

# DARWIN EU® - Impact of risk minimisation measures related to the risk of meningioma in women using nomegestrol and chlormadinone

**First published:** 28/01/2025

**Last updated:** 10/03/2026

Study

Finalised

## Administrative details

### EU PAS number

EUPAS1000000455

---

### Study ID

1000000455

---

### DARWIN EU® study

Yes

---

### Study countries

 Belgium

 Croatia

 Germany

---

## Study description

Nomegestrol acetate (NOMAC) and chlormadinone acetate (CMA) are synthetic progestins indicated for the treatment of several gynaecological and menstrual disorders, as hormone replacement therapy and as hormonal contraception.

Recent epidemiological studies have found a dose-dependent association between NOMAC or CMA and meningioma.

As a result, risk minimisation measures (RMM) were implemented in 2022, especially for high-dose products, which should be used at the lowest effective dose and for the shortest duration possible and should not be used for first-line treatment.

For all products containing NOMAC or CMA, treatment was contraindicated in patients with meningioma or a history of meningioma.

All patients should be monitored for symptoms of meningioma and treatment should be permanently discontinued if diagnosed with meningioma during treatment. This contraindication was already in place for NOMAC, with previous regulatory actions implemented in 2018 and 2020.

---


## Study status

Finalised

## Research institutions and networks

### Institutions

Department of Medical Informatics - Health Data Science, Erasmus Medical Center (ErasmusMC)

 Netherlands

**First published:** 03/11/2022

**Last updated:** 02/05/2024


**Institution**

**Educational Institution**


**ENCePP partner**


## Networks


### Data Analysis and Real World Interrogation Network (DARWIN EU®)


 Belgium


 Croatia


 Denmark


 Estonia

 Finland


 France


 Germany

 Greece

 Hungary


 Italy


 Netherlands

 Norway

 Portugal

 Spain

 Sweden

 United Kingdom

**First published:** 01/02/2024

Last updated: 30/04/2025

Network

## Contact details

### Study institution contact

Ilse Schuemie [study@darwin-eu.org](mailto:study@darwin-eu.org)

Study contact

[study@darwin-eu.org](mailto:study@darwin-eu.org)

### Primary lead investigator

Berta Raventós

Primary lead investigator

## Study timelines

### Date when funding contract was signed

Planned: 29/07/2024

Actual: 29/07/2024

---

### Study start date

Planned: 22/01/2025

Actual: 22/01/2025

---

### Date of final study report

Planned: 27/06/2025

Actual: 01/07/2025

## Sources of funding

- EMA

## Study protocol

[DARWIN EU\\_Protocol\\_P3-C3-006\\_NOMAC\\_CMA RMM Meningioma\\_V4.pdf](#) (907.87 KB)

## Regulatory

**Was the study required by a regulatory body?**

Yes

---

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

Not applicable

## Methodological aspects

### Study type

### Study type list

**Study topic:**

Disease /health condition

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

---

**Study design:**

Retrospective cohort studies will be conducted using routinely collected health data from 3 databases from 3 countries in Europe.

**Main study objective:**

1. To assess the monthly prevalence and incidence of use of drug classes of interest before and after the implementation of the restrictions of use.
2. To assess duration of use and cumulative dose of products containing NOMAC or CMA before and after the implementation of restrictions of use.
3. To describe characteristics of users of relevant drug classes before and after implementation of the restrictions of use.
4. To describe the line of treatment (2nd/3rd versus 1st) in users of products containing NOMAC or CMA before and after the implementation of the restrictions of use.
5. To describe the frequency of patients who develop meningioma during treatment with products containing NOMAC or CMA, and those who discontinue or switch to alternative treatments before and after implementation of the restrictions of use.
6. To assess the impact of the restrictions of use adopted in 2018 and 2022 in incident prescriptions of products containing NOMAC or CMA.

## Study Design

## **Non-interventional study design**

Cohort

## Study drug and medical condition

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

CHLORMADINONE

NOMEGESTROL ACETATE

---

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

(G03DB04) nomegestrol

nomegestrol

(G03DB06) chlormadinone

chlormadinone

---

### **Medical condition to be studied**

Meningioma

## Population studied

### **Short description of the study population**

The source population will comprise all females aged >10 present in the database at any time during the period from 1st of January 2010 (or start according to the database) to end of data availability. All patients will need to have at least 365 days of data visibility prior to index date.

For patient-level DUS, the study population will be additionally restricted to new medicine users (see “8.6. Variables” for further details). For objective 2, 4 and 5 these will be restricted to participants newly prescribed with NOMAC or CMA.

For objective 3, these will be all drug classes of interest.

## Study design details

## Setting

This study will be conducted using routinely collected data from 3 databases in 3 European countries selected from the DARWIN EU® Database Catalogue.

## Documents

### Study report

[DARWIN EU\\_Report\\_P3-C3-006\\_RMM Meningioma\\_V4.0.pdf](#) (3.9 MB)

## 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)

IQVIA Longitudinal Patient Data - Belgium

IQVIA Disease Analyzer Germany

Croatia National Public Health Information System (Nacionalni javnozdravstveni informacijski sustav)

## Use of a Common Data Model (CDM)

## **CDM mapping**

Yes

## **CDM Mappings**

### **CDM name**

OMOP

---

### **CDM website**

<https://www.ohdsi.org/Data-standardization/>

---

### **CDM version**

<https://ohdsi.github.io/CommonDataModel/index.html>

## Data quality specifications

### **Check conformance**

Unknown

---

### **Check completeness**

Unknown

---

### **Check stability**

Unknown

---

### **Check logical consistency**

Unknown

## Data characterisation

## **Data characterisation conducted**

Unknown