Nuplazid

(pimavanserin)

New Product
Slideshow

MPR

Introduction

- **Brand name:** Nuplazid
- **Generic name:** Pimavanserin
- **Pharmacological class:** Atypical antipsychotic
- **Strength and Formulation:** 17mg; tablets
- **Manufacturer:** Acadia
- **How supplied:** Bottle—60
- **Legal Classification:** Rx

NUPLAZID


60 tablets
NDC 63090-170-60
NUPLAZID
(pimavanserin) tablets
17 mg
Rx Only

Indications

- Treatment of hallucinations and delusions associated with Parkinson's disease (PD) psychosis

Dosage & Administration

- 34mg (taken as two 17mg tabs) once daily without titration
- **Concomitant strong CYP3A4 inhibitors:** 17mg once daily
- **Concomitant strong CYP3A4 inducers:** monitor and dose increase may be needed

Considerations for Special Populations

- **Pregnancy:** No data to assess risk of major congenital malformations or miscarriage
- **Nursing mothers:** Consider benefits and adverse effects
- **Pediatric:** Not established
- **Geriatric:** No differences in safety or efficacy
- **Hepatic impairment:** Not recommended
- **Renal impairment:** Severe impairment (CrCl <30mL/min): not recommended

Warnings/Precautions

- Elderly with dementia-related psychosis: increased risk of death
- **Not for** treating patients with dementia-related psychosis unrelated to the hallucinations/delusions associated with PD psychosis
- **Avoid** in patients with known or congenital QT prolongation, history of cardiac arrhythmias, symptomatic bradycardia, hypokalemia, or hypomagnesemia

Interactions

- See **Adults dose**
- **Potentiated** by strong CYP3A4 inhibitors (eg, itraconazole, ketoconazole, clarithromycin, indinavir); reduce dose by ½
- **Antagonized** by strong CYP3A4 inducers (eg, rifampin, carbamazepine, phenytoin, St. John's wort); monitor for reduced efficacy

Interactions

- **Avoid** concomitant use with other drugs known to **prolong QT interval** including Class 1A (eg, quinidine, procainamide, disopyramide) or Class 3 antiarrhythmics (eg, amiodarone, sotalol), certain antipsychotics (eg, ziprasidone, chlorpromazine, thioridazine), and certain antibiotics (eg, gatifloxacin, moxifloxacin)

Adverse Reactions

- Peripheral edema
- Confusional state
- Nausea
- Hallucination
- Constipation
- Gait disturbance
- QT prolongation

Mechanism of Action

- The mechanism of action in the treatment of hallucinations and delusions associated with PD psychosis is unknown
- However, the effect could be mediated through a combination of inverse agonist and antagonist activity at serotonin 5-HT_{2A} receptors and to a lesser extent at serotonin 5-HT_{2C} receptors

Pharmacokinetics

- **Distribution:** Highly protein bound (~95%) in human plasma
- **Metabolism:** CYP3A4, CYP3A5 (major); CYP2J2, CYP2D6 (minor)
- **Elimination:** Fecal

Clinical Trials

- The efficacy of Nuplazid was demonstrated in a 6-week, randomized, placebo-controlled, parallel-group study (N=199) that randomized patients in a 1:1 ratio to Nuplazid 34mg or placebo once daily
- Patients had a diagnosis of PD for ≥1 year prior to study initiation and had psychotic symptoms that started after the PD diagnosis

Clinical Trials

- The PD-adapted Scale for the Assessment of Positive Symptoms (SAPS-PD) was used to evaluate the efficacy of Nuplazid
- The **primary efficacy** was evaluated based on change from baseline to Week 6 in SAPS-PD total score
- Results demonstrated that Nuplazid was statistically significantly superior to placebo in decreasing the frequency and/or severity of hallucinations and delusions in patients as measured by central, independent, and blinded raters using the SAPS-PD scale

Clinical Trials

- Overall, patients in the Nuplazid arm had a least-squares (LS) mean change in score of **−5.79 vs. −2.73** for patients in the placebo arm (difference −3.06, 95% CI: −4.91, −1.20)
- For the SAPS-PD Hallucinations component, patients in the Nuplazid arm had a LS mean change of −3.81 vs. −1.80 for patients in the placebo arm (difference −2.01, 95% CI: −3.29, −0.72)

Clinical Trials

- For the SAPS-PD Delusions component, patients in the Nuplazid arm had a LS mean change of −1.95 from baseline vs. −1.01 for patients in the placebo arm (difference −0.94, 95% CI: −1.83, −0.04)
- The effect of Nuplazid on overall SAPS-PD improved through the 6-week study period

Clinical Trials

- Nuplazid did not show an effect vs. placebo on motor function, as measured using the UPDRS Parts II and III

- For more clinical trial data, see full labeling

New Product Monograph

- For more information view the product monograph available at:

  http://www.empr.com/nuplazid/drug/34562/