IMPROVED NIGHTTIME SLEEP WITHOUT INCREASED DAYTIME SEDATION IN PATIENTS WITH PARKINSON'S DISEASE PSYCHOSIS TREATED WITH PIMAVANSERIN, A SELECTIVE 5-HT_2A ANTAGONIST

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Background: Pimavanserin, a 5-HT_2A receptor antagonist with no dopaminergic, histaminergic, muscarinic, or adrenergic activity, is being developed for the treatment of PD- and AD-psychosis. Based on its pharmacology, pimavanserin is expected to have an improved safety profile compared to available antipsychotics and may improve nighttime sleep without daytime sedation.

Aim: To determine if pimavanserin treatment in patients with PD psychosis (PDP) improves nighttime sleep without daytime sedation.

Method: An international Phase III placebo-controlled study of pimavanserin (10, 40 mg) enrolled 298 PDP patients. Sleep impairment was not required for study entry. Nighttime sleep quality and daytime sleepiness were measured using the SCOPA-SLEEP scale over the 6-week treatment period.

Results: Mean baseline (pretreatment) SCOPA nighttime sleep scores were 10.5 for both the placebo and 40-mg dose groups (N=97 and 92, respectively). Statistically significant improvement in nighttime sleep scores were observed in the 40-mg pimavanserin group vs. placebo as early as Day 8 (-1.0 vs. no change, p=0.003) and continued through Day 29. At the end of treatment (Day 42), a trend toward significance remained (-1.7 40-mg vs. -1.2 placebo; p=0.066). The 10-mg pimavanserin group was similar to placebo at all timepoints. Daytime sleepiness scores were unaffected by pimavanserin treatment indicating no sedative effects of the drug.

Conclusions: Pimavanserin appears to improve nighttime sleep without negative effects on daytime sleepiness in patients with PDP. Studies of pimavanserin in AD psychosis, where sleep impairment is also a common comorbidity, are planned and will include evaluations of sleep.