# Biomarker Relatability in the International Severe Asthma Registry (BRISAR)

First published: 24/07/2019

**Last updated:** 02/07/2024





## Administrative details

EU PAS number	
EUPAS30430	
Study ID	
33344	
DARWIN EU® study	
Study countries	
Bulgaria .	
Canada	
Greece	
Ireland	
Italy	
Japan	

Korea, Republic of	
Kuwait	
Spain	
United Kingdom	
United States	

#### Study description

This study aims to characterise an international severe asthma population based on their pattern of biomarkers, potentially helping clinicians to classify and understand these patients. Primary objectives of this study are to assess the degree of overlap across commonly used asthma biomarkers of Type 2 inflammation (IgE, serum eosinophils and FeNO) among a diverse international cohort of severe asthma patients, and to characterise and compare severe asthma patients positive for different combinations of asthma biomarkers. This cross-sectional study will include baseline data of patients at the point of enrolment in the International Severe Asthma Registry (ISAR). This is an international registry combining retrospective and prospective data from the United States, Canada, Greece, Italy, Ireland, South Korea, Bulgaria, Kuwait, the United Kingdom and Spain with common data points of collection agreed on by 27 asthma experts worldwide. De-identified individual patient data will be classified categorically according to baseline biomarker status for analysis of characteristics, including demographics, lung function, asthma control, exacerbations, quality of life, presence of comorbidities and asthma medications.

#### **Study status**

Ongoing

Research institutions and networks

# Institutions

Optimum Patient Care (OPC)
United Kingdom
First published: 01/02/2024
Last updated: 01/02/2024
Institution Not-for-profit

## **Networks**

Optimum Patient Care (OPC) Network
United Kingdom (Northern Ireland)
First published: 26/09/2015
Last updated: 21/05/2025
Network ENCePP partner

Respiratory Effectiveness Group (REG)
Belgium
☐ Denmark
France
Germany
Greece
Hungary

## Contact details

## **Study institution contact**

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Study contact

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## **Primary lead investigator**

David Price

**Primary lead investigator** 

# Study timelines

Date when funding contract was signed

Planned: 01/04/2018

Actual: 30/04/2018

#### Study start date

Planned: 01/05/2019

Actual: 01/05/2019

#### Data analysis start date

Planned: 15/07/2019

#### Date of interim report, if expected

Planned: 01/10/2019

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

Planned: 29/02/2020

## Sources of funding

- Other
- Pharmaceutical company and other private sector

## More details on funding

AstraZeneca, OPC Global

## 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:

Non-interventional study

#### Scope of the study:

Assessment of risk minimisation measure implementation or effectiveness Disease epidemiology

#### Main study objective:

To assess the degree of overlap across commonly used asthma biomarkers of Type 2 inflammation (IgE, serum eosinophils and FeNO) among a diverse international cohort of severe asthma patients. To characterise and compare severe asthma patients positive for different combinations of asthma biomarkers as continuous and dichotomous variables.

## Study Design

### Non-interventional study design

Cross-sectional

## Study drug and medical condition

#### Medical condition to be studied

**Asthma** 

# Population studied

#### Age groups

Adults (18 to < 46 years)

Adults (46 to < 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

#### **Estimated number of subjects**

6275

## Study design details

#### Data analysis plan

Patients will be classified according to each of 3 biomarkers: IgE, blood eosinophils andFeNO. Univariate distributions for demographics and clinical characteristics will be described for each of the biomarker groups. Categorical variables will be compared using Chi-squared statistics with p-values and presented as mean ± standard deviation. Continuous variables will be compared between biomarker groups via the independent samples t-test with p-values. Data reduction methods will be used to validate the clusters according to biomarker group using biomarkers as continuous variables (IgE, FeNO and serum eosinophils) to identify unique clusters in the ISAR cohort according to biomarker group status. Cluster analysis will then be used to group patients and the baseline characteristics of each group will be described.

## Data management

## Data sources

Data source(s) International Severe Asthma Registry	
international Severe Astrina Registry	
Data sources (types)	
Disease registry	
Use of a Common Data Mo	idal (CDM)
Ose of a Common Data Mo	der (CDM)
CDM mapping	
No	
Data quality specifications	
Data quality specifications	
Check conformance	
Unknown	
Check completeness	
Unknown	
Check stability	
Unknown	

## **Check logical consistency**

Unknown

# Data characterisation

## **Data characterisation conducted**

No