

# A real-life historic study assessing metabolic and other adverse effects of small versus large particle inhaled corticosteroids in relation to their clinical benefit in obstructive lung disease

**First published:** 24/07/2015

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Study

Finalised

## Administrative details

### EU PAS number

EUPAS8832

### Study ID

10959

### DARWIN EU® study

No

### Study countries

☐ United Kingdom

## Study description

Aims to compare metabolic and other adverse effects of small (QVAR and Ciclesonide) vs. large particle (FP and Clenil) ICS in patients initiating and stepping-up their ICS therapy, and comparing results to appropriate control groups. The primary outcomes are:Diagnosis of pneumonia Diagnosis of pneumonia confirmed by chest x-ray or resulting in hospitalisation within one month of diagnosisFirst diagnosis of type 2 diabetes and/or prescription for anti-diabetic medication Progression of ongoing type 2 diabetes treatment to insulinChange in anti-diabetic medication Change in HbA1c valueChange in BMI

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## Study status

Finalised

## Research institutions and networks

### Institutions

#### Research in Real Life

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

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Institution

## Contact details

### Study institution contact

David Price david@rirl.org

Study contact

[david@rirl.org](mailto:david@rirl.org)

**Primary lead investigator**

Jessica Martin

Primary lead investigator

## Study timelines

**Date when funding contract was signed**

Actual: 01/02/2013

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**Study start date**

Actual: 01/11/2013

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**Data analysis start date**

Actual: 03/02/2014

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**Date of final study report**

Planned: 01/06/2015

Actual: 29/04/2015

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Teva

## Regulatory

## Was the study required by a regulatory body?

No

## 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:

Other

#### If 'other', further details on the scope of the study

Metabolic events evaluation

#### Data collection methods:

Secondary use of data

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#### Main study objective:

Compare for large particle vs small particle ICS:Diagnosis of pneumonia First diagnosis of type 2 diabetes and/or prescription for anti-diabetic medication Progression of ongoing type 2 diabetes treatment to insulinChange in anti-

diabetic medication (e.g. type or dose prescribed) Change in HbA1c  
valueChange in BMI

## Study Design

### **Non-interventional study design**

Cohort

## Study drug and medical condition

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

FLUTICASONE PROPIONATE

CICLESONIDE

BECLOMETASONE DIPROPIONATE

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

Chronic obstructive pulmonary disease

Pneumonia

Diabetes mellitus

## Population studied

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

Obstructive lung disease patients initiating and stepping-up their Inhaled corticosteroids (ICS) therapy.

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### **Age groups**

- Children (2 to < 12 years)
  - Adolescents (12 to < 18 years)
  - Adults (18 to < 46 years)
  - Adults (46 to < 65 years)
  - Adults (65 to < 75 years)
  - Adults (75 to < 85 years)
  - Adults (85 years and over)
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### **Special population of interest**

Other

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### **Special population of interest, other**

Chronic obstructive pulmonary disease (COPD) patients

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### **Estimated number of subjects**

10000

## Study design details

### **Outcomes**

Co-primary outcomes:(i) First diagnosis of diabetes and/or prescription for anti-diabetic medication (ii) Progression of ongoing diabetes treatment to insulin(iii) Change in HbA1c value(iv) Change in anti-diabetic medication (e.g. type or dose prescribed) (v) Change in BMI (vi) Diagnosis of pneumonia (vii) Exacerbation of obstructive lung disease

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### **Data analysis plan**

Treatment arms will be compared using (conditional) logistic regression, Poisson regression and Cox regression.

## Data management

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

Optimum Patient Care Research Database (OPCRD) United Kingdom

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### Data sources (types)

[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