Post-authorization Safety Study Evaluation of Neoplasm Events in Users of Mirabegron and Other Treatments for Overactive Bladder : Core Common Protocol

First published: 17/11/2016

Last updated: 02/07/2024

Study Finalised

Administrative details

EU PAS number

EUPAS16088

Study ID

32375

DARWIN EU® study

No

Study countries

Denmark

Sweden

United Kingdom

United States

Study description

Mirabegron is a first in class therapeutic agent, with a mechanism of action distinct from that of antimuscarinic agents indicated for the treatment of overactive bladder (OAB). This post authorization safety study (PASS, or post marketing requirement (PMR) in the US) is designed to generate additional evidence to help evaluate the results observed in the clinical trials. To implement the program, we selected data sources from 5 research centers. The investigators are from RTI Health Solutions, Optum, University of Southern Denmark, Centre for Pharmacoepidemiology at Karolinska Institute, and Comprehensive Health Insights.The study population will include patients observed in each of the 5 databases, providing a wide array of patient characteristics, drug utilization and medical practice patterns, which will enhance the generalizability of the study findings to the population of mirabegron users in real world practice, beyond clinical trials. This will be a cohort study comparing the incidence of commonly occurring malignant neoplasms among new users of mirabegron and new users of any comparator antimuscarinic medication (as a group) used in the treatment of OAB. To provide a sufficiently large patient population within which to evaluate the safety of mirabegron, the study will be conducted within multiple databases. Each of these populations will be studied according to the same Core protocol, although operational details will vary across sites due to the specifics of the data environments. In addition to data source-specific analyses, estimates obtained from all data sources will be analyzed using a meta-analysis approach.Overall, the study period includes October 2012 (first observed use of mirabegron in US data) through June 2019 (submission of final study report).

Study status

Finalised

Research institutions and networks

Institutions

Optum

Germany

First published: 03/01/2012

Last updated: 07/02/2014

Institution | Outdated | Other | ENCePP partner

Centre for Pharmacoepidemiology, Karolinska Institutet (CPE-KI)

Sweden

First published: 24/03/2010

Last updated: 23/04/2024

Institution | Educational Institution | Laboratory/Research/Testing facility | Not-for-profit | ENCePP partner

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

Comprehensive Health Insights Louisville, KY USA

Contact details

Study institution contact

John Seeger john.seeger@optum.com

Study contact

john.seeger@optum.com

Primary lead investigator

John Seeger

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 10/08/2015

Actual: 22/09/2015

Study start date
Planned: 05/08/2016

Actual: 06/09/2016

Data analysis start date
Planned: 15/09/2016

Date of interim report, if expected
Planned: 31/10/2017

Date of final study report
Planned: 28/06/2019

Actual: 13/06/2019

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Astellas Pharma Global Development, Inc.

Study protocol

178-CL-113_Protocol Version 7.0_For ENCePP Reg.pdf (625.71 KB)

178-cl-113-clp-07-reissue-v8dot1-en-final-02.pdf (1.33 MB)

Regulatory

Was the study required by a regulatory body?

Yes

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

EU RMP category 3 (required)

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:

Estimate the incidence of sex-specific composite cancer endpoint among users of mirabegron relative to antimuscarinic medication, overall and restricted to patients 65+ years. Estimate the incidence of 10 individual sex-specific cancers

among users of mirabegron relative to antimuscarinic medication. Examine protopathic bias by comparing incidence in post-treatment initiation intervals.

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Anatomical Therapeutic Chemical (ATC) code

(G04BD12) mirabegron

mirabegron

Population studied

Short description of the study population

New users of medications used for the treatment of Overactive Bladder (OAB).

Age groups

- Adults (18 to < 46 years)
- Adults (46 to < 65 years)
- Adults (65 to < 75 years)
- Adults (75 to < 85 years)
- Adults (85 years and over)

Special population of interest

Other

Special population of interest, other

Overactive Bladder patients

Estimated number of subjects

100000

Study design details

Outcomes

Composite cancer endpoints: lung & bronchus, colon & rectum, melanoma of skin, urinary bladder, non-Hodgkin lymphoma, kidney & renal pelvis, pancreas, prostate (males), breast (females), corpus uteri (females), 10 individual cancers included in the composite, sex-specific.

Data analysis plan

Within each data source, patients' baseline characteristics will be determined through analysis of data available up to and including the cohort entry date. All covariates at baseline will be evaluated based on all available information, except for the evaluation of health care utilization and concomitant medications which will only be based on the 12 months before cohort entry. Accounting for potential confounders will be performed by matching on a PS estimated from available covariates to balance cohorts with respect to those covariates. Cox proportional hazards regression models of the time from the day after cohort entry until the occurrence of an event or censoring will be built. Censoring occurs on the last day of cohort eligibility and events occur on the dates of diagnosis of events. Primary analysis results will be stratified into time periods before or after 1 year since index exposure. S

Documents

Study results

178-cl-113-clrr-04-disc01-en-final-02.pdf (904.23 KB)

Data management

ENCePP Seal

The use of the ENCePP Seal has been discontinued since February 2025. The ENCePP Seal fields are retained in the display mode for transparency but are no longer maintained.

Data sources

Data source(s)

Clinical Practice Research Datalink

Danish registries (access/analysis)

Sweden National Prescribed Drugs Register / Läkemedelsregistret

Data sources (types)

Administrative healthcare records (e.g., claims)

Disease registry

Drug dispensing/prescription data

Electronic healthcare records (EHR)

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

No