Safety and Efficacy of Siponimod in Patients with Active Secondary Progressive Multiple Sclerosis Identifying as Hispanic from the Phase 3 EXPAND Study

Stanley Cohan[1], Le H Hua[2], Amit Bar-Or[3], Fred D Lublin[4], Xiangyi Meng[5], Gina Mavrikis Cox[5], Patricia K Coyle[6], Robert J Fox[7]

[1]Providence Brain and Spine Institute, and Providence Multiple Sclerosis Center, Providence Health & Services, Portland, OR, USA; [2]Lou Ruvo Center for Brain Health, Las Vegas, NV, USA; [3]Center for Neuroinflammation and Experimental Therapeutics and Department of Neurology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA; [4]Icahn School of Medicine at Mount Sinai, New York, NY, USA; [5]Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA; [6]Multiple Sclerosis Comprehensive Care Center, Stony Brook University, Stony Brook, NY, USA; [7]Cleveland Clinic, Cleveland, OH, USA.

OBJECTIVE

Assess the efficacy/safety profile of siponimod 2mg daily in a subgroup of patients with active SPMS from EXPAND who identified as Hispanic.

BACKGROUND

Siponimod significantly reduced 3-month and 6-month CDP risk by 31% and 37%, respectively, in patients with active SPMS from EXPAND. Minority group patients are underrepresented in clinical trials, resulting in limited data to inform decision-making.

DESIGN/METHODS

Active SPMS was defined as having ≥1 relapse in the 2 years before Baseline and/or ≥1 T1 Gd+ lesion at Baseline. Proportional hazard and ANCOVA models were applied to analyze time to 3- and 6- month CDP (as per EDSS) and change in SDMT, respectively. Number and percentage of patients with AEs were reported.

RESULTS

Of 1651 patients in the overall EXPAND population, 106 (6.4%) identified as Hispanic, of which 40 had active SPMS (siponimod [n=31], placebo [n=9]). Mean (SD) age was 47.4 (7.6), 65.0% were female, mean (SD) duration since MS onset was 15.3 (6.4) years, mean (SD) baseline EDSS was 5.4 (1.1), and 77.5% of patients had ≥1 MS relapse in the last 2 years prior to Baseline. Siponimod reduced 3-month CDP risk by 42% (HR [95% CI]: 0.58 [0.17, 1.92]; p=0.37) and 6-month CDP risk by 67% (0.33 [0.07, 1.53], p=0.16) vs placebo. At Month-12, mean SDMT score changed minimally from Baseline for siponimod vs a 4.7-point worsening for placebo (difference between treatment groups, 4.9 (SE 2.6, p=0.07)). Rates of any AEs, SAEs, and AEs leading to discontinuation were similar for siponimod and placebo.

CONCLUSIONS

There was a numeric relative reduction in CDP risk in siponimod-treated patients with active SPMS identifying as Hispanic, consistent with the overall active SPMS cohort in EXPAND. Small sample size prevents us from drawing conclusions on statistical significance of the results in the Hispanic subgroup. This brings into focus the challenges of minority under-representation in clinical trials.