The ACROSS study: long-term efficacy of fingolimod in patients with RRMS (Follow-up at 10 years)

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Contribution

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Background: Long-term assessment of disability outcomes is important in the evaluation of the effectiveness of multiple sclerosis (MS) treatments.

Objective: In relapsing-remitting MS patients initially enrolled in the phase II proof of concept study we evaluated the effect of fingolimod on disability at 10 years. We also determined time to first use of an ambulatory device or wheelchair, change in MS functional composite (MSFC) score and MRI outcomes.

Methods: ACROSS was a multicentre, single visit, follow-up study at 10 years, of patients originally enrolled in the phase II fingolimod trial. Disability progression is defined as an increase in EDSS score of 1.5 (from baseline score 0), or 1 (from baseline score 1-5), or 0.5 (from baseline score >5). Patients in the continuous fingolimod treatment group (contin-fingo; patients with ≥8 years of exposure to fingolimod) and non-continuous treatment group (non-contin-fingo; patients with < 8 years of exposure to fingolimod) were compared using ANCOVA (EDSS) and Cox proportional hazards model (use of wheel chair) analysis. MRI outcomes will be presented separately.

Results: ACROSS enrolled 62.3% (175/281) patients of the original phase II study; mean age was 37.4 years and 66.9% were women. A total of 59.4% (104/175) were in contin-fingo, 37% of the full phase II cohort (104/281).

Disability progression at 10 years was reported in 72 (41.1%) patients. Significantly less patients progressed in contin-fingo vs non-contin-fingo groups (33.7% vs 52.7%, p=0.0268). Change from baseline EDSS was significantly lower in the contin-fingo vs non-contin-fingo groups (0.58 vs 1.17; p=0.0155). A four-fold difference in the time to use of wheelchair was found in favour of contin-fingo vs non-contin-fingo groups (HR: 0.24 [95%CI: 0.07 to 0.85]).

Twenty- six (14.9%) patients developed secondary progressive MS, significantly less in the contin-fingo vs non-contin-fingo groups (10 [9.6%] vs 14 [25.5%]; p=0.0107).

Conclusions: Ten year single visit follow up of patients enrolled in the fingolimod phase II study shows high treatment persistence. Disability progression was lower in patients on continuous fingolimod compared to those who interrupted treatment. Although the study was of observational nature, a causal link between reduced disability progression and fingolimod treatment is plausible.

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