MSMilan2023
9th Joint ECTRIMS-ACTRIMS Meeting
11–13 October 2023 | Milan, Italy

Abstract Number: 222/P727

Eight-Point Reliable Change on Symbol Digit Modalities Test With Ozanimod: Findings From the Phase 3 SUNBEAM and DAYBREAK Extension Trials

John Deluca * [1],Jeffrey Cohen [2],Bruce Cree [3],Giancarlo Comi [4],Ludwig Kappos [5],Chun-Yen Cheng [6],James Sheffield [6],Jon Riolo [6],Andrew Thorpe [6],Diego Silva [6],Ralph Benedict [7],

[1] Kessler Foundation, West Orange, New Jersey, and Departments of Physical Medicine and Rehabilitation, and Neurology, Rutgers - New Jersey Medical School, Newark, United States, [2] Mellen Center for MS Treatment and Research, Cleveland Clinic, Cleveland, United States, [3] Weill Institute for Neurosciences, University of California San Francisco, San Francisco, United States, [4] Vita-Salute San Raffaele University, and Casa di Cura Igea, Milan, Italy, [5] Research Center for Clinical Neuroimmunology and Neuroscience Basel (RC2NB), Departments of Head, Spine and Neuromedicine, Clinical Research, Biomedicine, and Biomedical Engineering, University Hospital and University of Basel, Basel, Switzerland, [6] Bristol Myers Squibb Company, Princeton, United States, [7] Jacobs MS Center, Department of Neurology, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, State University of New York, Buffalo, United States

Introduction:

In the SUNBEAM trial (NCT02294058), ozanimod (OZA) treatment improved cognitive processing speed (CPS) vs interferon β-1a (IFN) as measured by clinically meaningful (≥4 point) improvement or worsening on the Symbol Digit Modalities Test (SDMT). Recently it has been suggested that 8-point SDMT change better represents a statistically reliable threshold for identifying individual-level changes.

Objectives/Aims:

To evaluate the long-term effects of OZA on CPS in patients with relapsing multiple sclerosis (RMS) using an SDMT change of 8 points.

Methods:

The double-blind, double-dummy, SUNBEAM trial randomised adults (18–55 years) with RMS to once-daily oral OZA 0.92 or 0.46mg or intramuscular IFN 30µg/wk. SUNBEAM continued until the last participant was treated for 12 months (M), with completers eligible for an open-label extension (OLE) trial (DAYBREAK; NCT02576717) of OZA 0.92mg. This analysis reports the percentage of participants with reliable (≥8 point) SDMT improvement or worsening compared with SUNBEAM baseline at SUNBEAM M12, and at OLE M12, M36, and M60 in those initially randomised to OZA 0.92 mg or IFN. *P*-values are nominal.

Results:

SUNBEAM participants (n=397, OZA 0.92mg; n=395, IFN) who entered the OLE were analysed. Mean (SE) baseline SDMT scores were 48.0 (0.69) and 47.4 (0.68), respectively. At SUNBEAM M12, 16.1% (64/397) and 9.1% (36/395) of participants randomised to OZA 0.92mg and IFN, respectively, had ≥8-point SDMT improvement (*P*=0.005), and 11.6% (46/397) and 11.6% (46/395) worsened ≥8 points (*P*=0.970). At OLE M12, ≥8-point improvement was seen in 21.2% (84/396) of those who received continuous OZA and 17.0% (66/388) of those originally assigned to IFN (*P*=0.219); 11.6% (46/396) and 13.1% (51/388) worsened ≥8 points (*P*=0.580), respectively. At OLE M36, 22.5% (81/360) and 18.1% (62/342) improved ≥8 points (*P*=0.291) and 13.6% (49/360) and 14.0% (48/342) worsened ≥8 points (*P*=0.674). At OLE M60, 24.5% (79/323) and 19.7% (60/304) improved ≥8 points (*P*=0.320); 14.6% (47/323) and 15.8% (48/304) worsened ≥8 points (*P*=0.885).

Conclusion:

Compared with participants treated with IFN, participants in the OZA group were significantly more likely to achieve 8-point improvement on SDMT at M12 in SUNBEAM. When IFN participants switched to OZA in the OLE, the statistical group differences were no longer apparent.** At the end of the OLE trial, after 5–7 years of follow-up, the proportion of participants with 8-point improvement in the continuously OZA-treated group remained numerically higher.

Disclosures:

This study was sponsored by Bristol Myers Squibb. Writing and editorial assistance was provided by Noud van Helmond, MD, PhD, of Peloton Advantage, LLC, an OPEN Health company, and funded by Bristol Myers Squibb. JD: reports personal compensation for consulting from Biogen Idec, Bristol Myers Squibb, Janssen Pharmaceuticals, and Novartis; speaker for Consortium of MS Centers; and grant funding from Biogen Idec, Canadian MS Society, Consortium of MS Centers, EMD Serono, and National MS Society. JAC: received personal compensation for consulting for Biogen, Convelo, EMD Serono, Gossamer Bio, Mylan, and PSI; and serving as an editor of Multiple Sclerosis Journal. BACC: reports personal compensation for consulting for Alexion, Atara, Autobahn, Avotres, Biogen, Boston Pharma, EMD Serono, Gossamer Bio, Hexal/Sandoz, Horizon Therapeutics, Immunic AG, Neuron23, Novartis, Sanofi, Siemens, TG Therapeutics, and Therini; and received research support from Genentech. GC: reports compensation for consulting and/or speaking activities from Almirall, Biogen, Celgene, EXCEMED, Forward Pharma, Genzyme, Merck, Novartis, Roche, Sanofi, and Teva. LK: has received no personal compensation. His institutions (University Hospital Basel/Stiftung Neuroimmunology and Neuroscience Basel) have received and used exclusively for research support payments for steering committee and advisory board participation, consultancy services, and participation in educational activities from Actelion, Aurigia Vision AG, Bayer, BMS, df-mp Molnia & Pohlmann, Celgene, Eli Lilly, EMD Serono, Genentech, Glaxo Smith Kline, Janssen Pharmaceuticals, Japan Tobacco, Merck, MH Consulting, Minoryx, Novartis, F. Hoffmann-La Roche Ltd, Senda Biosciences Inc., Sanofi, Santhera, Shionogi BV, TG Therapeutics, and Wellmera; license fees for Neurostatus-UHB products; and grants from Novartis, Innosuisse, and Roche. CYC, JKS, JVR, AT, and DS: employees and/or shareholders of Bristol Myers Squibb. RHB: has received fees from Acorda Therapeutics, Biogen, Bristol Myers Squibb, EMD Serono, Roche/Genentech, Mallinckrodt, National Multiple Sclerosis Society, Novartis Pharmaceuticals Corporation, and Sanofi Genzyme.