# Insights into real-world treatment of cluster headache through a large Italian database: prevalence, prescription patterns, and costs

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# Administrative details

EU PAS number	
EUPAS1000000262	
Study ID	
1000000262	
DARWIN EU® study	
No	
Study countries  Italy	

#### Study description

Objective: This study aimed at estimating the treated cluster headache (CH) prevalence and describing prescription patterns and direct costs paid by the Italian National-Health-System.

Methods: Through the ReS database (healthcare administrative data collection of a large sample of the

Italian population), adults in treatment for CH (acute therapy with sumatriptan/subcutaneous or oxygen, associated with preventive therapy with verapamil or lithium) were selected. A crosssectional analysis described the prevalence of CH-treated subjects repeated annually in 2013–2017. A longitudinal analysis of patients selected in 2013–2015 and followed for 2 years provided the prescription patterns.

Results: The annual prevalence of CH-treated patients increased from 6.4×100,000 adults in 2013 to 6.7 in 2017. In 2013–2015, 570 patients (80.7% M; mean age 46) treated for CH were found. In 50.4%, the identifying CH treatment was sumatriptan/subcutaneous+verapamil. During follow-up, >1/3 changed the preventive drug and interruption was the most frequent modification, although acute treatments were still prescribed. The mean annual cost/patient ranged from €2,956 to €2,267; pharmaceuticals expenditure represented the 56.4% and 57.3%, respectively.

Conclusions: This study showed an important unmet need among CH patients, carrying a high economic burden that should be considered in the evaluation of the impact of incoming therapies (e.g. Calcitonin-Gene-Related-Peptide antibodies).

## Study status

Finalised

# Research institutions and networks

# **Institutions**

# Fondazione ReS (Ricerca e Salute), CINECA partner | Italy | First published: 05/07/2017 | Last updated: 12/04/2024 | Institution | Not-for-profit | ENCePP partner

# Contact details

# **Study institution contact**

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Study contact

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# Primary lead investigator

Letizia Dondi

Primary lead investigator

# Study timelines

Date when funding contract was signed

Actual: 12/06/2019

Study start date

Actual: 12/07/2019

#### **Date of final study report**

Actual: 11/11/2019

# Sources of funding

• Pharmaceutical company and other private sector

# More details on funding

Eli Lilly

# 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:**

Disease /health condition

#### Study type:

Non-interventional study

#### Scope of the study:

Disease epidemiology

Healthcare resource utilisation

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

Secondary use of data

#### Study design:

Retrospective longitudinal cross sectional cohort study.

### Main study objective:

This study aimed at estimating the treated cluster headache (CH) prevalence and describing prescription patterns and direct costs paid by the Italian National-Health-System.

# Study Design

#### Non-interventional study design

Cohort

Cross-sectional

# Study drug and medical condition

#### Medical condition to be studied

Cluster headache

# Population studied

#### Short description of the study population

Adult patients affected by Cluster headache and treated with specific drugs for acute attack associated with a preventive therapy were selected.

#### Age groups

Adult and elderly population (≥18 years)

Adults (18 to < 65 years)

Adults (18 to < 46 years)

Adults (46 to < 65 years)

Elderly (≥ 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

# Study design details

#### **Setting**

In-hospital and local outpatient settings in public and affiliated with SSN facilities.

#### **Summary results**

The annual prevalence of CH-treated patients increased from  $6.4 \times 100,000$  adults in 2013 to 6.7 in 2017. In 2013–2015, 570 patients (80.7% M; mean age 46) treated for CH were found. In 50.4%, the identifying CH treatment was

sumatriptan/subcutaneous+verapamil. During follow-up, >1/3 changed the preventive drug and interruption was the most frequent modification, although acute treatments were still prescribed. The mean annual cost/patient ranged from €2,956 to €2,267; pharmaceuticals expenditure represented the 56.4% and 57.3%, respectively.

# **Documents**

#### **Study publications**

Insights into real-world treatment of cluster headache through a large Italian ...

# Data management

# Data sources

#### Data source(s)

Database of Fondazione ReS

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

Administrative healthcare records (e.g., claims)

# Use of a Common Data Model (CDM)

#### **CDM** mapping

No

# Data quality specifications

Yes		
Check completeness		
Yes		
Check stability		
Yes		

# **Check logical consistency**

**Check conformance** 

Yes

# Data characterisation

# **Data characterisation conducted**

Yes