# Pharmacoepidemiological Safety Study of Neuroleptics and Antidepressants in the Area of Geriatric Psychiatrics (PhaSiNAg)

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### Administrative details

#### **PURI**

https://redirect.ema.europa.eu/resource/29000

#### **EU PAS number**

**EUPAS6539** 

#### Study ID

29000

#### DARWIN EU® study

No

### Study countries

Germany

#### Study description

The use of neuroleptics and antidepressants in elderly patients has been associated with adverse drug reactions such as cerebrovascular and cardiovascular events, pneumonia, fractures, venous thromboembolism and higher all-cause mortality. Based on data from the German Pharmacoepidemiological Research Database (GePaRD), the PhaSINAg project will investigate the safety profiles of neuroleptics and antidepressants in elderly patients in consideration of co-morbidity and co-medication.. Furthermore, prescription patterns of neuroleptics and antidepressants in patients aged 65 years and older will be analyzed. Within this context, investigations on how previous risk minimization activities led to

changes in prescription patterns and how administrative data may be used for systematic risk monitoring will be conducted.

### Study status

Finalised

### Research institution and networks

### Institutions



### Contact details

Study institution contact

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Study contact

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Primary lead investigator

Tania Schink

Primary lead investigator

# Study timelines

Date when funding contract was signed

Planned: 02/10/2012 Actual: 02/10/2012

#### Study start date

Planned: 01/01/2004 Actual: 01/01/2004

### Date of final study report

Planned: 31/10/2014 Actual: 19/12/2014

# Sources of funding

Other

### More details on funding

Federal Institute for Drugs and Medical Devices, Insitute funds

### 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 list

**Study topic:** 

Disease /health condition

### Study type:

Non-interventional study

#### Scope of the study:

Assessment of risk minimisation measure implementation or effectiveness Drug utilisation

#### Data collection methods:

Secondary data collection

### Main study objective:

To estimate the risk of acute myocardial infarction, heart failure, ventricular arrhythmia, ischemic stroke, hip fracture and all-cause mortality for incident users of NLs and ADs aged 65 years and older and to compare these risks between individual drugs and drug classes. For incident NL users, the outcomes pneumonia and venous thromboembolism will also be investigated.

# Study Design

Non-interventional study design Cohort

### Study drug and medical condition

Anatomical Therapeutic Chemical (ATC) code (N05A) ANTIPSYCHOTICS (N06A) ANTIDEPRESSANTS

#### Medical condition to be studied

Ventricular arrhythmia Cardiac failure Pneumonia Ischaemic stroke Hip fracture Death Embolism venous

### Population studied

#### Short description of the study population

neuroleptics (NLs) and antidepressants (ADs) users aged 65 years and older.

#### Age groups

Adults (65 to < 75 years) Adults (75 to < 85 years) Adults (85 years and over)

### **Estimated number of subjects**

523000

### Study design details

#### **Outcomes**

Acute myocardial infarction, heart failure, ventricular arrhythmia, ischemic stroke, hip fracture, pneumonia, venous thromboembolism and all-cause mortality.

### Data analysis plan

For the primary and secondary analysis, Cox models will be used to estimate the adjusted hazard ratio for each outcome in the NL (reference group: atypical neuroleptic) and antidepressant (reference group: tri- and tetracyclic antidepressants) drug classes and for frequently used individual drugs (reference group neuroleptic: risperidone, reference group antidepressants: citalopram). The time-scale for the time-to-event analysis is the time in the cohort until occurrence of an outcome or censoring at the end of cohort time. Pre-defined a priori covariates such as age, sex, and prior history of selected co-morbidity and co-medication will always be included in the model. A backward selection (p=0.05) will be performed to include additional covariates in the model.

### **Documents**

#### Study results

Final Scientific Report\_PhaSiNAg\_v1.0\_FINAL.pdf(1.59 MB)

### Study publications

Jobski, K., Schmedt, N., Kollhorst, B. et al. Characteristics and drug use patt... Schmedt N, Kollhorst B, Enders D, Jobski K, Krappweis J, Garbe E, Schink T. Com... Schmedt N, Jobski K, Kollhorst B, Krappweis J, Rüther E, Schink T, Garbe E. Tre... Pisa FE, Reinold J, Kollhorst B, Haug U, Schink T. Antidepressants and the risk...

### Data management

### Data sources

### Data source(s)

German Pharmacoepidemiological Research Database

### **Data sources (types)**

Administrative data (e.g. claims)

# 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