At enrollment, patients in the untreated vs treated group, respectively, had a mean PD duration of 8.05 vs 10.23 years, mean duration of PDP features of 2.20 vs 3.10 yrs, and had a PDP diagnosis for a mean of 1.42 vs 2.16 yrs. Most patients in the untreated group (n=221, 77%) received no antipsychotics through follow-up. The groups were balanced in terms of age (mean 73.9 vs 73.4 yrs) and sex (65.1% vs 63.1% male). The untreated group had higher rates of hypertension (44.5% vs 36.8%) and diabetes (12.8% vs 8.8%); however, the treated group had higher rates of depression (25.6% vs 41.3%) and anxiety (22.8% vs 26.9%). The percent change from baseline at 12 months in total psychosis, hallucination, and delusion scores for the untreated group showed greater worsening than the treated group: 32.3% vs 29.3%; 29.3 % vs 25.0%; and 29.3 % vs 25.0%, respectively, as did daytime sleepiness scores (51.6% vs 40.8%). Measures of PD severity (non-motor and motor MDS-UPDRS scores) and health-related quality of life showed less worsening for the untreated group vs treated group at 12 months. Caregiver burden (per the ZBI) was lower in the untreated group vs the treated group (81.5% vs 90.0%).

Conclusions. In this descriptive analysis, untreated patients had shorter duration of PD, fewer PDP symptoms at baseline, and lower rates of mental health comorbidities vs treated patients. The untreated PDP patients had greater worsening in their psychosis and sleepiness scores at 12 months versus the treated group, yet remained untreated. Future studies are needed to better understand clinicians' rationale for withholding PDP treatment. Funding. Acadia Pharmaceuticals, Inc

**Study Outcomes Among Patients** with Parkinson's Disease Treated for Psychosis Residing in the Long-Term Care Setting and Newly Initiating Pimavanserin or **Off-Label Atypical Antipsychotics** 

Juliana Meyers<sup>1</sup>, Tram Nham<sup>1</sup>, Stanley Wang<sup>2</sup>, Lizzi Esterberg<sup>1</sup> and Nazia Rashid<sup>3</sup>

<sup>1</sup>RTI Health Solutions, Research Triangle Park, NC, USA, <sup>2</sup>PointClickCare, Mississauga, Canada and <sup>3</sup>Medical Affairs, Acadia Pharmaceuticals Inc., San Diego, CA, USA

## Abstract

Introduction. Psychosis is a common feature of Parkinson's Disease (PD), with an estimated 50% of PD patients experiencing psychosis (i.e., hallucinations [H] or delusions [D]) at some time during the course of their illness. Pimavanserin (PIM) is the only medication approved in the US for the treatment of H&D associated with Parkinson's disease psychosis (PDP); however, offlabel atypical antipsychotics (AAP) are continuously used. Currently, there are very few real-world studies which evaluate the patient characteristics and clinical outcomes among PD patients residing in the long-term care (LTC) setting within the US, newly initiated on PIM or other AAPs to treat psychosis.

253

pharmacy orders (RX), and EHR data linked with the Minimum Data Set (MDS) was used to identify PD patients with a PD DX and 1 PD RX from 01/01/2017 to 09/30/2021 retrospectively. Patient groups were created: PIM group (patients with a PIM RX); AAP group (patients with an AAP RX [and no PIM RX]); and no treatment (No Tx) group (no PIM or AAP RX). All patients were required to have at least 100 days in LTC to be labelled as a resident (≤7 days between discharge and admission were included as LTC stay). Psychosis diagnosis was required at any time for the AAP and No Tx groups. Other medical causes of psychosis beyond PD were not excluded. The index dates were the first RX identified during the study time period for the PIM and AAP groups; and the psychosis DX date for the No Tx group. Incident treatment patients were defined as having no history of PIM or AAP in the 6 months prior to the index date. Patient/clinical characteristics, treatment patterns, and study outcomes were reported using means (SD) and frequencies during the post index period.

Results. There were: PIM group (N=3,120; N=870 incident), AAP group (N=5,880; N=2,396 incident), and No Tx group (N=1,802). The PIM and AAP groups had an average of 415 days and 383 days between the admitting date and the date of RX. The mean age among all groups was 76-77 years and 48-50% were female. PIM group patients were observed to be sicker with higher rates of concomitant dementia, depression, diabetes, and hypertension versus the AAP group or No Tx group. Initial treatments in the AAP group were mostly quetiapine (49%), risperidone (21%), or olanzapine (12%). The descriptive analysis during the 6 months post index showed the outcomes for the incident AAP group to have: higher proportion of falls and aggression events; higher incidence of new DX (physical changes, anxiety disorders, cognitive decline, insomnia, depression, and anticholinergic effects); and higher proportion of new medication orders (anticonvulsants, antidepressants, and benzodiazepines) compared with the incident PIM group.

Conclusions. In this descriptive LTC retrospective analysis, incident PIM patients were shown to have better outcomes versus the AAP group. These findings are subject to study limitations. Funding. Acadia Pharmaceuticals Inc.

## Hyperammonemia and First-Degree Atrio-Ventricular Block in Adult Male from Valproic Acid Toxicity

## Nicholas Wilson, DO

The Ohio State University, Columbus, OH, USA

## Abstract

Introduction. The purpose of this case study is to review the clinical presentation and medical work of an adult male who experienced symptomatic hyperammonemia and first-degree atrio-ventricular block in the setting of valproic acid toxicity.

Method. This case involves a 28-year-old African American male with a past psychiatric history of bipolar 1 disorder with psychotic