# Cohort study to quantify the risk of glaucoma with intravitreal VEGF inhibitors (bevacizumab, ranibizumab, aflibercept)

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## Administrative details

PURI
https://redirect.ema.europa.eu/resource/42994
EU PAS number
EUPAS42993
Study ID
42994
DARWIN EU® study
No
Study countries

Ital	ly

#### **Study status**

**Planned** 

## Research institutions and networks

## Institutions

# University of Siena

First published: 01/02/2024

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

Institution

## University of British Columbia

First published: 01/02/2024

Last updated: 01/02/2024

Institution

## University of Pisa

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Institution

University of Firenze Firenze, Azienda Ospedaliera Universitaria Senese Siena, University of British Columbia Vancouver, University of Pisa Pisa

## Contact details

**Study institution contact** 

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**Primary lead investigator** 

Andrea Spini

**Primary lead investigator** 

# Study timelines

Date when funding contract was signed

Planned: 01/09/2020

Study start date

Planned: 15/09/2021

**Date of final study report** 

Planned: 15/12/2021

Sources of funding

Other

## More details on funding

Regional funding (Tuscany region)

## 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:

Assessment of risk minimisation measure implementation or effectiveness Drug utilisation

#### Main study objective:

What is the risk of glaucoma surgery among non-diabetic new users of anti-VEGF drugs for ocular diseases in Tuscany, Italy, compared across brands?

# Study Design

#### Non-interventional study design

Cohort

# Study drug and medical condition

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

(L01XX44) aflibercept

aflibercept

(L01XC07) bevacizumab

bevacizumab

(S01LA04) ranibizumab

ranibizumab

#### Medical condition to be studied

Glaucoma

# Population studied

#### **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)

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

500

# Study design details

#### **Outcomes**

risk of glaucoma surgery, risk of glaucoma diagnosis

#### Data analysis plan

Descriptive statistics: i.e number of users of bevacizumab, ranibizumab, aflibercept in the study population. Mean age by different drugs. Compute covariate distributions (age, gender by drug type). Average number of injection during follow-up for all three drugs. Crude number of outcomes (glaucoma surgeries and glaucoma outcome) by different exposure strata Cox regression to compute Hazard ratios: First, perform an intention to treat analysis i.e exposure is defined as index drug based on the first injection ('Time on') followed forward to an event (outcome 1 or 2) or censored based on above criteria. Adjustment: Age, use of oral corticosteroids, gender, comorbidities, binocularity.

## Data management

### Data sources

Data source(s)  ARS Toscana	
Data source(s), other ARS	
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