Real-world disease, patient characteristics and treatment patterns in patients with Non-Small Cell Lung Cancer and extensive stage Small cell lung cancer in Belgium [AIBED]

First published: 30/06/2025

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Study Finalised

Administrative details

EU PAS number

EUPAS1000000396

Study ID

1000000396

DARWIN EU® study

No

Study countries

☐ Belgium

Study description

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

Study status

Finalised

Research institutions and networks

Institutions

AZ Maria Middelares 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

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Institution | Hospital/Clinic/Other health care facility | Laboratory/Research/Testing facility | ENCePP partner

Universitair Ziekenhuis Brussel Algemeen Ziekenhuis Groeninge Universitair Ziekenhuis Leuven LynxCare Clinical Informatics

Contact details

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Primary lead investigator

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Study timelines

Date when funding contract was signed
Actual: 02/12/2019

Study start date
Actual: 01/10/2023

Date of final study report
Planned: 31/05/2022

Actual: 28/06/2024

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

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:

Disease epidemiology

Drug utilisation

Data collection methods:

Secondary use of data

Study design:

Multicenter study (n = 5) 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:

This study describes the following in Belgian patients with lung cancer for specific subpopulations of interest (Patients with stage IB-IIIB NSCLC, stage III unresected NSCLC, Stage IV NSCLC, or ES-SCLC):

• Demographics

• Biomarker testing with focus on EGFR and PD-L1

• Treatment patterns with focus on durvalumab and osimertinib

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Study drug International non-proprietary name (INN) or common name

OSIMERTINIB

DURVALUMAB

Medical condition to be studied

Non-small cell lung cancer

Small cell lung cancer

Population studied

Short description of the study population

Non-small cell lung cancer and small cell lung cancer diagnosed between 1 January 2019 and 31 December 2021.

Estimated number of subjects

2000

Study design details

Setting

Belgium, diagnosis between 2019 and 2021

Summary results

We included 1952 patients, of whom 87% (1699) had NSCLC and 13% (253) SCLC (86.6% ES-SCLC). Stage IB-IIIB resected NSCLC included 17.3%,

unresected stage III NSCLC 12.3%, and stage IV NSCLC 45.0% of NSCLC patients. Brain metastasis around diagnosis was reported in 16.4% of stage IV NSCLC (22.3% in EGFR mutated) and 15.1% of ES-SCLC patients. Across NSCLC subcohorts, 53.9% of patients had a programmed death-ligand 1 (PD-L1)-positive tumor (≥1%) and 12.7% an EGFR mutation-positive tumor. In stage IB-IIIB resected NSCLC patients, resection status was retrieved for 83.0% of patients, of whom 93.0% had complete resection. Among 327 stage III NSCLC patients, 63.9% (n = 209) were unresected, 36.7% (n = 120) had a PD-L1-positive tumor, 18.3% (n = 60) completed chemoradiotherapy, and 11.3% (n = 37) initiated durvalumab

Documents

Study publications

https://www.sciencedirect.com/science/article/pii/S2949820125005570

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

Use of a Common Data Model (CDM)

CDM mapping

Yes

CDM Mappings

CDM name

OMOP

CDM website

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

CDM version

5.4

Data quality specifications

Check conformance

Yes

Check completeness

Yes

Check stability

Yes

Check logical consistency

Yes

Data characterisation

Data characterisation conducted

Yes

Data characterisation moment

after data extraction

after extract-transform-load to a common data model

after creation of study variables