EFFECT OF TERIFLUNOMIDE ACROSS PATIENT SUBGROUPS BASED ON PRIOR TREATMENT: POOLED ANALYSES OF THE PHASE 3 TEMSO AND TOWER STUDIES

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BACKGROUND/OBJECTIVES: Teriflunomide is a once-daily oral immunomodulator approved for relapsing-remitting MS. In TEMSO (NCT00134563) and TOWER (NCT00751881), teriflunomide 14 mg significantly reduced annualized relapse rate (ARR) and risk of disability progression vs placebo in patients with relapsing forms of MS; teriflunomide 7 mg significantly reduced ARR. Both teriflunomide doses had similar, manageable safety profiles.
We assess consistency of teriflunomide effects based on baseline disease-modifying therapy (DMT) history in TEMSO/TOWER.
METHODS: Post hoc pooled analyses of ARR and 12‑week confirmed disability progression were performed according to patient subgroups defined by prior MS treatment: ≥2 prior DMTs (n=109); 1 prior DMT (n=574); no prior DMT (n=1568).
RESULTS: Baseline characteristics were well balanced between treatment groups. Mean time since diagnosis ranged from 4.4 years (no prior DMT) to 7.3 years (≥2 prior DMTs). Teriflunomide 14 mg demonstrated efficacy vs placebo across prior treatment subgroups for ARR and disability progression, with no significant treatment-by-subgroup interactions. Relative risk reductions for ARR with teriflunomide 14 mg vs placebo were 46.7%, 27.7%, and 35.9% for ≥2 prior DMTs, 1 prior DMT, and no prior DMT, respectively. Corresponding hazard rate reductions for risk of disability progression were 78.6%, 46.6%, and 17.4%. Similar results for ARR were observed with teriflunomide 7 mg.
CONCLUSIONS: These analyses demonstrate consistent treatment effect for teriflunomide 14 mg regardless of pre-trial therapy, with treatment-naïve patients showing slightly lower relative reductions in disability progression, reflective of lower background disease progression.
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