Preliminary results of RETRO PPMS: A retrospective study investigating best supportive and medical care in clinical practice in patients with primary progressive multiple sclerosis (PPMS) in Germany

Short title: Best supportive and medical care in PPMS

Herbert Schreiber^{1*}, Iris-Katharina Penner^{2,3}, Cornelia Cooper^{4**}, Stefanie Hieke-Schulz⁴, Tjalf Ziemssen⁵

¹Neurologische Gemeinschaftspraxis & Neuropoint Akademie, Ulm, Deutschland; ²Medizinische Fakultät, Neurologische Klinik, Heinrich Heine Universität Düsseldorf, Deutschland; ³COGITO Zentrum für Angewandte Neurokognition und Neuropsychologische Forschung, Düsseldorf, Deutschland; ⁴Roche Pharma AG, Grenzach-Wyhlen, Deutschland; ⁵Klinik und Poliklinik für Neurologie, Universitätsklinikum Carl Gustav Carus, Dresden, Deutschland

*Main author **Main author/submitting and presenting author

Background:

Prior to the European Medicines Agency approval of ocrelizumab, a CD20⁺ B-cell targeting antibody, as the first disease-modifying treatment (DMT) for PPMS in January 2018, management focused on symptomatic treatment and non-evidence-based use of DMTs.

Objectives: RETRO PPMS (ML39631) is an ongoing retrospective study investigating best supportive and medical care in clinical practice in patients with PPMS in Germany. We present interim analysis results, based on the first 100 patients with complete documentation available. The data were previously presented at the DGN (German Neurological Society) congress on November 4-7, 2020.

Methods: RETRO PPMS is a multicenter, secondary data use, retrospective, non-interventional study. Adults with PPMS according to McDonald 2010 criteria were included from the first visit after study onset. Interim data were collected between Q2/2018 and Q1/2020. Medical history, disease status, and treatments were assessed from 12-month periods prior to PPMS diagnosis to the current visit. Acute measures, including BSC parameters and rehabilitation were assessed from the last 2 years, and pharmacoeconomic data from the last 3 months. Data were analyzed using descriptive

statistics with 95% confidence intervals expected to stay within ±3% of the respective estimate. Primary endpoint analyses were performed for defined subgroups.

Results: The interim analysis included 99 patients; one patient was excluded due to failure to meet the McDonald 2010 criteria. The mean±SD age was 57.1±11.2 years, and 44.4% of the patients were female. 45.5% had received corticosteroids and 8.1% interferon-beta-1a. Further results on BSC and pharmacoeconomic data will be shown.

Conclusions: RETRO PPMS provides valuable real-world data insights into the epidemiology and individual patterns of care of patients with PPMS in Germany prior to the era of B-cell targeted therapy.