AZORG general OMOP database

First published: 15/11/2024

Last updated: 15/11/2024

Data source | Human | Cancer registry | Hospital inpatient records | Other | Pharmacy dispensing records

Administrative details

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Data source ID

1000000358

Data source acronym

AZORG OMOP

Data holder

AZORG hospital (AZORG)

Data source type

Cancer registry

Hospital inpatient records

Other

Pharmacy dispensing records

Data source type, other

Electronic health records, EORTC quality of life questionnaires

Main financial support

Funding by own institution

Funding from industry or contract research

Care setting

Hospital inpatient care

Data source qualification

If the data source has successfully undergone a formal qualification process (e.g., from the EMA, ISO or other certifications), this should be described.

No

Contact details

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Data source regions and languages

Data source countries

Belgium

Data source languages

Dutch

English

Data source regions

Vlaams Gewest

Data source establishment

Data source established

30/11/2022

Data source time span

First collection: 01/01/2015

The date when data started to be collected or extracted.

Publications

Data source publications

Trends of drug use with suggested shortages and their alternatives across 41 real world data sources and 18 countries in Europe and North America

Studies

No information provided.

Data elements collected

The data source contains the following information

Disease information

Does the data source collect information with a focus on a specific disease? This might be a patient registry or other similar initiatives.

Yes

Disease details

Lung adenocarcinoma

Non-small cell lung cancer

Small cell lung cancer

Large cell lung cancer

Bladder cancer

Disease details (other)

Hospital-wide mapping of drug administration, procedures and diagnosis using our minimal clinical data and pharmacy system for hospitalised patients. We also have disease-specific information on patients with bladder cancer for which we have mapped comorbidities, lab data, billing codes for surgical procedures and tumor-specific characteristics using cancer registry data combined with pathology data. We also have disease-specific information on patients with lung cancer, including PROMs en PREMs, sociodemographic data, quality of life questionnaires, tumor-specific characteristics using cancer registry data, detailed treatment information, biomarker and genetic tumor-related information, additional clinical data (e.g. FEV1 values).

Rare diseases

Are rare diseases captured? In the European Union a rare disease is one that affects no more than 5 people in 10,000.

No

Pregnancy and/or neonates

Does the data source collect information on pregnant women and/or neonatal subpopulation (under 28 days of age)?

Yes

Hospital admission and/or discharge

Yes

ICU admission

Is information on intensive care unit admission available?

Yes

Cause of death

Not Captured

Prescriptions of medicines

Captured

Dispensing of medicines

Captured

Advanced therapy medicinal products (ATMP)

Is information on advanced therapy medicinal products included? A medicinal product for human use that is either a gene therapy medicinal product, a somatic cell therapy product or a tissue engineered products as defined in Regulation (EC) No 1394/2007 [Reg (EC) No 1394/2007 Art 1(1)].

No

Contraception

Is information on the use of any type of contraception (oral, injectable, devices etc.) available?

No

Indication for use

Does the data source capture information on the therapeutic indication for the use of medicinal products?

Not Captured

Medical devices

Is information on medicinal devices (e.g., pens, syringes, inhalers) available?

No

Administration of vaccines

Yes

Procedures

Does the data source capture information on procedures (e.g., diagnostic tests, therapeutic, surgical interventions)?

Captured

Procedures vocabulary

ICD-10

Healthcare provider

Is information on the person providing healthcare (e.g., physician, pharmacist, specialist) available? The healthcare provider refers to individual health professionals or a health facility organisation licensed to provide health care diagnosis and treatment services including medication, surgery and medical devices.

No

Clinical measurements

Is information on clinical measurements (e.g., BMI, blood pressure, height) available?

Yes

Genetic data

Are data related to genotyping, genome sequencing available?

Captured

Genetic data vocabulary

Other

Genetic data vocabulary, other

LOINC, SNOMED (tumor genetic labtests)

Biomarker data

Does the data source capture biomarker information? The term “biomarker” refers to a broad subcategory of medical signs (objective indications of medical state observed from outside the patient), which can be measured accurately and reproducibly. For example, haematological assays, infectious disease markers or metabolomic biomarkers.

Captured

Biomarker data vocabulary

Other

Biomarker vocabulary, other

LOINC (biomarkers included are based on blood test measurements)

Patient-reported outcomes

Is information on patient-reported outcomes (e.g., quality of life) available?

Yes

Patient-generated data

Is patient-generated information (e.g., from wearable devices) available?

No

Units of healthcare utilisation

Are units of healthcare utilisation (e.g., number of visits to GP per year, number of hospital days) available or can they be derived? Units of healthcare utilisation refer to the quantification of the use of services for the purpose of preventing or curing health problems.

Yes

Unique identifier for persons

Are patients uniquely identified in the data source?

