Comparative safety of extrafine beclometasone fixed dose combinations (FDC) and fluticasone FDC in COPD

First published: 25/05/2020
Last updated: 02/07/2024

Study | Planned

Administrative details

PURI
https://redirect.ema.europa.eu/resource/40013

EU PAS number
EUPAS35439

Study ID
40013

DARWIN EU® study
No

Study countries
United Kingdom

Study description
A historical cohort study, comparing time to pneumonia events in patients with COPD who initiated a fixed dose combination containing beclometasone (Fostair® or Trimbow®) with • Patients initiating a fixed dose combination containing fluticasone • Patients initiating a long-acting bronchodilator The primary outcome is time until a pneumonia event. The secondary outcome is time until a respiratory infection. The following exploratory outcomes will be used: Time until the first pneumonia related hospitalisation: a primary care recorded hospital admission within one month of a physician diagnosed pneumonia Time to first primary care recorded hospital admission. The rate of moderate/severe COPD

exacerbations and pneumonia events during the entire follow-up period (to be used for a benefit/harm comparison). A set of confounding handling approaches will be evaluated, and the best one with regard to residual bias will be chosen. Superiority will be tested in a per protocol analysis comparing the FDC beclomethasone group with the FDC fluticasone reference group, with a superiority margin of 10% (or loge(1.1) on the log scale). Patients will be censored at the end of data availability (due to leaving the practice, or the last time data were extracted for the practice), 4 weeks after the last prescription containing ICS or 4 weeks after the patient switches to the comparator medication. This four-week period is to ensure we will capture a pneumonia event, even if early symptoms have caused discontinuation of ICS or switching to the other medication. Non-inferiority will be tested in per protocol analyses comparing the FDC beclometasone group with the LABD reference group, with a non-inferiority margin of a relative difference of 15%. Patients will be censored at the end of data availability (due to leaving the practice, or the last time data were extracted for the practice) or on addition of an ICS.

Study status
Planned

Research institution and networks

Institutions

Observational & Pragmatic Research Institute Pte (OPRI)

United Kingdom
First published: 06/10/2015
Last updated
23/11/2016

Institution | Educational Institution | Laboratory/Research/Testing facility | ENCePP partner

Contact details

Study institution contact
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Study contact

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Primary lead investigator
David Price
Primary lead investigator

Study timelines

Date when funding contract was signed
Planned:
01/04/2020

Study start date
Planned:
01/06/2020

Data analysis start date
Planned:
01/07/2020

Date of interim report, if expected
Planned:
01/09/2020

Date of final study report
Planned:
14/05/2021

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Chiesi pharmaceuticals, Italy

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 type:
Non-interventional study

Scope of the study:
Assessment of risk minimisation measure implementation or effectiveness
Effectiveness study (incl. comparative)

Main study objective:
1. To compare the risk of pneumonia in patients with COPD among new users of ICS FDC with fine-particle fluticasone or extrafine beclometasone, and to assess if this is the same for the different fluticasone salts.2. To compare the risk of pneumonia in patients with COPD among new users of ICS FDC with extrafine beclomethasone versus long acting bronchodilators

Study Design

Non-interventional study design
Cohort

Study drug and medical condition

Anatomical Therapeutic Chemical (ATC) code
(R03) DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES

Medical condition to be studied
Chronic obstructive pulmonary disease

Population studied

Age groups
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)

Estimated number of subjects
60000

Study design details

Outcomes
time until a pneumonia event, time until a respiratory infection.

Data analysis plan
1. Superiority will be tested in a per protocol analysis comparing the FDC beclomethasone group with the FDC fluticasone reference group, with a superiority margin of 10% (or loge(1.1) on the log scale).2. Non-inferiority will be tested in per protocol analyses comparing the FDC beclometasone group with the LABD reference group, with a non-inferiority margin of a relative difference of 15%.A set of confounding handling approaches will be evaluated, and the best one with regard to residual bias will be chosen. Time-to-event analysis will be performed to analyse the association between treatment and time to recurrent pneumonia events. Cox regression with the Prentice, Williams and Peterson approach with gap-time will be used. To model the recurrent events, events occurring within 28 days of a previous event are considered part of a single episode. Therefore, the patients will be at risk for a new event starting 28 days after each previous event.

Data management

Data sources

Data source(s)
Optimum Patient Care Research Database

Data sources (types)
Electronic healthcare records (EHR)

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