIA provides real-world evidence on the use of siponimod in the treatment of active SPMS patients in Germany. While our data confirm a particular benefit from siponimod for younger patients and patients who are treated early after disease onset, advanced deficits in baseline EDSS, SDMT, and FSMC illustrate the challenges in timely diagnosis of SPMS. Multimodal clinical and behavioral phenotyping of MS patients is required since biomarkers are still lacking.

Disclosure

Olaf Hoffmann served on scientific advisory boards, received speaker honoraria from Alexion, Bayer Healthcare, Biogen, Bristol Myers Squibb/Celgene, Janssen, Merck, Novartis, Roche, Sandoz, Sanofi, Teva; received financial support for research activities from Biogen, Novartis, and Sanofi.

Herbert Schreiber received research grants and honoraria from Almirall, Bayer Healthcare, Biogen, Merck, Novartis, Roche, and Teva.

Luisa Klotz received compensation for serving on scientific advisory boards, speaker honoraria, travel support, research support from Alexion, Janssen, Novartis, Merck Serono, Sanofi Genzyme, Roche, Biogen, TEVA. She receives research funding from the Deutsche Forschungsgemeinschaft (DFG), the German Ministry for Education and Research, the Interdisciplinary Center for Clinical Studies (IZKF) Muenster, and the Innovative Medical research Muenster.

Martin S. Weber received research support from the DFG (DFG; WE 3547/5-1), Novartis, TEVA, Biogen-Idec, Roche, Merck, and the ProFutura Programm of Uni Göttingen; editor for PLoS One; received travel funding and/or speaker honoraria from Biogen, Merck Serono, Novartis, Roche, TEVA, Bayer, and Genzyme.

Caroline Baufeld and Lea Leist are employee of Novartis Pharma GmbH, Germany.

Tjalf Ziemssen received speaking honoraria and financial support for research activities from Almirall, Biogen, Celgene, Novartis, Roche, Teva, and Sanofi.

This study is financed by Novartis Pharma GmbH, Nuremberg, Germany.