

# Ivabradine Drug Utilisation Study in Select European Countries: A Multinational, Retrospective, Observational Study to Assess Effectiveness of Risk-Minimisation Measures

**First published:** 20/06/2017

**Last updated:** 02/07/2024

Study

Finalised

## Administrative details

### EU PAS number

EUPAS19522

---

### Study ID

26650

---

### DARWIN EU® study

No

---

### Study countries

☐ France

☐ Germany

- ☐ Italy
  - ☐ Spain
  - ☐ United Kingdom
- 

### Study description

This is a multinational retrospective drug utilization study aiming to assess how ivabradine is used in patients with chronic stable angina pectoris in routine clinical practice, and to evaluate the effectiveness of the new risk-minimisation measures (RMM) with a focus on whether the new contraindications (heart rate (HR) at treatment initiation lower than 70 bpm and concomitant use of verapamil or diltiazem) are followed.

---

### Study status

Finalised

## Research institutions and networks

### Institutions

#### Real World Solutions, PRA Real World Solutions

- ☐ France
- ☐ Germany

**First published:** 19/05/2021

**Last updated:** 06/03/2024

**Institution**

**Non-Pharmaceutical company**

**ENCePP partner**

## Contact details

**Study institution contact**

Delphine CAZALEDES [delphine.cazaledes@servier.com](mailto:delphine.cazaledes@servier.com)

Study contact

[delphine.cazaledes@servier.com](mailto:delphine.cazaledes@servier.com)

**Primary lead investigator**

Alexandre Malouvier

Primary lead investigator

## Study timelines

**Date when funding contract was signed**

Planned: 10/06/2016

Actual: 10/06/2016

---

**Study start date**

Planned: 31/12/2016

Actual: 14/07/2017

---

**Data analysis start date**

Planned: 02/04/2018

---

**Date of interim report, if expected**

Planned: 31/12/2017

Actual: 12/12/2017

---

**Date of final study report**

Planned: 30/06/2018

Actual: 28/06/2018

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Les Laboratoires Servier

## Study protocol

[0304114 Ivabradine DUS\\_PASS\\_Amend-2 1\\_Final\\_28Apr2016.pdf](#)(1015.16 KB)

[Redacted Protocol-version 2.2.pdf](#)(3.15 MB)

## Regulatory

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

Yes

---

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

EU RMP category 1 (imposed as condition of marketing authorisation)

## Methodological aspects

### Study type

### Study type list

**Study topic:**

Disease /health condition  
Human medicinal product

---

**Study type:**

Non-interventional study

---

**Scope of the study:**

Drug utilisation

**Data collection methods:**

Secondary use of data

---

**Main study objective:**

To assess how ivabradine is used in chronic angina patients and to describe before and after implementation of the new RMM:-Characteristics of new users according to demographics and specific comorbidities at baseline and baseline HR at treatment initiation-Patterns of use according to the dose and the concurrent use of verapamil or diltiazem at initiation and within a 6-month follow-up period

## Study Design

**Non-interventional study design**

Cohort  
Other

---

**Non-interventional study design, other**

Retrospective cohort study/Chart review

## Study drug and medical condition

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

IVABRADINE

---

**Anatomical Therapeutic Chemical (ATC) code**

(C01EB17) ivabradine

ivabradine

---

**Medical condition to be studied**

Angina pectoris

## Population studied

**Short description of the study population**

All patients with chronic stable angina initiating treatment with ivabradine in regular clinical practice. A patient initiating ivabradine (new user) was defined as a patient without documented use of ivabradine during the previous 6 months and who receives a first prescription for ivabradine by their prescribing physician during (one of) the study periods.

Patients with documented initiation of treatment with ivabradine during one of the study periods, diagnosis of chronic stable angina as the indication for treatment initiation, and patient (or legal representative) who has provided informed consent to participate in the study, where required were included.

---

**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)

---

## **Special population of interest**

Other

---

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

Angina pectoris patients

---

## **Estimated number of subjects**

1200

# **Study design details**

## **Outcomes**

For each study period:-HR at treatment initiation-Ivabradine dose at initiation and dose changes within a 6-month follow-up (FU)-Concurrent use of verapamil or diltiazem at baseline and within a 6-month FU-Ivabradine prescriptions according to the HR recommendation at baseline, no doses higher than the SmPC doses at initiation and during FU,and no concomitant use of verapamil or diltiazem, -Characteristics of participating and non-participating physicians-Patient's characteristics and treatment patterns at start date.-Ivabradine treatment discontinuation curves by study period

---

## **Data analysis plan**

All analyses (primary and secondary) will be stratified by study period, unless specified otherwise. The difference, before and after implementation of the additional RMM, between the proportions of the study outcomes defined in the main analysis will be calculated as an estimate of the change. In addition to analyses based on the overall population the primary and secondary outcomes will be presented by country, by physician specialty, and by type of setting for specialists. Ivabradine dose at start and over the 6-month FU will be stratified by age group. A chi-square test or a t-test will be used to test the differences

(95% CI) in patient characteristics and observed study outcomes between the two study periods. As sensitivity analyses, the primary outcome will be evaluated on the whole study cohort, including patients with missing data in the denominator for proportions, summarized by initiator status (initiator vs subsequent prescriber)

## Documents

### Study results

[Ivabradine DUS - Final Report Abstract.pdf](#)(130.76 KB)

---

## Data management

## Data sources

### Data sources (types)

[Other](#)

---

### Data sources (types), other

Patients medical charts

## 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**

Unknown