Determining the prevalence of severe asthma in children in UK primary care

First published: 01/02/2023

Last updated: 28/01/2026

Study Finalised

Administrative details

EU PAS number

EUPAS50650

Study ID

50651

DARWIN EU® study

No

Study countries

United Kingdom

Study description

It is a retrospective epidemiological database study that aims to determine the annual prevalence of severe asthma in children in the UK community using primary care data, and applying different criteria for defining severe asthma.

Study status

Finalised

Research institutions and networks

Networks

Respiratory Effectiveness Group (REG)

- Belgium
- Denmark
- France
- Germany
- Greece
- Hungary
- Italy
- Netherlands
- Spain
- Sweden
- United Kingdom

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Network **ENCePP partner**

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Steve Turner

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 18/01/2023

Actual: 18/01/2023

Study start date

Planned: 12/06/2023

Actual: 28/06/2023

Data analysis start date

Planned: 06/01/2025

Actual: 03/03/2025

Date of interim report, if expected

Planned: 04/08/2025

Actual: 30/09/2025

Date of final study report

Planned: 30/10/2024

Actual: 16/12/2025

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Sanofi

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

Drug utilisation

Main study objective:

A descriptive characterisation of children with potentially severe asthma including a comparison between those who have been referred to a secondary care specialist with those who have not been referred.

Study Design

Non-interventional study design

Other

Non-interventional study design, other

Retrospective epidemiological database study

Study drug and medical condition

Medical condition to be studied

Asthma

Population studied

Age groups

- Children (2 to < 12 years)
- Adolescents (12 to < 18 years)

Estimated number of subjects

0

Study design details

Outcomes

1) To determine the annual incidence of children in UK with severe asthma using primary care data.

2) Applying different criteria for defining severe asthma (ref: Ahmed H, Turner S. Severe asthma in children-a review of definitions, epidemiology, and treatment options in 2019. Pediatr Pulmonol. 2019 Jun,54(6):778-787. doi: 10.1002/ppul.24317. Epub 2019 Mar 18. PMID: 30884194).

The annual incidence of:

1. new-onset severe asthma in children with asthma,
2. prevalence of high SABA use,
3. referral to a secondary care specialist,
4. children meeting the NICE eligibility criteria for biologic treatment,
5.children with severe asthma referred to a secondary care specialist with those who are not referred to a secondary care specialist and remain treated solely in UK primary.

Data analysis plan

The data for the 2-5 yr age group and the 6-16 yr old age group will each be analysed separately.

We will calculate the percentage of patients with severe asthma that are identified in the patient's primary care records by GPs as having severe asthma, and also the percentage of patient's who are identified in the UK primary care records by GPs as having severe asthma despite not meeting our criteria for severe asthma.

The 2 cohorts, those referred to a secondary care specialist and those not referred to a secondary care specialist, will be compared. Continuous variables will be given a mean and standard deviation, and differences in characteristics between the groups assessed with Kruskal-Wallis tests.

Categorical variables will be given as count and percentage by category, and differences in characteristics between the groups will be assessed with chi-

squared tests/Fisher’s exact tests.

The incidence of severe asthma remission of children who met the criteria will also be calculated.

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)

Optimum Patient Care Research Database

Data sources (types)

Electronic healthcare records (EHR)

Other

Data sources (types), other

Historical electronic medical records (EMRs)

Use of a Common Data Model (CDM)

CDM mapping

No

Data quality specifications

Check conformance

Unknown

Check completeness

Unknown

Check stability

Unknown

Check logical consistency

Unknown

Data characterisation

Data characterisation conducted

No