# The Role of Inhaler Device in the Treatment Persistence with Dual Bronchodilators in Patients with COPD

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# Administrative details

PURI https://redirect.ema.europa.eu/resource/30839
EU PAS number
EUPAS30838
Study ID
30839
DARWIN EU® study
No
Study countries  Spain

#### Study description

Stiolto® Respimat®, a combination of Olodaterol and Tiotropium Bromide delivered via soft mist inhaler (SMI), was approved in May 2015 in the US and July 2015 in the EU (marketed as Spiolto in the EU). Anoro® Ellipta®, a combination of Umeclidinium and Vilanterol delivered via dry powder inhaler (DPI), was approved in December 2013 in the US and in February 2014 in the EU. Both products are maintenance therapies consisting of a combination of long-acting muscarinic antagonists (LAMA) and long-acting beta agonists (LABA). However, the question of whether different devices (DPI and SMI) play a role in treatment persistence remains to be answered. This study seeks to compare the treatment persistence of two drugs in same drug class (LAMA/LABA as a fixed dose combination FDC) delivered through different devices (a DPI and a SMI) within an administrative claims database in the US.

#### **Study status**

Ongoing

## Research institutions and networks

## Institutions



## Contact details

#### **Study institution contact**

Jukka Montonen

Study contact

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### **Primary lead investigator**

Jukka Montonen

**Primary lead investigator** 

# Study timelines

## Date when funding contract was signed

Planned: 26/02/2019

Actual: 26/02/2019

#### Study start date

Planned: 10/06/2019

Actual: 10/06/2019

#### Data analysis start date

Planned: 11/06/2019

Actual: 11/06/2019

#### **Date of final study report**

Planned: 30/03/2020

# Sources of funding

• Pharmaceutical company and other private sector

# More details on funding

Boehringer Ingelheim

## 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:**

Other

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

Treatment persistence

#### Main study objective:

The primary objective of the study is to use US claims data to determine relative treatment persistence in using Olodaterol/Tiotropium Bromide delivered with the Respimat soft mist inhaler and Umeclidinium/Vilanterol delivered with the Ellipta dry powder inhaler using a 1:2 propensity score matched analysis.

## Study Design

#### Non-interventional study design

Cohort

# Study drug and medical condition

#### **Anatomical Therapeutic Chemical (ATC) code**

(R03AL06) olodaterol and tiotropium bromide olodaterol and tiotropium bromide (R03AL03) vilanterol and umeclidinium bromide vilanterol and umeclidinium bromide

#### Medical condition to be studied

Chronic obstructive pulmonary disease

# Population studied

#### Age groups

Adults (46 to < 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)
Adults (85 years and over)

#### **Estimated number of subjects**

14719

# Study design details

#### **Outcomes**

The primary outcome of interest is discontinuation of index treatment (Olodaterol/Tiotropium Bromide or Umeclidinium/Vilanterol), defined as persistence (i.e. no refill claim within 60 days not involving treatment switch, nor death (allowable grace period) after end of <n> days supply) during follow-up.

#### Data analysis plan

Among the post-matched cohort, rates of discontinuation of Olodaterol/Tiotropium Bromide or Umeclidinium/Vilanterol will be reported as the number of events divided by the number of person-years at risk.

Discontinuation of Olodaterol/Tiotropium Bromide or Umeclidinium/Vilanterol in the Post-matched CohortAmong the post-matched cohort, risk (proportion of patients) of discontinuation of Olodaterol/Tiotropium Bromide or Umeclidinium/Vilanterol will be reported as the number of events divided by the number of eligible patients at cohort entry date.

## Data management

## Data sources

#### Data sources (types)

Administrative healthcare records (e.g., claims)

# 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