

# Treatment patterns in patients with pulmonary arterial hypertension

**First published:** 20/06/2023

**Last updated:** 02/04/2024

Study

Finalised

## Administrative details

### EU PAS number

EUPAS104302

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### Study ID

104303

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### DARWIN EU® study

No

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### Study countries

 Germany

 United Kingdom

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### Study description

A cohort study to investigate the actual treatment patterns for patients with Pulmonary Arterial Hypertension (PAH) in Germany and the UK, describing (1)

the first line treatment for patients diagnosed with PAH focusing on ERA and PDE5i classes (monotherapy or combined), and (2) after how long patients initiating single therapy receive a second drug (combination therapy).

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### **Study status**

Finalised

## Research institutions and networks

### Institutions

#### European Medicines Agency (EMA)

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

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**Institution**

## Contact details

### **Study institution contact**

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**Study contact**

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### **Primary lead investigator**

Karin Hedenmalm

**Primary lead investigator**

# Study timelines

## **Date when funding contract was signed**

Planned: 31/01/2022

Actual: 31/01/2022

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## **Study start date**

Planned: 31/01/2022

Actual: 31/01/2022

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## **Date of final study report**

Planned: 15/02/2022

Actual: 08/02/2022

# Sources of funding

- EMA

# Study protocol

[Final Analysis Plan\\_Treatment patterns in PAH -To be published\\_CLEAN.pdf](#)

(240.65 KB)

# Regulatory

## **Was the study required by a regulatory body?**

Yes

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## **Is the study required by a Risk Management Plan (RMP)?**

Not applicable

# Methodological aspects

**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:**

Disease epidemiology

**Data collection methods:**

Secondary use of data

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**Main study objective:**

The main aim of the study was to describe the first line treatment for patients diagnosed with PAH focusing on ERA and PDE5i classes (monotherapy or combined), and describe after how long patients initiating single therapy receive a second drug (combination therapy).

## Study Design

**Non-interventional study design**

Cohort

Other

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**Non-interventional study design, other**

Descriptive study

## Study drug and medical condition

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

MACITENTAN

TADALAFIL

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## **Medical condition to be studied**

Pulmonary arterial hypertension

## Population studied

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

The study included patients with a history of pulmonary arterial hypertension (both idiopathic, secondary) identified from the IMRD databases between January 2006 to June 2021.

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### **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)
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### **Special population of interest**

Other

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

Pulmonary arterial hypertension patients

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### **Estimated number of subjects**

634

## Study design details

## Data analysis plan

A cohort of patients with a history of PAH (both idiopathic, secondary) was created, with follow-up starting at date of diagnosis. Study period was between January 2006 and June 2021 in IQVIA™ Disease Analyser Germany and between 1998 and 2021 in IMRD. Patients with a history of PAH were followed since their first incident prescription of either ERA and PDE5i (incident use) and treatment patterns were reported. The following variables were calculated:

- Number of PAH patients
- Number of PAH patients that initiated incident treatment with ERA or PDE5i
- Treatment initiation patterns over time in PAH patients (overall and specifically for macitentan, tadalafil)
- Number of patients initially treated with monotherapy which progressed to combination therapy, (assuming that they stayed on the initial therapy), within 1 year and respectively 2 years since start of treatment.

## Documents

### Study results

[Study Report\\_Treatment patterns in PAH patients -To be published\\_CLEAN\\_final.pdf](#) (363.93 KB)

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## 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)**

IQVIA Disease Analyzer Germany

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**Data source(s), other**

IQVIA™ Medical Research Data (IMRD) UK

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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