

# Multi-component assessment systems and predicting future risk in chronic obstructive pulmonary disease

**First published:** 10/06/2014

**Last updated:** 14/08/2014

Study

Finalised

## Administrative details

### EU PAS number

EUPAS6749

### Study ID

7250

### DARWIN EU® study

No

### Study countries

- Netherlands
- Sweden
- United Kingdom

## Study description

A study to evaluate the Dyspnoea, Obstruction, Smoking, Exacerbation (DOSE) and the Age, Dyspnoea, Obstruction (ADO) indices and GOLD categories as measures of current health status and future outcomes in COPD patients using observational cohort studies comprising 5116 primary care COPD patients across three databases from UK, Sweden and Holland.

## Study status

Finalised

# Research institutions and networks

## Institutions

### [International Primary Care Respiratory Group \(IPCRG\)](#)

United Kingdom

**First published:** 10/06/2014

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[Institution](#)

[Not-for-profit](#)

### [Leiden University Medical Centre \(LUMC\)](#)

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

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

[Institution](#)

Uppsala University

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

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

Institution

Peninsula College of Medicine and Dentistry,  
Plymouth University United Kingdom, Department  
of Public Health and Primary Care, Leiden  
University Medical Center Netherlands,  
Department of Public Health and Caring Sciences,  
Family Medicine and Preventive Medicine, Uppsala  
University Sweden

## 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**

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**Study contact**

[rupert.jones@plymouth.ac.uk](mailto:rupert.jones@plymouth.ac.uk)

### **Primary lead investigator**

Rupert Jones

**Primary lead investigator**

## Study timelines

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

Planned: 24/02/2012

Actual: 24/02/2012

**Study start date**

Planned: 30/03/2012

Actual: 30/03/2012

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**Date of final study report**

Planned: 10/06/2014

Actual: 10/06/2014

## Sources of funding

- Non-for-profit organisation (e.g. charity)
- Other

## More details on funding

IPCRG, REG

## Regulatory

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

No

## 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:**

Effectiveness study (incl. comparative)

**Data collection methods:**

Secondary use of data

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**Main study objective:**

To evaluate the Dyspnoea, Obstruction, Smoking, Exacerbation (DOSE) and the Age, Dyspnoea, Obstruction (ADO) indices and GOLD categories as measures of current health status and future outcomes in COPD patients.

## Study Design

**Non-interventional study design**

Cohort

## Study drug and medical condition

**Medical condition to be studied**

Chronic obstructive pulmonary disease

## Population studied

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

Primary care COPD patients

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## **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)

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## **Special population of interest**

Other

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

Chronic obstructive pulmonary disease (COPD) patients

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## **Estimated number of subjects**

5116

## **Study design details**

### **Outcomes**

DOSE and ADO associations with health status measured by the CCQ and SGRQ, Current symptoms, exacerbations and hospital admissions, Future events of exacerbations, admissions and mortality, Distribution of GOLD categories according to different methods of calculation

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### **Data analysis plan**

Spearmans rank correlation was used to assess the association between each of the DOSE and ADO indices and the health status measures and markers of healthcare consumption in each of the 3 datasets. Logistic regression analysis was used to calculate the unadjusted odds ratio for 1 or more hospital admissions and for 1 or more exacerbations in the subsequent year for a unit increase in the DOSE or ADO indices. ROC analyses and AUC were produced for DOSE and ADO indices in relation to the prediction of future risk of exacerbations and admissions. Negative binomial regression models and Cox regression were also used.

## 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), other**

Optimum Patient Care (OPCRD) United Kingdom, PRAXIS-study Sweden, Bocholtz study Netherlands

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### **Data sources (types)**

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

Other

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**Data sources (types), other**

Prospective patient-based data collection

## 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

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## Data characterisation

**Data characterisation conducted**

No