Yes

Diagnostic codes

Captured

Diagnosis / medical event vocabulary

ICD-10-CM

Medicinal product information

Captured

Medicinal product information collected

Active ingredient(s)

Brand name

Dose

Formulation

Strength

Medicinal product vocabulary

RxNorm

Quality of life measurements

Captured

Quality of life measurements vocabulary

other

Quality of life measurements, other

SNOMED (no matching QLQ specific vocabulary was available at that time)

Lifestyle factors

Not Captured

Sociodemographic information

Captured

Sociodemographic information collected

Age

Country of origin

Gender

Quantitative descriptors

Population Qualitative Data

Population age groups

All

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)

Elderly (≥ 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

Estimated percentage of the population covered by the data source in the catchment area

22,5%; if we consider East Flanders (our complete province) as our catchment area, the denominator is 1.572.002 inhabitants. There will be patients in our dataset from other provinces in Belgium - since we, for example, have a hospital campus in another province, but the majority of our patients will originate from East Flanders (Oost-Vlaanderen).

Description of the population covered by the data source in the catchment area whose data are not collected (e.g., people who are registered only for private care)

We must mention that this percentage is based on our current location in Aalst. On the first of January 2025 our merge with the other large hospital in Aalst will be completed and the OLV hospital will officially become "AZORG", which will increase the population percentage. Next to our hospital there are also several other general hospitals in Flanders, which explains why only about 1/4 of the entire population is present in our database.

Family linkage

Family linkage available in the data source permanently or can be created on an ad hoc basis

Ad hoc

Population

Population size

353.708

Active population size

319.560

Population by age group

Age group	Population size	Active population size
Paediatric Population (< 18 years)	39.259	39.175
Term newborn infants (0 – 27 days)	143	100
Infants and toddlers (28 days – 23 months)	3.598	3.580
Children (2 to < 12 years)	23.678	23.668
Adolescents (12 to < 18 years)	12.182	12.168
Adults (18 to < 46 years)	95.370	94.713
Adults (46 to < 65 years)	96.183	92.230
Elderly (≥ 65 years)	122.941	93.442

Age group	Population size	Active population size
Adults (65 to < 75 years)	52.670	46.643
Adults (75 to < 85 years)	42.314	32.473
Adults (85 years and over)	27.957	14.326

Median observation time

Median time (years) between first and last available records for unique individuals captured in the data source

1,00

Median time (years) between first and last available records for unique active individuals (alive and currently registered) capt

1,00

Data flows and management

Access and validation

Governance details

Documents or webpages that describe the overall governance of the data source and processes and procedures for data capture and management, data quality check and validation results (governing data access or utilisation for research purposes).

OMOP governance.pdf

English (205.71 KB - PDF)

View document

Biospecimen access

Are biospecimens available in the data source (e.g., tissue samples)?

Yes

Biospecimen access conditions

If a specific study would require us to have access to pathology samples (e.g. tumour samples) that would be possible, since they are stored in-house.

Access to subject details

Can individual patients/practitioners/practices included in the data source be contacted?

Yes

Description of data collection

The vast majority of our data originates from our EPD, pharmacy, lab system, etc., which is replicated to our data warehouse for processing. The majority of this data is structured. For the patient reported outcomes we use digital questionnaires (called Formasa in our EPD) some fields in these questionnaires are not structured, and require processing by experts prior to the mapping process.

Event triggering registration

Event triggering registration of a person in the data source

Other

Event triggering registration of a person in the data source, other

Any billable interaction with our hospital

Event triggering de-registration of a person in the data source

Other

Event triggering creation of a record in the data source

Patients are able to opt out for the secondary use of their data. This has not yet happened until this date. There are no other de-registration triggers.

Data source linkage

Linkage

Is the data source described created by the linkage of other data sources (prelinked data source) and/or can the data source be linked to other data source on an ad-hoc basis?

Yes

Linkage description, pre-linked

Our EPD, lab database, pharmacy database, etc., are integrated systems and can be considered pre-linked.

Linkage description, possible linkage

The Belgian registry number (rijksregisternr.) is available for all patients. If applicable this can be used to link patients to all data sources, including external Belgian sources (government, healthcare,...).

Data management specifications that apply for the data source

Data source refresh

Monthly

Informed consent for use of data for research

Not Required

Possibility of data validation

Can validity of the data in the data source be verified (e.g., access to original medical charts)?

Yes

Data source preservation

Are records preserved in the data source indefinitely?

Yes

Approval for publication

Is an approval needed for publishing the results of a study using the data source?

No

Data source last refresh

15/10/2024

Common Data Model (CDM) mapping

CDM mapping

Has the data source been converted (ETL-ed) to a common data model?

Yes

CDM Mappings

CDM name

OMOP

CDM website

https://www.ohdsi.org/Data-standardization/

Data source ETL CDM version

5.4.1

Data source ETL frequency

0,03 months

Data source ETL status

Completed