

# Comparative Clinical and Economic Outcomes among Venous Thromboembolism Patients who Initiated Apixaban or Warfarin in the United States Medicare Population (VTE CER in Medicare)

**First published:** 19/07/2018

**Last updated:** 02/06/2020

Study

Finalised

## Administrative details

### EU PAS number

EUPAS24902

### Study ID

35610

### DARWIN EU® study

No

### Study countries

United States

## **Study description**

This study will evaluate the patient profiles, current antithrombotic patterns, and real-world clinical & economic outcomes among patients with VTE

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## **Study status**

Finalised

## Contact details

### **Study institution contact**

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[Study contact](#)

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### **Primary lead investigator**

Patrick Hlavacek

[Primary lead investigator](#)

## Study timelines

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

Actual: 11/09/2017

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### **Study start date**

Planned: 01/08/2018

Actual: 08/01/2018

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

Planned: 02/06/2020

Actual: 02/06/2020

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## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Pfizer

## Study protocol

[SIMR\\_Pfizer\\_Protocol\\_Medicare\\_VTE\\_07JUNE\\_clean.pdf](#) (922.32 KB)

## Regulatory

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

No

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

Not applicable

## Methodological aspects

### Study type

### Study type list

#### **Study topic:**

Human medicinal product

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**Study type:**

Non-interventional study

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**Scope of the study:**

Effectiveness study (incl. comparative)

Safety study (incl. comparative)

Healthcare resource utilisation

**Data collection methods:**

Secondary use of data

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**Main study objective:**

Aim 1: Compare the demographic and clinical characteristics of patients who were prescribed apixaban or warfarin. Aim: 2: Compare both the incidence rates and the risk (using Hazard ratios) of major bleeding between patients who received apixaban versus warfarin. Aim 3: Compare both the incidence rates and the risk of CRNM between patients who received apixaban versus warfarin

Additional

## Study Design

**Non-interventional study design**

Cohort

## Study drug and medical condition

**Medicinal product name**

ELIQUIS

## Population studied

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

Elderly ( $\geq 65$  years) patients diagnosed with Venous thromboembolism (VTE) in the Medicare population, who were prescribed apixaban or warfarin (bridging to warfarin) between September 1, 2014 and December 31, 2016 and had continuous health plan enrolment for 6 months prior to the prescription.

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## **Age groups**

- 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**

Venous thromboembolism patients

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## **Estimated number of subjects**

1

# Study design details

## **Outcomes**

Major bleeding, CRNM bleeding, Recurrent VTE, Major bleeding related costs, Recurrent VTE related cost, All cause health care utilization, All cause costs, All cause death

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## **Data analysis plan**

Means, medians, and standard deviations will be provided for continuous variables. Numbers and percentages will be provided for dichotomous and polychotomous variables. Bivariate comparisons of baseline characteristics and outcomes measures will be provided. Appropriate tests (eg, t-test, chi-square test) will be used based on the distribution of the measure. The cumulative incidence rate for clinical outcomes (major bleeding, CRNM, and recurrent VTE) will be calculated. Propensity score matching will be used to balance patient characteristics of the cohorts. Cox regression models will be used to evaluate the risk of clinical outcomes. Generalized linear models (GLM) and two-part models will be used to compare health care costs between the apixaban and warfarin cohorts. Data analysis will be executed using statistical software SAS version 9.3/9.4.

## Documents

### Study results

[Final Report\\_Medicare\\_VTE.pdf](#) (345.28 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 sources (types)**

Administrative healthcare records (e.g., claims)

## 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

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## Data characterisation

**Data characterisation conducted**

No