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Title
Effect of Siponimod on the MSWS-12 and MSIS-29 in Patients With SPMS From the EXPAND Study

Introduction
In the Phase 3 EXPAND study in SPMS, siponimod showed a favourable effect on the 12-item Multiple Sclerosis Walking Scale (MSWS-12). Treatment effects on 29-item Multiple Sclerosis Impact Scale (MSIS-29) and MSWS-12 were further investigated by applying clinically meaningful cut-offs based on literature, in addition to the change from baseline.

Methods
Of 1651 patients randomised, 1327 completed the EXPAND core study (median duration, 21 months). Change from baseline for MSIS-29 was assessed using a mixed-effect repeated measures model. Time to 6-month confirmed progression (6m-CP) was assessed using a Cox regression model, with meaningful cut-offs defined as >=7.5 (MSIS-29) and 4/6/8/10 (MSWS-12) points in the overall population and active/non-active SPMS and age <=/>45 years subgroups.

Results
In the overall population, increases from baseline in MSIS-29 physical and psychological scores were significantly reduced with siponimod versus placebo (Table 1). Risk of 6m-CP in the MSIS-29 physical score also decreased in the overall population (hazard ratio [HR] 0.81, p=0.034), active SPMS (0.76, p=0.055) and age <=45 years (0.63, p=0.005) subgroups. Trends favouring siponimod were observed for 6m-CP in MSIS-29 psychological score. On MSWS-12, pronounced reductions in 6m-CP risk were observed with more stringent cut-offs of 6/8/10 points in the overall population (HR 0.75–0.80, p<0.05), active SPMS (0.72–0.74, p<0.05) and age <=45 years (0.67–0.71, p<0.05) subgroups.

Conclusion
Siponimod reduced the increase in MSIS-29 and MSWS-12 scores and the risk of clinically meaningful confirmed progression in SPMS patients. The effect was more apparent in younger (age <=45 years) or active SPMS patients.

Disclosure
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