

# Evaluation of Clinical outcomes among non-valvular atrial fibrillation patients with renal dysfunction treated with warfarin or reduced dose rivaroxaban (CALLIPER)

**First published:** 28/11/2017

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

Study

Finalised

## Administrative details

### EU PAS number

EUPAS21253

### Study ID

32656

### DARWIN EU® study

No

### Study countries

☐ Germany

### Study status

Finalised

## Research institutions and networks

# Institutions

## Bayer AG

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

**Last updated:** 01/02/2024

Institution

## Contact details

### Study institution contact

Bayer Clinical Trials BAYER AG clinical-trials-contact@bayer.com

Study contact

[clinical-trials-contact@bayer.com](mailto:clinical-trials-contact@bayer.com)

### Primary lead investigator

Bayer Clinical Trials BAYER AG

Primary lead investigator

## Study timelines

### Date when funding contract was signed

Planned: 08/11/2017

Actual: 08/11/2017

---

**Study start date**

Planned: 01/12/2017

Actual: 01/12/2017

---

**Date of final study report**

Planned: 13/09/2019

Actual: 05/09/2019

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Bayer AG

## Study protocol

[OS\\_Protocol\\_RenalDysfunction\\_MarketScan\\_v5.pdf](#)(297.71 KB)

[19721\\_Study Protocol\\_V2.0\\_Redacted.pdf](#)(885.39 KB)

## 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 topic:**

Disease /health condition

Human medicinal product

---

**Study type:**

Non-interventional study

---

**Scope of the study:**

Assessment of risk minimisation measure implementation or effectiveness

Effectiveness study (incl. comparative)

**Data collection methods:**

Secondary use of data

---

**Main study objective:**

The objective of the study is to evaluate the effectiveness and safety of the reduced dose rivaroxaban (15mg once daily) as compared to warfarin in non-valvular atrial fibrillation (NVAF) patients with renal dysfunction in routine clinical practice. The study has a retrospective design, and will be conducted in the US Truven Health MarketScan Commercial Claims and Medicare Supplemental Databases.

## Study Design

**Non-interventional study design**

Cohort

## Study drug and medical condition

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

RIVAROXABAN

---

**Anatomical Therapeutic Chemical (ATC) code**

(B01AA03) warfarin

warfarin

---

**Medical condition to be studied**

Atrial fibrillation

## Population studied

**Short description of the study population**

All the insured individuals included in the Truven Health MarketScan databases. To be included in the present study, patients have to be adults ( $\geq 18$  years of age) newly-initiated on warfarin or rivaroxaban 15 mg (index event, index drug), have at least 365 days of continuous medical and prescription benefits prior to the index event (baseline period), at least two diagnosis codes for NVAf (on outpatient or inpatient claims, at two different days) and at least one diagnosis code (inpatient or outpatient) indicating renal dysfunction in the baseline period.

---

**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

Renal impaired

---

## Estimated number of subjects

11000

# Study design details

## Outcomes

Ischemic stroke, Intracranial hemorrhage, Bleeding-related hospitalization, Composite endpoint, which is defined as the occurrence of ischemic stroke or intracranial hemorrhage, Progression to stage 5 chronic kidney disease, kidney failure or need for dialysis

---

## Data analysis plan

Stabilized inverse probability of treatment weighting (IPTW) methodology based on the propensity score will be utilized to adjust for potential confounding. Additionally, a propensity score matching analysis and a conventional multiple logistic regression analysis will be conducted. The incidence rates of the study outcome measures will be reported as the number of events per 100 person-years. Cox proportional hazards regression model will be applied to estimate adjusted hazard ratios.

# Documents

## Study results

[19721\\_CALLIPER\\_EU PAS Abstract\\_2019-07-31\\_Redacted.pdf](#)(221.14 KB)

---

## Study report

[19721\\_CALLIPER\\_Clinical Study Report\\_2019-07-31\\_Redacted.pdf](#)(9.89 MB)

# Data management

ENCLOSURE

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 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