A MULTI-CENTER, PLACEBO-CONTROLLED, DOUBLE-BLIND TRIAL TO EXAMINE THE SAFETY AND EFFICACY OF CIMIVANSSERIN IN THE TREATMENT OF PARKINSON’S DISEASE PSYCHOSIS (ACP-103-012)

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Introduction: Because of its specificity for the 5-HT₂₄ receptor and lack of D₂ and H₁ receptor binding, pimavanserin may provide antipsychotic benefit in PDP with acceptable safety and tolerability.

Aim: An international outpatient study was conducted to demonstrate the antipsychotic efficacy and safety of pimavanserin in subjects with PDP.

Methods: 298 non-demented PDP patients were randomized to receive once-daily oral doses of placebo, 10mg or 40mg pimavanserin (1:1:1 ratio). Evaluations occurred on Days 1, 8, 15, 29, and 42. Patients were on stable PD medication through the study. The primary efficacy endpoint was change from Baseline to Day 42 on the Hallucinations and Delusions score of the SAPS. Secondary measures included UPDRS and CGI. Effects on caregiver burden and sleep were also evaluated.

Results: All arms showed marked improvements in mean SAPS scores: 5.9 points placebo, 5.8 points 10mg pimavanserin, and 6.7 points 40mg pimavanserin. Neither active arm showed statistically significant separation from placebo at Day 42. The high placebo response may have limited the ability to detect treatment effects. Although significance was not achieved at all time points, the 40mg pimavanserin arm consistently demonstrated efficacy signals across a number of measures, including the SAPS, CGI-I, SCOPA nighttime sleep measure and caregiver burden scale. Pimavanserin met the key secondary endpoint of motoric tolerability as measured using the UPDRS. Pimavanserin was safe and well tolerated, with the frequency of adverse events generally similar in the pimavanserin and placebo arms.

Conclusions: These data warrant further investigation of 40mg pimavanserin for PDP.