Title
The BELTRIMS registry: a unique Belgian registry on real-world safety and efficacy data of MS patients treated with new DMTs in Belgium

Authors

1Antwerp University Hospital, Department of Neurology, Antwerp 2University of Antwerp, Laboratory of Experimental Hematology, Vaccine & Infectious Disease Institute (VAXINFECTIO), Faculty of Medicine and Health Sciences, Antwerp, 3Cliniques Universitaires Saint-Luc, Department of Neurology, Brussels, 4National Multiple Sclerosis Center, Melsbroek, 5CHU Liège - Sart Tilman B35, Unité de Neuro-Immunologie Clinique, Liège, 6UZ Leuven and KU Leuven, Laboratory for Neuroimmunology, Department of Neurosciences, Leuven, 7CHU Ambroise Paré, Department of Neurology, Mons, UZ Brussel, 8Department of Neurology, Brussels, 9CHU Charleroi, Department of Neurology, Charleroi, 10ZNA Middelheim, Department of Neurology, Antwerp, 11Hôpital Brugmann, Department of Neurology, Brussels, 12GZA Ziekenhuizen, Department of Neurology, Antwerp, 13UZ Gent, Department of Neurology, Gent, 14AZ Alma, Department of Neurology, Sijsele, 15Hôpital de la Citadelle, Department of Neurology, Liège, 16AZ Sint-Jan Brugge Oostende, Department of Neurology, Bruges, 17Imeldaziekenhuis, Department of Neurology, Bonheiden, 18Jessa Ziekenhuis, Department of Neurology, Hasselt, 19AZ Sint-Blasius, Department of Neurology, Dendermonde, 20Clinique Saint-Michel, Department of Neurology, Brussels, 21Clinique Saint-Joseph, Department of Neurology, Arlon, 22AZ SintMaarten, Department of Neurology, Mechelen, 23CNRF, Fraiture-en-Condroz, 24Hôpital Erasme, Brussels, 25Centre de Santé des Fagnes, Department of Neurology, Chimay, 26Clinique Saint-Pierre, Ottignies, 27AZ Sint-Lucas, Department of Neurology, Assebroek, 28CHU de Liège - Sart Tilman B35, Liège, 29CHU UCL Namur site Godinne, Department of Neurology, Yvoir, 30Hôpital Erasme, Department of Neurology, Brussels, 31Heilig-Hart Ziekenhuis, Department of Neurology, Mol, 32Grand Hôpital de Charleroi, Department of Neurology, Charleroi, 33AZ Sint-Nikolaas, Department of Neurology, Sint Niklaas, 34AZ Sint-Jan Brugge-Oostende, Department of Neurology, Oostende, Belgium

Introduction: A unique Belgian registry of multiple sclerosis (MS) patients starting a new disease modifying treatment (DMT) was conceived and established in 2012 by the Belgian Study Group for Multiple Sclerosis (BSGMS). The registry is named BELTRIMS, short for ‘Belgian Treatment in MS’.

Aims: We collect data independent from pharmaceutical companies in a single registry of Belgian MS patients, as opposed to having different registries for each new DMT. In doing so, we anticipate to detect unknown or rare side-effects, to collect real-life efficacy, safety and tolerability data and to capture pregnancy outcomes. Moreover, sequencing of treatments is captured in this registry, as once a patient is in the registry, data are collected on a 6-monthly basis.

Methods: Neurologists who are members of the BSGMS can enter patients after approval of the BELTRIMS registry protocol by local and central ethics committees. Informed consent from each
patient is required. An electronic CRF that can be accessed from the internet, was developed, with forms for starting a treatment, patient history, laboratory tests, adverse events and serious adverse events. Six-monthly follow-up forms contain clinical status including relapses and EDSS, as well as standard MRI data. More specific data per treatment are collected optionally. The registry is governed by a steering group and owned by the BSGMS, with technical support provided by Custodix NV.

**Results:** 1408 patients have been registered by 42 centers as of May 27th, 2018. 27% of Patients are treated with fingolimod, 26% with dimethylfumarate, 24% with teriflunomide, 13% with natalizumab, 4% with alemtuzumab. 4% of patients is untreated.

**Conclusions:** We present the set-up, governance and treatment data from the BELTRIMS registry. To date, this is the first and only Belgian MS registry. The current treatment practice of MS in Belgium is reflected in this registry.

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