

PATTERN OF USE AND SAFETY PROFILE OF BRANDED VS GENERIC ANTIEPILEPTIC DRUGS

First published: 01/06/2018

Last updated: 16/02/2024

Study

Finalised

Administrative details

EU PAS number

EUPAS24224

Study ID

44414

DARWIN EU® study

No

Study countries

☐ Italy

Study status

Finalised

Research institutions and networks

Institutions

Unit of adverse drug reactions monitoring (UADRM), University Hospital of Pisa

☐ Italy

First published: 08/01/2014

Last updated: 16/02/2024

Institution

Educational Institution

Hospital/Clinic/Other health care facility

ENCePP partner

Neurofarba Department, Pharmacovigilance Unit, University of Florence

☐ Italy

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Institution

Educational Institution

Unit of adverse drug reactions monitoring (UADRM), University Hospital of Pisa

☐ Italy

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Institution

Educational Institution

Hospital/Clinic/Other health care facility

ENCePP partner

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Study contact

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Primary lead investigator

Ersilia Lucenteforte

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 01/06/2018

Actual: 01/06/2018

Study start date

Planned: 01/06/2018

Actual: 01/06/2018

Data analysis start date

Planned: 11/06/2018

Date of final study report

Planned: 28/09/2018

Actual: 18/02/2021

Sources of funding

- Other

More details on funding

University of Florence

Study protocol

[Project AEDs.pdf](#) (439.31 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

Drug utilisation

Data collection methods:

Secondary use of data

Main study objective:

- describe the therapeutic pattern of generic vs branded antiepileptics (AEDs). -
assess the risk profile of generic vs branded AEDs . -to describe the most
frequent AEDs- related ADRs among users of generic vs branded AEDs.

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Anatomical Therapeutic Chemical (ATC) code

(N03) ANTIEPILEPTICS

ANTIEPILEPTICS

Population studied

Short description of the study population

The source population corresponds to all subjects active into the database at January the 1, 2015 and that, at this date, had at least 365 days of look-back period. Within such population, all subjects with ≥ 1 prescription of any AEDs (ATC: N03*) will be identified. For each subject, the first AED prescription (ATC: N03*) in the study period will be considered as the index prescription, and its date will be considered as the index date.

Subjects prescribed with AEDs in the 12 months before the index date (look-back period) will be excluded. In addition, we will exclude all subjects with active neoplasia or with history of neoplasia, identified as presence of prescription records and/or hospitalizations related to neoplasia during the look-back (i.e. use of antineoplastic drug (ATC: L01*), and/or hospital discharge records with a diagnosis of neoplasia (ICD-9-CM codes: 140*-208*; 230*-239*) in primary or secondary diagnosis field).

Age groups

- Adolescents (12 to < 18 years)
 - Children (2 to < 12 years)
 - 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

Hepatic impaired

Immunocompromised

Pregnant women

Estimated number of subjects

30000

Study design details

Outcomes

All hospitalization and/or access to ED occurring during follow-up. All hospitalization and/or access to ED occurring during follow-up with a diagnosis of possible AEDs-related ADRs in primary or secondary diagnosis field.

Data analysis plan

- Descriptive analysis will be used to describe the most frequently prescribed active principles and exposure classes, proportions of switching, and the most frequent AEDs- related ADRs. - Propensity Score (PS) calculation: we will use PS matching to balance the baseline characteristics between subjects treated with brand vs generic AEDs. PS will be calculated on demographic, socio-economic and clinical variables, using the Stata routine PSmatch2 to perform nearest number matching with a caliper of 0.2. of the SD of PS. - Statistical analysis: Adjusted Cox regression models will be fitted to estimate the risk of hospitalization and/or access to ED for any cause and for AEDs-related ADRs among subjects exposed to generic vs branded AEDs. Analysis will be stratified according to different ATC codes.

Documents

Study, other information

[EUPAS24224_publication.pdf](#) (35.31 KB)

Data management

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)

ARS Toscana

Data sources (types)

[Administrative healthcare records \(e.g., claims\)](#)

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

No