

(10%) opted for 'non-applicable'. In total, 258/332 (78%) pwMS indicated family planning was not considered when selecting treatment.

Overall, 56% of pwMS reported that the disease affected, with different degrees of impact, their family planning decision-making. HCPs were the main source of information.

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### Efficacy of Subcutaneous Interferon B-1a in Patients with a First Clinical Demyelinating Event in REFLEX is Maintained After Application of the 2017 McDonald Criteria

Mark S Freedman<sup>1</sup>, Ludwig Kappos<sup>2</sup>, Giancarlo Comi<sup>3</sup>, Nicola De Stefano<sup>4</sup>, Sanjeev Roy<sup>5</sup>, Delphine Issard<sup>6</sup>

<sup>1</sup> University of Ottawa and the Ottawa Hospital Research Institute, Ottawa, Canada

<sup>2</sup> Neurologic Clinic and Policlinic, Departments of Clinical Research and Biomedical Engineering, University Hospital Basel and University of Basel, Basel, Switzerland

<sup>3</sup> Università Vita-Salute San Raffaele, Ospedale San Raffaele, Milan, Italy

<sup>4</sup> University of Siena, Siena, Italy

<sup>5</sup> Merck, Aubonne, Switzerland

<sup>6</sup> Cytel Inc, Geneva, Switzerland

In REFLEX, subcutaneous interferon  $\beta$ -1a (scIFN $\beta$ -1a) reduced conversion to McDonald (2005 criteria) and clinically definite (CD) multiple sclerosis (MS) versus placebo in patients with a first clinical demyelinating event. Retrospective analysis demonstrated overall results were unchanged after application of McDonald-2010 MS criteria. Revised McDonald-2017 MS criteria included presence of cerebrospinal fluid specific oligoclonal bands, symptomatic lesions, and cortical lesions. Effect of scIFN $\beta$ -1a on time to McDonald-2005 MS and CDMS, and annualised relapse rate (ARR) during REFLEX was assessed, stratified by retrospective diagnosis of patients at baseline that did/did not meet McDonald-2017 MS criteria.

During REFLEX, patients were randomised to scIFN $\beta$ -1a three times (tiw) or once weekly (qw), or placebo for 2-years. Patients in the intention-to-treat population were retrospectively stratified into McDonald-2017-positive (retrospectively met the McDonald-2010 MS criteria at baseline or had positive oligoclonal bands) and -negative subgroups. Kaplan-Meier curves estimated time to McDonald-2005 MS or CDMS by treatment group for each McDonald-2017 subgroup.

Oligoclonal band detection was optional during REFLEX and only a small number of patients were added from the McDonald-2010 analysis. Overall, 235/517 patients were McDonald-2017-positive at baseline (40 were McDonald-2010-negative but had positive oligoclonal bands). In the McDonald 2017-positive subgroup, scIFN $\beta$ -1a tiw or qw versus placebo significantly delayed time to McDonald-2005 MS (hazard ratio [HR] versus placebo: tiw,0.47;p<0.001; qw,0.58;p=0.002) and CDMS (HR versus placebo: tiw:0.46;p=0.010; qw:0.42;p=0.003). scIFN $\beta$ -1a qw and tiw significantly reduced mean ARR versus placebo in McDonald-2017-positive patients (69.1% and 59.3%;p<0.001).

Effect of scIFN $\beta$ -1a observed in McDonald-2010 patients on time to McDonald-2005 MS and CDMS was maintained in McDonald-2017-positive patients, although only a small number of patients were added after applying the 2017 criteria.

