# Risk of Mortality Associated With Pimavanserin Use Compared With Other Atypical Antipsychotics in Patients With Parkinson's Disease-Related Psychosis

First published: 21/03/2022

**Last updated:** 20/12/2024





## Administrative details

#### **PURI**

https://redirect.ema.europa.eu/resource/50226

#### **EU PAS number**

EUPAS46331

#### Study ID

50226

## **DARWIN EU® study**

No

Stı	udy	COI	untries
	Uni	ted	States

### **Study description**

Pimavanserin is approved in the United States (US) for the treatment of hallucinations and delusions associated with Parkinson's disease psychosis (PDP). The main objective of this study is to compare the risk of mortality among patients with PDP after initiation of pimavanserin with the risk of mortality after initiation of comparator atypical antipsychotics (i.e., clozapine, quetiapine, risperidone, olanzapine, aripiprazole, or brexpiprazole). The evaluation of the study's primary objective will consist of an observational (noninterventional), population-based cohort of patients with PDP. This study will be conducted using information collected in US Medicare claims data.

#### **Study status**

Ongoing

## Research institutions and networks

## **Institutions**

RTI Health Solutions (RTI-HS)		
France		
Spain		
Sweden		
United Kingdom		
United Kingdom (Northern Ireland)		
United States		

First published: 21/04/2010

**Last updated:** 13/03/2025

Institution

Not-for-profit

**ENCePP** partner

## Contact details

## **Study institution contact**

**Bradley Layton** 

Study contact

jblayton@rti.org

## **Primary lead investigator**

**Bradley Layton** 

**Primary lead investigator** 

#### **ORCID** number:

0000-0003-0994-5820

# Study timelines

## Date when funding contract was signed

Planned: 20/10/2020

Actual: 20/10/2020

## Study start date

Planned: 30/09/2021

Actual: 22/10/2021

## Date of interim report, if expected

Planned: 31/03/2022

Actual: 24/03/2022

## **Date of final study report**

Planned: 31/03/2025

# Sources of funding

• Pharmaceutical company and other private sector

# More details on funding

Acadia Pharmaceuticals Inc.

# Study protocol

0305976 PDP ACADIA mortality protocol 13AUG2021\_signed\_redacted.pdf (1001.36 KB)

# Regulatory

Was the study required by a regulatory body?

No

Is the study required by a Risk Management Plan (RMP)?

Not applicable

# Methodological aspects

# Study type

Study type list

## **Study topic:**

Human medicinal product

## Study type:

Non-interventional study

## Scope of the study:

Assessment of risk minimisation measure implementation or effectiveness

#### **Data collection methods:**

Secondary use of data

## Main study objective:

To compare the risk of mortality among patients with PDP after initiation of pimavanserin with the risk of mortality after initiation of comparator atypical antipsychotics (i.e. clozapine, quetiapine, risperidone, olanzapine, aripiprazole, or brexpiprazole)

# Study Design

## Non-interventional study design

Cohort

# Study drug and medical condition

### Name of medicine, other

**NUPLAZID** 

#### Study drug International non-proprietary name (INN) or common name

**PIMAVANSERIN** 

### **Anatomical Therapeutic Chemical (ATC) code**

(N05AX17) pimavanserin pimavanserin

#### Medical condition to be studied

Parkinson's disease psychosis

# Population studied

### Age groups

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

### **Estimated number of subjects**

6000

# Study design details

#### **Outcomes**

All-cause mortality

#### Data analysis plan

Descriptive statistics will describe the baseline characteristics in the unmatched cohorts. Exposure propensity scores will be estimated that will be used to control for confounding by matching the comparator atypical antipsychotic group to the pimavanserin. Incidence rates and 95% confidence interval (CI) of

mortality will be estimated by treatment group, and HRs and 95% CIs in the unmatched and matched cohorts will be estimated with Cox proportional hazards regression models comparing new users of pimavanserin versus new users of atypical antipsychotics. Estimation of the HRs and 95% CIs will be repeated comparing new users of pimavanserin versus new users of atypical antipsychotics among long-term care residents only. Secondary analyses evaluating changing hazards over time and in clinically relevant subgroups will be conducted. Sensitivity analyses will be performed.

## **Documents**

## **Study publications**

Layton JB, Forns J, McQuay LJ, Danysh HE, Dempsey C, Anthony MS, Turner ME. Mor...

Layton JB, McQuay L, Forns J, Danysh H, Dempsey C, Anthony M, Turner ME. Risk o...

## Data management

## Data sources

## Data source(s), other

**US Medicare United States** 

## Data sources (types)

Administrative healthcare records (e.g., claims)

Drug dispensing/prescription data

# Use of a Common Data Model (CDM)

## **CDM** mapping

No

# Data quality specifications

#### **Check conformance**

Unknown

## **Check completeness**

Unknown

## **Check stability**

Unknown

## **Check logical consistency**

Unknown

# Data characterisation

### **Data characterisation conducted**

Unknown