

# Leveraging Digital Technology and Artificial Intelligence to Describe the Real World Belgian Chronic Lymphocytic Leukemia Patient Population [BE-CLLEAR]

**First published:** 03/02/2026

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Study

Finalised

## Administrative details

### EU PAS number

EUPAS1000000394

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### Study ID

1000000394

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### DARWIN EU® study

No

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### Study countries

 Belgium

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### Study description

This multicenter study describes demographics, biomarker testing, and treatment patterns in Belgian patients with chronic lymphocytic leukemia by leveraging natural language processing and the OMOP common data model.

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## Study status

Finalised

## Research institutions and networks

### Institutions

#### AZ Maria Middelaes General Hospital

 Belgium

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

**Last updated:** 01/02/2024

Institution

Hospital/Clinic/Other health care facility

#### AstraZeneca

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

**Last updated:** 01/02/2024

Institution

#### Universitair Ziekenhuis Antwerpen (UZA)

 Belgium

**First published:** 11/06/2025

**Last updated:** 16/06/2025

**Institution**

Hospital/Clinic/Other health care facility

Laboratory/Research/Testing facility

ENCePP partner

## LynxCare Clinical Informartics

 Belgium

**First published:** 20/10/2025

**Last updated:** 20/10/2025

**Institution**

Other

Algemeen Ziekenhuis Groeninge; Universitair  
Ziekenhuis Brussel

## Contact details

### Study institution contact

Katoo Muylle [katoo.muylle@astrazeneca.com](mailto:katoo.muylle@astrazeneca.com)

**Study contact**

[katoo.muylle@astrazeneca.com](mailto:katoo.muylle@astrazeneca.com)

## Primary lead investigator

Katoo Muylle 0000-0003-1117-6709

Primary lead investigator

## ORCID number:

0000-0003-1117-6709

## Study timelines

### Date when funding contract was signed

Actual: 16/11/2022

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### Study start date

Actual: 06/12/2023

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### Date of final study report

Planned: 01/05/2024

Actual: 28/10/2024

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

AstraZeneca BeLux

## Regulatory

**Was the study required by a regulatory body?**

No

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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

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**Study type:**

Non-interventional study

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**Scope of the study:**

Disease epidemiology

Drug utilisation

**Data collection methods:**

Secondary use of data

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**Study design:**

Multicenter study (n = 4) analyzing routinely collected data from pseudonymized electronic health records (EHRs) using natural language

processing (NLP) for unstructured sources. The algorithm mapped variables to a standard terminology, generating OMOP CDM databases, validated per hospital

**Main study objective:**

- Proof of concept for novel and scalable methodology in CLL
- Characterize clinical and demographic patient profile
- Asses biomarker testing and treatment patterns against evolving guidelines

## Study Design

**Non-interventional study design**

Cohort

## Study drug and medical condition

**Medical condition to be studied**

Chronic lymphocytic leukaemia

## Population studied

**Short description of the study population**

CLL patients diagnosed between 1 January 2018 and 31 October 2021.

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**Estimated number of subjects**

500

## Study design details

## Setting

Belgium, diagnosis between 2018 and 2021

## 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)

LynxCare

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### Data sources (types)

[Electronic healthcare records \(EHR\)](#)

## Use of a Common Data Model (CDM)

### CDM mapping

Yes

### CDM Mappings

**CDM name**

OMOP

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**CDM website**

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

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**CDM version**

5.4

## Data quality specifications

**Check conformance**

Yes

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**Check completeness**

Yes

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**Check stability**

Yes

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**Check logical consistency**

Yes

## Data characterisation

**Data characterisation conducted**

Yes

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## **Data characterisation moment**

after data extraction

after extract-transform-load to a common data model

after creation of study variables