

# Incidence of phimosis and paraphimosis in patients treated with SGLT2 inhibitors

**First published:** 02/10/2023

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Study

Finalised

## Administrative details

### PURI

<https://redirect.ema.europa.eu/resource/106883>

### EU PAS number

EUPAS106882

### Study ID

106883

### DARWIN EU® study

No

### Study countries

☐ United Kingdom

## Study description

A cohort study aimed at estimating one-year and two-year incidence proportions of phimosis and paraphimosis among individuals who initiated treatment with an SGLT2 inhibitor.

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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

Andrei Barbulescu

**Study contact**

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### Primary lead investigator

Andrei Barbulescu

## Study timelines

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

Planned: 10/07/2023

Actual: 10/07/2023

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### **Study start date**

Planned: 10/07/2023

Actual: 10/07/2023

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

Planned: 31/08/2023

Actual: 08/09/2023

## Sources of funding

- EMA

## Study protocol

[Final\\_Analysis\\_Plan--](#)

[Phimosis\\_\\_Paraphimosis\\_\\_SGLT2i\\_\\_Redacted\\_version\\_for\\_publication.pdf](#)(292.55 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 type

#### Study type list

**Study topic:**

Disease /health condition

Human medicinal product

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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:**

To estimate the incidence of phimosis and paraphimosis in male patients who initiated SGLT2 inhibitors (regardless of indication and restricted to a type-2

diabetes mellitus cohort) and also in type-2 diabetic male patients no exposed to SGLT2 inhibitors (background population).

## Study Design

### **Non-interventional study design**

Cohort

## Study drug and medical condition

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

(A10BK) Sodium-glucose co-transporter 2 (SGLT2) inhibitors

Sodium-glucose co-transporter 2 (SGLT2) inhibitors

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### **Medical condition to be studied**

Phimosis

Paraphimosis

## Population studied

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

The study population included male patients with any identified phimosis/paraphimosis event initiated treatment with SGLT2 inhibitors from January 2022 to January 2023

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### **Age groups**

Preterm newborn infants (0 – 27 days)

Term newborn infants (0 – 27 days)  
Infants and toddlers (28 days – 23 months)  
Children (2 to < 12 years)  
Adolescents (12 to < 18 years)  
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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### **Estimated number of subjects**

10000

## Study design details

### **Outcomes**

Phimosis and paraphimosis

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### **Data analysis plan**

Eligible study participants were followed from study entry (i.e., initiation of an SGLT2 inhibitor in the treated cohorts or start of calendar year in the background cohort) until the first of: outcome event, death, loss to follow-up or the end of the study period. Crude incidence proportions were calculated as the ratio of: numerator: number of study participants who experienced the outcome event during follow-up denominator: number of patients at risk at the start of follow-up .To account for censoring during follow-up, incidence proportions (i.e., cumulative incidences) were also calculated using the product-limit method.

## Documents

## Study results

[Final\\_Report--](#)

[Phimosis\\_\\_Paraphimosis\\_\\_SGLT2i\\_\\_Redacted\\_version\\_for\\_publication.pdf](#)(419.14 KB)

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## Data management

### Data sources

#### Data source(s)

IQVIA Disease Analyzer Germany

Disease Analyzer - OMOP

THIN® (The Health Improvement Network®)

IQVIA Medical Research Data - OMOP

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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