

Prevalence, prescriptions, outcomes and costs of type 2 diabetic patients with or without prior coronary artery disease or stroke. A longitudinal 5-year claims-data analysis of over 7 million inhabitants

First published: 15/07/2024

Last updated: 15/07/2024

Study

Finalised

Administrative details

EU PAS number

EUPAS1000000257

Study ID

1000000257

DARWIN EU® study

No

Study countries

☐ Italy

Study description

Retrospective observational cohort study providing a descriptive analysis of prevalence, comorbidities, outcomes and costs of type 2 diabetes mellitus patients with and without coronary artery disease (CAD) or stroke in the ReS database.

Study status

Finalised

Research institutions and networks

Institutions

Fondazione ReS (Ricerca e Salute), CINECA partner

☐ Italy

First published: 05/07/2017

Last updated: 01/10/2025

Institution

Not-for-profit

ENCePP partner

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Letizia Dondi

Primary lead investigator

Study timelines

Date when funding contract was signed

Actual: 12/07/2019

Study start date

Actual: 02/09/2019

Date of final study report

Actual: 12/03/2020

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Astra Zeneca SpA

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 topic:

Disease /health condition

Study type:

Non-interventional study

Scope of the study:

Disease epidemiology

Healthcare resource utilisation

Data collection methods:

Secondary use of data

Study design:

Retrospective longitudinal cohort study

Main study objective:

To analyze the prevalence, comorbidities, outcomes and costs of type 2 diabetes mellitus (T2DM) patients with and without coronary artery disease (CAD) or stroke in a population of over 7 million inhabitants

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Medical condition to be studied

Diabetes mellitus

Coronary artery disease

Ischaemic stroke

Haemorrhagic stroke

Population studied

Short description of the study population

four cohorts were considered: #1 with CAD and/or stroke; #2 without CAD and/or stroke; #3 with chronic CAD but no myocardial infarction or stroke; #4 with chronic CAD undergoing percutaneous coronary interventions (PCI).

Age groups

- **Paediatric Population (< 18 years)**

- Preterm newborn infants (0 – 27 days)
- Term newborn infants (0 – 27 days)
- Children (2 to < 12 years)
- Adolescents (12 to < 18 years)

- **Adult and elderly population (≥18 years)**

- Adults (18 to < 65 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)

Study design details

Setting

In-hospital and outpatient settings in public and affiliated with the Italian national Healthcare Service facilities

Summary results

The prevalence of T2DM was 6% (441,085/7,365,954). CAD and/or stroke in the previous 3 years affected 7.5% of T2DM patients (33,153); this cohort was generally older, of male sex, with more comorbidities, prescriptions, and hospital admissions (50.5% versus 13.4% during the first follow-up year) compared to cohort #2. Yearly costs were over threefold for cohort #1 versus #2, main drivers being hospitalizations in the former and drugs in the latter. Two-year cardiovascular events were recorded significantly more commonly in cohort #4 compared to the other cohorts. Guideline-recommended lipid-lowering therapy was <80% in all but cohort #4.

Documents

Study publications

[Prevalence, prescriptions, outcomes and costs of type 2 diabetes patients with ...](#)

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 source(s)

Database of Fondazione ReS

Data sources (types)

[Administrative healthcare records \(e.g., claims\)](#)

Use of a Common Data Model (CDM)

CDM mapping

No

Data quality specifications

Check conformance

Yes

Check completeness

Yes

Check stability

Yes

Check logical consistency

Yes

Data characterisation

Data characterisation conducted

Yes