

# COMPARABILITY OF POPULATION DEFINITIONS WITHIN & BETWEEN GLOBAL DATABASES – DEVELOPING TOOLS FOR OBSERVATIONAL RESEARCH (ACO Population Definitions)

**First published:** 15/07/2016

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

Study

Finalised

## Administrative details

### EU PAS number

EUPAS13959

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### Study ID

31039

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### DARWIN EU® study

No

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### Study countries

 Korea, Democratic People's Republic of

 Netherlands

 Poland

 Spain

 United Kingdom

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## **Study description**

This initial phase—the focus of this study—intends to compare prevalence and agreement rates for the different ACO definitions between different national and international databases. As such, simple ACO definitions will be used to ensure they can be operationalized across a number of databases. As each database used will be specific to a patient population and (in most cases) to one country of origin, use of multiple databases affords a unique opportunity to examine the sensitivity of findings to how populations were included in different databases. Future phases of the REG ACO Working Group’s research programme will go on to characterize the different ACO populations from a clinical perspective (cross sectionally and historically) and to explore potential differential treatment outcomes associated with the different definitions. It is expected to be considerable variation in characterization approaches in the follow-on clinical characterisation and outcome evaluation phases (owing to differences in available variables and the requirement to use a range of proxy measures in order to optimise approaches within each database). As such, this work will be treated as a separate second study phase

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## **Study status**

Finalised

# 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**


University of Groningen Netherlands, University Hospital Vall d'Hebron Spain, Adelphi Real World UK, Primary Care Majorca Department Spain, OPCRD UK


## Networks


### Respiratory Effectiveness Group (REG)


 Belgium

 Denmark

 France

 Germany

 Greece

 Hungary



Italy



Netherlands



Spain



Sweden



United Kingdom

**First published:** 07/07/2021

**Last updated:** 04/06/2024

Network

ENCePP partner

## Contact details

### Study institution contact

Jerry Krishnan [enquiries@regresearchnetwork.org](mailto:enquiries@regresearchnetwork.org)

Study contact

[enquiries@regresearchnetwork.org](mailto:enquiries@regresearchnetwork.org)

### Primary lead investigator

Jerry Krishnan

Primary lead investigator

## Study timelines

### Date when funding contract was signed

Planned: 31/08/2016

Actual: 31/08/2016

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**Study start date**

Planned: 31/10/2016

Actual: 31/10/2016

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**Date of final study report**

Planned: 31/08/2017

Actual: 31/08/2018

## Sources of funding

- Other

## More details on funding

Respiratory Effectiveness Group

## 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

**Data collection methods:**

Secondary use of data

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**Main study objective:**

To inform standardised methods for future ACO observational research, the study aims to: test various smoking-related ACO population definitions (based on previous evidence), evaluating their respective prevalence and agreement (i) within and (ii) between a number of national and international research quality databases

## Study Design

**Non-interventional study design**

Other

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**Non-interventional study design, other**

Observational, historical database study

## Study drug and medical condition

## **Medical condition to be studied**

Chronic obstructive pulmonary disease

Asthma

Asthma-chronic obstructive pulmonary disease overlap syndrome

## **Population studied**

### **Short description of the study population**

Chronic obstructive pulmonary disease, Asthma, and Asthma-chronic obstructive pulmonary disease overlap syndrome patients

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### **Age groups**

- Children (2 to < 12 years)
  - Adolescents (12 to < 18 years)
  - 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)
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### **Estimated number of subjects**

50000

## **Study design details**

### **Outcomes**

The primary outcomes of the study are the prevalence of subpopulations B and C, relative to A within each of the parent population series (COPD, ACOS,

Asthma, Control) and the agreement within each database between the most selective subpopulations' definitions within each parent series (i.e. subpopulation C) and between different databases

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### **Data analysis plan**

Evaluation of:1. Outcome 1 (total number of patients) will require absolute count of patient numbers.2. Outcome 2 (population prevalence) will require evaluation of the percent prevalence within different Parent Series.3. Outcomes 3 & 4 (agreement across different population definitions: 1C vs 2C vs 3C vs 4C) will use the kappa statistic (k) or suitable alternatives (e.g. Chi-squared)

## Documents

### **Study publications**

[Krishnan JA, Nibber A, Chisholm A, Price D, Bateman ED, Bjermer L, van Boven JF...](#)

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## 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)**

The Information System for Research in Primary Care (SIDIAP)  
Optimum Patient Care Research Database

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**Data sources (types)**

[Administrative healthcare records \(e.g., claims\)](#)  
[Electronic healthcare records \(EHR\)](#)

## Use of a Common Data Model (CDM)

**CDM mapping**

No

## Data quality specifications

**Check conformance**

Unknown

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**Check completeness**

Unknown

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**Check stability**

Unknown

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**Check logical consistency**

Unknown

## Data characterisation

## **Data characterisation conducted**

Unknown