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### Subcutaneous Interferon Beta-1a 22/44 mg Demonstrates Comparable Effectiveness Versus Teriflunomide in Newly Treated Patients with Multiple Sclerosis. a Study in a French Nationwide Cohort of Multiple Sclerosis: Observatoire Francais De La Sclérose En Pla

Fabien Rollot<sup>1</sup>, Caroline Foch<sup>2</sup>, David Laplaud<sup>3</sup>, Emmanuelle Boutmy<sup>2</sup>, Kurt Marhardt<sup>4</sup>, Meritxell Sabidó<sup>2</sup>

<sup>1</sup> Université de Lyon, Université Claude Bernard and Hospices Civils de Lyon and EUGENE DEVIC EDMUS Foundation against multiple sclerosis, state-approved foundation and Observatoire Français de la Sclérose en Plaques, Centre de Recherche en Neurosciences de, Lyon, France

<sup>2</sup> Merck KGaA, Darmstadt, Germany

<sup>3</sup> CRTI-Inserm U1064, CHU Nantes, Nantes, France

<sup>4</sup> Merck Gesellschaft mbH, Vienna, Austria

Subcutaneous interferon beta-1a (scIFN $\beta$ -1a) is a well-established multiple sclerosis therapy with approximately 1.69 million patient-years of exposure. Comparing real-world outcomes for scIFN $\beta$ -1a 22/44 $\mu$ g and teriflunomide (TFN) can provide insights into the benefits of both therapies. Effectiveness of IFN $\beta$ -1a versus TFN was compared by assessing relapse incidence (Year-2), proportion of patients with disability progression confirmed over 6-months with the expanded disability status scale (EDSS; Year-2), and proportion of patients achieving no evidence of disease activity (NEDA-3; Year-1).

Patients with relapsing-remitting multiple sclerosis (RRMS) onset date, initiating IFN $\beta$ -1a or TFN between Jan-2014–Jun-2018 were included. Patients, pregnant, or with RRMS duration  $\geq$ 10 years were excluded. Patients were categorised by drug initiated and followed regardless of drug discontinuation. Risk of first relapse was compared by proportional hazard Cox model with hazard ratio (HR; 95% confidence intervals [CI]) and EDSS and NEDA-3 status by logistic regression with odds ratio (OR; 95%CI). To account for baseline differences, results were weighted on propensity score via Inverse Probability of Treatment Weighting (IPTW) method.

Respectively, 244 and 688 patients were included in IFN $\beta$ -1a and TFN cohorts for relapse risk. Year-2: 39.4%(95%CI,34.7-51.4) IFN $\beta$ -1a versus 49.2%(42.7-54.7)TFN patients had  $\geq$ 1 relapse (HR, 0.79[0.59-1.06]); 8.5%(95%CI,2.2-22.3) IFN $\beta$ -1a versus 11.4%(6.4-22) TNF patients presented disability progression (OR, 0.72[0.24-2.13]). Year-1: 73.1%(95%CI,40.0-79.6) IFN $\beta$ -1a versus 55.1%(43.7-68.5) TFN patients achieved NEDA-3 (OR, 2.22[0.90-5.56]).

Considering baseline confounders, no differences in relapse incidence (Year-2), disability progression (Year-2), or achievement of NEDA-3 (Year-1) were observed with IFN $\beta$ -1a versus TFN. However, since the IPTW method did not balance some baseline differences between groups, remaining confounders may have biased the conclusions. The small sample size limited power of analyses.

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### Updated Safety of Cladribine Tablets in the Treatment of Patients with Multiple Sclerosis: Integrated Safety Analysis and Post-Approval Data

Stuart Cook<sup>1</sup>, Gavin Giovannoni<sup>2</sup>, Thomas Leist<sup>3</sup>, Giancarlo Comi<sup>4</sup>, Sana Syed<sup>5</sup>, Axel Nolting<sup>6</sup>, Doris Damian<sup>5</sup>, Regina Schick<sup>6</sup>

<sup>1</sup> Rutgers, The State University of New Jersey, New Jersey Medical School, Newark, United States

<sup>2</sup> Queen Mary University of London, Blizard Institute, Barts and The London School of Medicine and Dentistry, London, United Kingdom

<sup>3</sup> Jefferson University, Comprehensive MS Center, Philadelphia, United States

<sup>4</sup> Università Vita-Salute San Raffaele, Ospedale San Raffaele, Milan, Italy