Coronary Artery Disease in Patients Older than 35 and Eligible for Cardiovascular Secondary Prevention: An Italian Retrospective Observational Analysis of Healthcare Administrative Databases

First published: 15/07/2024

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Study Finalised

Administrative details

EU PAS number

EUPAS1000000258

Study ID

1000000258

DARWIN EU® study

No

Study countries

☐ Italy

Study description

Background: This study describes patients with coronary artery disease (CAD) who are eligible for secondary prevention and assesses their healthcare consumption and costs from the perspective of the Italian National Health Service (SSN). Methods: From the Fondazione Ricerca e Salute's database, which collects Italian healthcare administrative data, all patients aged >=35, with >=1 primary in-hospital CAD diagnosis and/or procedure on the coronary arteries, or with the specific disease exemption code, and who are suitable for long-term secondary prevention treatments, were identified in 2018 and analyzed. Demographics, comorbidities, one-year supplied drugs, hospitalizations, and costs were analyzed. Results: From >3 million inhabitants aged >= 35, 46,063 (1.3%) were identified (72.1% males, mean age 70 (12) years; approximately 50% with >=3 comorbidities). During a one-year follow-up, 96.4% were treated with >=1 drug for secondary prevention (mainly antiplatelets and lipid lowering agents), 69.4% with >=1 concomitant cardiovascular drug, and 95.8% with >=1 concomitant non-cardiovascular therapy. Within one year, 30.6% of patients were hospitalized at least once, mostly due to non-cardiovascular events. Calculated by mean, the INHS paid EUR 6078 per patient. Conclusions: This analysis confirms the relevant burden of CAD for patients with many comorbidities and who are frequently hospitalized, and the burden on the INHS. A multidisciplinary healthcare approach is encouraged to improve patients' outcomes and reduce costs for the INHS.

Study status

Finalised

Research institutions and networks

Institutions

Fondazione ReS (Ricerca e Salute), CINECA partner

Italy

First published: 05/07/2017

Last updated: 13/06/2025

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: 11/07/2019

Study start date

Actual: 12/09/2019

Date of final study report

Actual: 12/01/2020

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Acarpia Farmaceutici S.r.l, Milan, Italy

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 topic:

Disease /health condition

Study type:

Non-interventional study

Scope of the study:

Drug utilisation

Healthcare resource utilisation

Data collection methods:

Secondary use of data

Study design:

Retrospective longitudinal cohort study

Main study objective:

This study describes patients with coronary artery disease (CAD) who are eligible for secondary prevention and assesses their healthcare consumption and costs from the perspective of the Italian National Health Service (SSN)

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Anatomical Therapeutic Chemical (ATC) code

(B01AC) Platelet aggregation inhibitors excl. heparin

Platelet aggregation inhibitors excl. heparin

(C07A) BETA BLOCKING AGENTS

BETA BLOCKING AGENTS

(C09A) ACE INHIBITORS, PLAIN

ACE INHIBITORS, PLAIN

(C09B) ACE INHIBITORS, COMBINATIONS

ACE INHIBITORS, COMBINATIONS

(C09C) ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs), PLAIN

ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs), PLAIN

(C09D) ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs), COMBINATIONS

ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs), COMBINATIONS

(C10) LIPID MODIFYING AGENTS

LIPID MODIFYING AGENTS

Medical condition to be studied

Coronary artery disease

Population studied

Short description of the study population

Among all patients older than 35 in the ReS database in 2018, and with at least a healthcare resource consumption in the charge of the SSN since 2015, subjects who were admitted to hospital at least once in 2018 (accrual) and whose hospital discharge contained a primary/secondary diagnosis of CAD and/or a procedure on coronary arteries, or patients with a CAD-specific cost sharing exemption code, were selected for the analysis.

Study design details

Setting

In-hospital and outpatient setting in public and affiliated with the SSN facilities

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Summary results

From >3 million inhabitants aged >= 35, 46,063 (1.3%) were identified (72.1% males, mean age 70 (12) years; approximately 50% with >=3 comorbidities). During a one-year follow-up, 96.4% were treated with >=1 drug for secondary prevention (mainly antiplatelets and lipid lowering agents), 69.4% with >=1 concomitant cardiovascular drug, and 95.8% with >=1 concomitant non-cardiovascular therapy. Within one year, 30.6% of patients were ospitalized at least once, mostly due to non-cardiovascular events. Calculated by mean, the SSN paid EUR 6078 per patient.

Documents

Study publications

Coronary Artery Disease in Patients Older Than 35 and Eligible for Cardiovascu…

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