

# Assessing the impact of earlier access to biologics on remission and natural course of asthma (GLEAM)

**First published:** 28/03/2025

**Last updated:** 04/06/2025

Study

Ongoing

## Administrative details

### EU PAS number

EUPAS1000000530

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### Study ID

1000000530

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### DARWIN EU® study

No

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### Study countries

☐ Argentina

☐ Belgium

☐ Brazil

☐ Bulgaria

- ☐ Canada
  - ☐ Colombia
  - ☐ Denmark
  - ☐ Estonia
  - ☐ France
  - ☐ Greece
  - ☐ India
  - ☐ Ireland
  - ☐ Italy
  - ☐ Japan
  - ☐ Korea, Republic of
  - ☐ Kuwait
  - ☐ Mexico
  - ☐ Norway
  - ☐ Poland
  - ☐ Portugal
  - ☐ Saudi Arabia
  - ☐ Singapore
  - ☐ Spain
  - ☐ Taiwan
  - ☐ United Arab Emirates
  - ☐ United Kingdom
  - ☐ United States
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### **Study description**

An examination of the association between the timing of biologic therapy initiation, disease progression, and remission probabilities in severe asthma.

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### **Study status**

Ongoing

## Research institutions and networks

## Institutions

### Observational & Pragmatic Research Institute Pte (OPRI)

☐ United Kingdom

**First published:** 06/10/2015

**Last updated:** 19/08/2024

**Institution**

**Educational Institution**

**Laboratory/Research/Testing facility**

**ENCePP partner**

## Contact details

### Study institution contact

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**Study contact**

[dprice@opri.sg](mailto:dprice@opri.sg)

### Primary lead investigator

David Price 0000-0002-9728-9992

**Primary lead investigator**

### ORCID number:

0000-0002-9728-9992

## Study timelines

### **Date when funding contract was signed**

Planned: 17/11/2023

Actual: 17/11/2023

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### **Study start date**

Planned: 01/03/2024

Actual: 01/08/2024

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### **Data analysis start date**

Actual: 15/03/2025

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### **Date of final study report**

Planned: 30/06/2025

## Sources of funding

- Other
- Pharmaceutical company and other private sector

## More details on funding

Pharmaceutical companies: AstraZeneca

Other: Optimum Patient Care Global

## Study protocol

[GLEAM\\_PROTOCOL\\_Final\\_25.03.15.pdf](#)(622.3 KB)

## 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:**

Human medicinal product

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**Study type:**

Non-interventional study

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**Scope of the study:**

Effectiveness study (incl. comparative)

**Data collection methods:**

Secondary use of data

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**Study design:**

Observational study, historical cohort study

**Main study objective:**

### Objective 1:

To describe the timing of biologic therapy initiation using various proxies of time to initiation

### Objective 2:

To assess whether the timing of biologic therapy initiation is associated with the course of the disease in patients with severe asthma, including remission, biomarkers and individual clinical outcomes.

## Study Design

### **Non-interventional study design**

Cohort

## Study drug and medical condition

### **Name of medicine**

DUPIXENT

FASENRA

NUCALA

TEZSPIRE 210 MG - SOLUTION FOR INJECTION

XOLAIR

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### **Name of medicine, other**

Cinqair

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

BENRALIZUMAB

DUPILUMAB  
MEPOLIZUMAB  
OMALIZUMAB  
RESLIZUMAB  
TEZEPELUMAB

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**Anatomical Therapeutic Chemical (ATC) code**

(R03DX05) omalizumab  
omalizumab  
(R03DX08) reslizumab  
reslizumab  
(R03DX09) mepolizumab  
mepolizumab  
(R03DX10) benralizumab  
benralizumab  
(R03DX11) tezepelumab  
tezepelumab  
(D11AH05) dupilumab  
dupilumab

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**Additional medical condition(s)**

Severe asthma

## Population studied

**Short description of the study population**

Patients diagnosed with severe asthma from 27 countries.

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## **Age groups**

Adults (18 to < 65 years)

Adults (18 to < 46 years)

Adults (46 to < 65 years)

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## **Special population of interest**

Other

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## **Special population of interest, other**

Patients with severe asthma

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## **Estimated number of subjects**

15000

# Study design details

## **Setting**

Data collected at a clinical setting from years 2017-2024

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## **Comparators**

Early vs late biologic initiators

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## **Outcomes**

Asthma clinical remission, exacerbation, Long-term OCS, asthma control, blood eosinophil count, Fractional exhaled nitric oxide

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## **Data analysis plan**

Remission:

- Type: Yes / No, Univariable: Logistic regression



#### Clinical outcomes:

- Exacerbations, Type: count, Univariable: Negative binomial
- Total OCS, Type: Continuous, Univariable: Linear regression
- Asthma control, Type: Ordinal, Univariable: Ordinal logistic regression
- Lung function, Type: Continuous, Univariable: Linear regression

#### Biomarkers:

- FeNO, Type: Continuous, Univariable: Median change from baseline to 3 months, 12 month, 2 yrs, 3 yrs (Linear or quantile regression)
- BEC, Type: Continuous, Univariable: Median change from baseline to 3 months, 12 month, 2 yrs, 3 yrs (Linear or quantile regression)

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#### Summary results

Not yet completed.

## Data management

### Data sources

#### Data source(s)

International Severe Asthma Registry

Optimum Patient Care Research Database

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#### Data source(s), other

CHRONICLE

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## **Data sources (types)**

Disease registry

Electronic healthcare records (EHR)

## Use of a Common Data Model (CDM)

### **CDM mapping**

No

## 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**

Not applicable