

# Changes in alternative treatments for pain and cough in children after introduction of risk minimisation measures for codeine (Alternatives to codeine)

**First published:** 29/10/2019

**Last updated:** 30/01/2025

Study

Finalised

## Administrative details

### EU PAS number

EUPAS32021

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### Study ID

44757

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### DARWIN EU® study

No

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### Study countries

 France

 Germany

 Spain

## Study description

Europe-wide risk minimisation measures (RMMs) were introduced for the use of codeine for the treatment of pain relief in children in June 2013 to minimise the risk of serious adverse events. In April 2015, similar RMMs were also introduced for the use of codeine in the treatment of cough or cold in paediatric patients. This is a drug utilisation study in a cohort of patients under 18 years of age. The study has the following objectives: 1. To assess whether the codeine referrals for the treatment of pain and cough or cold in patients below 18 years of age were temporally associated with statistically significant changes in prescribing of alternative analgesics, antitussives or cold medicines in this patient population. 2. To describe prescribing trends for codeine and alternative analgesics and antitussives over time in patients below 18 years of age by evaluating the total number of children with a prescription and the total number of prescriptions of codeine and selected alternative analgesics and antitussives per time period: 2.1. In relation to all children in the database during the same time period. 2.2. Stratified by age group (0-11 years and 12-17 years) and gender.

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## Study status

Finalised

## Research institutions and networks

### Institutions

[European Medicines Agency \(EMA\)](#)

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

**Last updated:** 01/02/2024

**Institution**

Agencia Española de Medicamentos y Productos Sanitarios (Spanish Agency for Medicines and Medical Devices, AEMPS)

 Spain

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

**Last updated:** 04/09/2024

**Institution**

**EU Institution/Body/Agency**

**Not-for-profit**

**Regulatory Authority**

**ENCePP partner**

ANSM France, The Norwegian Medicines Agency  
Norway

## Contact details

### Study institution contact

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## Study contact

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### Primary lead investigator

Daniel Nogueras Zondag

## Primary lead investigator

## Study timelines

### Date when funding contract was signed

Planned: 15/01/2019

Actual: 01/01/2020

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### Study start date

Planned: 01/10/2019

Actual: 01/06/2020

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### Data analysis start date

Planned: 01/11/2019

Actual: 01/09/2020

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### Date of interim report, if expected

Actual: 31/01/2021

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### Date of final study report

Planned: 01/02/2019

Actual: 31/07/2021

## Sources of funding

- EMA

## Regulatory

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

No

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

Not applicable

## Methodological aspects

### Study type

#### Study type list

**Study topic:**

Human medicinal product

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**Study type:**

Non-interventional study

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**Scope of the study:**

Drug utilisation

**Data collection methods:**

Secondary use of data

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**Main study objective:**

To assess whether the codeine referrals for the treatment of pain and cough or cold in patients below 18 years of age were temporally associated with statistically significant changes in prescribing of alternative analgesics, antitussives or cold medicines in this patient population.

## Study Design

**Non-interventional study design**

Cohort

## Study drug and medical condition

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

CODEINE

DEXTROMETHORPHAN

DIHYDROCODEINE

ETHYLMORPHINE

HYDROMORPHONE

METAMIZOLE

MORPHINE

OXYCODONE

PHOLCODINE

TRAMADOL

## Population studied

## Short description of the study population

The patient population consisted in all patients under the age of 18 years, with a particular focus on children below 12 eligible to be exposed to codeine or any of the alternative analgesics or antitussives of interest included in our study.

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### Age groups

- Term newborn infants (0 - 27 days)
  - Infants and toddlers (28 days - 23 months)
  - Children (2 to < 12 years)
  - Adolescents (12 to < 18 years)
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### Estimated number of subjects

750

## Study design details

### Data analysis plan

Interrupted time series analysis

## Documents

### Study results

[Annex A - Tables and Figure.pdf](#) (177.51 KB)

[Annex B - Medicines use in children 12 to 18 years of age.pdf](#) (747.48 KB)

[Final Report.pdf](#) (773.55 KB)

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## 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), other**

NorPD, BIFAP

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

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

[Drug dispensing/prescription data](#)

[Electronic healthcare records \(EHR\)](#)

## Use of a Common Data Model (CDM)

### **CDM mapping**

No

## Data quality specifications

### **Check conformance**

Unknown

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### **Check completeness**

Unknown

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**Check stability**

Unknown

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**Check logical consistency**

Unknown

## Data characterisation

**Data characterisation conducted**

No