

# The relationship between the month of birth and ADHD treatment

**First published:** 28/04/2017

**Last updated:** 23/04/2024

Study

Finalised

## Administrative details

### EU PAS number

EUPAS18732

### Study ID

41916

### DARWIN EU® study

No

### Study countries

☐ Netherlands

### Study description

\*\*\*\*This study has been cancelled before data collection due to lack of time by the researchers\*\*\*\* There seems to be a relationship between a child's month of birth and the diagnosis and treatment of attention deficit hyperactivity

disorder (ADHD). Both underdiagnosis as well as overdiagnosis of ADHD can have consequences for the future of a child. The objective of this study is to determine if there is a relationship between the month of birth and the pharmacological treatment of ADHD in children in the Netherlands. The study cohort includes children and adolescents  $\leq 24$  years old who use ADHD medication, dispensed for the first time between 2006-2016.

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## Study status

Finalised

## Research institutions and networks

### Institutions

Division of Pharmacoepidemiology & Clinical Pharmacology (PECP), Utrecht Institute for Pharmaceutical Sciences (UIPS), Utrecht University

☐ Netherlands

**First published:** 01/03/2010

**Last updated:** 23/05/2024

**Institution**

**Educational Institution**

**ENCePP partner**

## Contact details

### Study institution contact

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#### Study contact

[E.R.Heerdink@uu.nl](mailto:E.R.Heerdink@uu.nl)

#### Primary lead investigator

Rob Heerdink

#### Primary lead investigator

## Study timelines

#### Date when funding contract was signed

Planned: 01/02/2017

Actual: 01/02/2017

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#### Study start date

Planned: 01/06/2017

Actual: 01/06/2017

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#### Date of final study report

Planned: 01/01/2018

Actual: 07/07/2021

## Sources of funding

- Other

## More details on funding

Division of Pharmacoepidemiology & Clinical Pharmacology

# Study protocol

[20170426 ADHD\\_birthmonth\\_def3.pdf](#) (561.42 KB)

## 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

Disease /health condition

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**Study type:**

Non-interventional study

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**Scope of the study:**

Assessment of risk minimisation measure implementation or effectiveness

Disease epidemiology

Drug utilisation

**Data collection methods:**

Secondary use of data

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**Main study objective:**

Is there a relationship between the month of birth and the pharmacological treatment of ADHD in children and adolescents?

## Study Design

**Non-interventional study design**

Cohort

Other

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**Non-interventional study design, other**

Descriptive

## Study drug and medical condition

**Anatomical Therapeutic Chemical (ATC) code**

(N06BA04) methylphenidate

methylphenidate

(N06BA02) dexamfetamine

dexamfetamine

(N06BA09) atomoxetine

atomoxetine

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**Medical condition to be studied**

## Population studied

### Short description of the study population

The study cohort will include children and adolescents (hereafter referred to as children)  $\leq 24$  years old who use attention deficit hyperactivity disorder (ADHD) medication for the first time (incident users).

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### Age groups

- Children (2 to  $< 12$  years)
  - Adolescents (12 to  $< 18$  years)
  - Adults (18 to  $< 46$  years)
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### Estimated number of subjects

20000

## Study design details

### Outcomes

The start of ADHD medication.

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### Data analysis plan

The analysis will be descriptive. The children receiving ADHD medication with a different month of birth will be compared. The age at which a child receives the treatment for the first time will be defined, it will be represented as the number of months from birth until the first dispensing date. Also the period the children use the ADHD medication will be analysed. The measures of occurrence and association are the incidence rates and the relative risks. Analyses are stratified

according to sex, age categories and the calendar year the ADHD medication is dispensed for the first time. We will correct for the total number of births in different months/years.

## 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.

### Conflicts of interest of investigators

[Conflicts of interest.pdf](#) (82.12 KB)

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## Data sources

### Data source(s)

PHARMO Data Network

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### Data sources (types)

[Drug dispensing/prescription data](#)

## 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