

# Phase III TOWER Study

**Analyses from the TOWER trial will be presented at the 65<sup>th</sup> Annual Meeting of the American Academy of Neurology (AAN)**

**AUBAGIO is a once-daily, oral immunomodulator indicated for patients with relapsing multiple sclerosis (MS)**

TOWER (Teriflunomide Oral in people With relapsing multiple sclerosis) is a randomized, double-blind Phase III trial that enrolled 1,169 patients with relapsing MS across 26 countries and compared 7 mg or 14 mg once-daily, oral AUBAGIO<sup>®</sup> (teriflunomide) against placebo, followed by an open-label extension period. The primary endpoint was the annualized relapse rate, defined as the number of confirmed relapses per patient-year. The key secondary endpoint was time to disability progression confirmed for a minimum of 12-weeks. Safety variables were defined as adverse events reported by the patients or noted by the investigator during the study period.

## Teriflunomide Efficacy and Safety in Patients with Relapsing Multiple Sclerosis: Results from TOWER, a Second Pivotal, Phase 3 Placebo-Controlled Study

**Abstract S01.004; Session S01: Multiple Sclerosis: Clinical Trials 1; March 19, 2013, 1:45 pm PST**

TOWER data for the 14 mg dose of AUBAGIO, as previously reported, include:

- A 36.3 percent reduction in annualized relapse rate (ARR=0.319), the primary endpoint of the trial, as compared to placebo (ARR=0.501) ( $p=0.0001$ ).
- Fifty-two percent of patients treated with this dose were also relapse-free, meaning they did not experience any relapses during the study, compared to 38 percent with placebo (37 percent risk reduction;  $p<0.0001$ ).
- A 31.5 percent reduction in the risk of 12-week sustained accumulation of disability, the main secondary endpoint, as measured by the Expanded Disability Status Scale (EDSS), compared to placebo ( $p=0.0442$ ).
- Adverse events observed in the trial were consistent with those seen in previous studies of AUBAGIO in MS. The proportion of patients with treatment-emergent adverse events was similar across all treatment arms. The most common adverse events reported more frequently in the AUBAGIO arms were headache, ALT (Alanine aminotransferase) elevations, hair thinning, diarrhea, nausea and neutropenia. As previously reported, there was one death from a respiratory infection in the placebo arm and three deaths in the teriflunomide arms from a motor vehicle accident, suicide and sepsis.

## Pre-Defined Subgroups Analyses of TOWER, a Placebo-Controlled Phase 3 Trial of Teriflunomide in Patients with Relapsing Multiple Sclerosis

**Abstract S41.006; Session S41: Multiple Sclerosis: Clinical Trials II; March 21, 2013, 1:30 pm PST**

- This subgroup analysis reveals the efficacy benefits of AUBAGIO 14 mg in patients with severe disease, as well as those with mild to moderate MS.
- Reduction in risk of relapse and sustained disability progression were consistent in both patients with baseline EDSS scores greater than 3.5, meaning their disability was severe, and those with EDSS scores less than or equal to 3.5 (mild to moderate).
- The beneficial effects of AUBAGIO 14 mg on disability progression were significantly more pronounced in patients who had more than one relapse within one year ( $p=0.0179$ ) or two years ( $p=0.0454$ ) of study enrollment than those with fewer relapses; the beneficial effects on relapse rates were comparable across groups stratified by number of prior relapses.

## Teriflunomide Reduces Relapse-Related Sequelae, Hospitalizations and Corticosteroid Use: A Post-Hoc Analysis of the Phase 3 TOWER Study

**Abstract P07.109; Session P07: Multiple Sclerosis: Clinical Trial Outcomes; March 21, 2013, 2:30 pm PST**

- Treatment with AUBAGIO 14 mg may have a positive impact on the lives of MS patients by significantly reducing the number of relapses with neurological sequelae (relapses resulting in an increase in EDSS or Function Scores (FS) within 30 days following the relapse or defined by the study investigator).
- AUBAGIO 14 mg reduced ARR with sequelae defined by an increased EDSS or FS by 33 percent ( $p=0.0081$ ) and reduced the ARR with sequelae defined by the investigator by 53.5 percent ( $p=0.0004$ ) versus placebo.
- In addition, AUBAGIO significantly reduced the number and length of hospitalizations of MS patients resulting from a relapse, as well as the need for treatment with corticosteroids. Relapses leading to hospitalization were reduced by 33.6 percent ( $p=0.0155$ ) with AUBAGIO 14 mg, and patients treated with AUBAGIO 14 mg spent significantly fewer nights in the hospital for a relapse (1.7 nights with AUBAGIO 14 mg compared 3.4 nights for placebo ( $p=0.0285$ )). Relapses treated with corticosteroids were reduced by 35.7 percent ( $p=0.0002$ ) with AUBAGIO 14 mg versus placebo. These outcomes may result in a reduction of relapse-related healthcare costs.