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: 14/08/2026

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
- Lithuania
- Netherlands
- Norway
- Poland
- Portugal
- Spain
- Sweden
- United Kingdom

United States

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Network

Contact details

Study institution contact

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Study contact

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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.

Outcomes

Outcomes were considered for the population-level DUS (objective 1) and consisted of the 2 drug classes and 3 progestogens of interest described in 9.6. Variables. They were also considered to study records of drug classes of interest not containing NOMAC nor CMA for objectives aiming to assess line of treatment (objective 4) and switching (objective 5). Meningioma was also considered as an outcome for objective 5.

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