DECREASED CAREGIVER BURDEN AMONG CARERS OF PATIENTS WITH PARKINSON'S DISEASE PSYCHOSIS TREATED WITH PIMAVANSELRIN, A SELECTIVE 5-HT$_{2A}$ ANTAGONIST

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**Background:** Pimavanserin is a selective 5-HT$_{2A}$ antagonist being developed for treatment of PD- and AD-psychosis. Onset of psychotic symptoms in these patients is associated with increased caregiver burden, more rapid functional decline, premature nursing home placement, and increased morbidity/mortality. Based on its pharmacology, pimavanserin may impart antipsychotic benefit with an improved safety profile compared to available antipsychotics and may also improve nighttime sleep without daytime sedation.

**Aim:** To determine if pimavanserin treatment in patients with PD psychosis (PDP) confers reduced caregiver burden.

**Method:** An international Phase III placebo-controlled study of pimavanserin (10mg, 40mg) was conducted in 298 PDP patients. Caregivers were required to attend all study visits and complete the Caregiver Burden Scale (CBS) over the 6-week treatment period.

**Results:** Mean baseline (pretreatment) CBS scores were 30.8 and 31.0 for the placebo (N=97) and 40mg (N=92) groups, respectively. Statistically significant improvement in caregiver burden was observed in the first week of treatment for the 40mg pimavanserin group vs. placebo (-3.0 vs. -1.0; p=0.042). Caregiver burden continued to decrease in both groups over the 6-week treatment period, to a maximum change of -3.7 points in the 40mg group and -2.4 points for placebo (NSS). The 10mg pimavanserin group was similar to placebo at all timepoints. Caregiver response curves in this study were similar in shape to patient response curves on measures of psychosis and sleep.

**Conclusions:** Pimavanserin treatment of PDP patients appears to reduce caregiver burden. In planned studies of pimavanserin in ADP, evaluation of caregiver burden may be of interest.