

# University Clinical Center of Serbia - Heliant

**First published:** 01/02/2024

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Data source

Human

Hospital inpatient records

Hospital outpatient visit records

Other

## Administrative details

### Administrative details

**Data source ID**

1111232

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**Data source acronym**

UCCS

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**Data holder**

[University Clinical Center of Serbia \(UCCS\)](#)

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**Data source type**

Hospital inpatient records

Hospital outpatient visit records

Other

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## Data source type, other

Electronic health records

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## Main financial support

National, regional, or municipal public funding

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## Care setting

Hospital inpatient care

Hospital outpatient care

Secondary care – specialist level (ambulatory)

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## 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

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## Data source website

<http://www.kcs.ac.rs/>

## Contact details

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Main

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## Data source regions and languages

### Data source countries

Serbia

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## Data source languages

Serbian

## Data source establishment

### Data source established

01/01/1983

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### Data source time span

**First collection:** 03/05/2003

The date when data started to be collected or extracted.

## Publications

### Data source publications

[Supporting Pharmacovigilance Signal Validation and Prioritization with Analyses of Routinely Collected Health Data: Lessons Learned from an EHDEN Network Study](#)

[The effect of prophylaxis with ertapenem versus cefuroxime/metronidazole on intestinal carriage of carbapenem-resistant or third-generation-cephalosporin-resistant Enterobacterales after colorectal surgery](#)

[Safety, efficacy, and tolerability of efgartigimod in patients with generalised myasthenia gravis \(ADAPT\): a multicentre, randomised, placebo-controlled, phase 3 trial](#)

[Global, regional, and national burden of meningitis and its aetiologies, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019](#)

[Rationale and design of ASPIRE-ICU: a prospective cohort study on the incidence and predictors of Staphylococcus aureus and Pseudomonas aeruginosa pneumonia in the ICU](#)

## Data elements collected

The data source contains the following

## **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

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## **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.

Yes

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## **Pregnancy and/or neonates**

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

Yes

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## **Hospital admission and/or discharge**

Yes

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## **ICU admission**

Is information on intensive care unit admission available?

Yes

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## **Cause of death**

Captured

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## **Cause of death vocabulary**

ICD-10

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## **Prescriptions of medicines**

Captured

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## **Dispensing of medicines**

Captured

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## **Dispensing vocabulary**

ATC

other

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## **Dispensing vocabulary, other**

JKL, Serbian system

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## **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

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## **Contraception**

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

No

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## **Indication for use**

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

Captured

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## **Indication vocabulary**

ICD-10

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## **Medical devices**

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

Yes

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## Administration of vaccines

No

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## Procedures

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

Captured

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## Procedures vocabulary

Other

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## Procedures vocabulary, other

Serbian system

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## 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.

Yes

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## Clinical measurements

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

Yes

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## Genetic data

Are data related to genotyping, genome sequencing available?

Not Captured

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## 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.

Not Captured

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### **Patient-reported outcomes**

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

No

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### **Patient-generated data**

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

No

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### **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

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### **Unique identifier for persons**

Are patients uniquely identified in the data source?

Yes

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### **Diagnostic codes**

Captured

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### **Diagnosis / medical event vocabulary**

ICD-10

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### **Medicinal product information**

Captured

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## **Medicinal product information collected**

Brand name

Dosage regime

Formulation

Package size

Strength

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## **Medicinal product vocabulary**

ATC

Other

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## **Quality of life measurements**

Captured

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## **Quality of life measurements vocabulary**

Not coded (Free text)

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## **Lifestyle factors**

Captured

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## **Lifestyle factors**

Alcohol use

Frequency of exercise

Other

Tobacco use

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## **Sociodemographic information**

Captured

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## **Sociodemographic information collected**

Age

Country of origin

Gender

Marital status

## Quantitative descriptors

### Population Qualitative Data

#### **Population age groups**

Paediatric Population (< 18 years)

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)

Elderly ( $\geq$  65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

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

85% of inhabitants of Serbia. In addition to that Montenegro, Republic of Srpska, Bosna and Herzegovina occasionally.

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**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)**

Military insured population.

## Family linkage

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

Ad hoc

## Population

**Population size**

1142728

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**Active population size**

18705

## Population by age group

<b>Age group</b>	<b>Population size</b>	<b>Active population size</b>
Paediatric Population (< 18 years)	101437	801
Term newborn infants (0 - 27 days)	28624	164
Infants and toddlers (28 days - 23 months)	5462	41

Age group	Population size	Active population size
Children (2 to < 12 years)	38536	350
Adolescents (12 to < 18 years)	28815	246
Adults (18 to < 46 years)	395016	6198
Adults (46 to < 65 years)	321834	5649
Elderly ( $\geq$ 65 years)	324441	6057
Adults (65 to < 75 years)	200005	3995
Adults (75 to < 85 years)	98632	1679
Adults (85 years and over)	25804	383

## Median observation time

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

2.00

## 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).

<http://www.kcs.ac.rs/index.php/eticki-odbor>

### **Biospecimen access**

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

No

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### **Access to subject details**

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

Yes

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### **Description of data collection**

Medical workers use the Heliant EHR every day and by using it they fill out the source database, which is used as the only source for the ETL and final OMOP CDM instance

## Event triggering registration

### **Event triggering registration of a person in the data source**

Disease diagnosis

Start of treatment

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

Death

End of treatment

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### **Event triggering creation of a record in the data source**

Every action in the system, including admitting and discharge of patients, recording procedures, conditions, drugs etc. triggers creation of records

## 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?

No

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## Data management specifications that apply for the data source

### **Data source refresh**

Monthly

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### **Informed consent for use of data for research**

Required for general use

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### **Possibility of data validation**

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

Yes

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### **Data source preservation**

Are records preserved in the data source indefinitely?

Yes

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### **Approval for publication**

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

Yes

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### **Data source last refresh**

23/10/2023

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## 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

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### **CDM website**

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

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### **Data source ETL CDM version**

5.4

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### **Data source ETL frequency**

12,00 months

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### **Data source ETL status**

Completed