

# Predicting outcome using systemic markers in severe exacerbations of chronic obstructive pulmonary disease

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<b>Registration date</b> 16/04/2008	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 23/03/2018	<b>Condition category</b> Respiratory	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

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## Additional identifiers

### Protocol serial number

N/A

## Study information

Scientific Title

# Predicting Outcome using systemic Markers In Severe Exacerbations of Chronic Obstructive Pulmonary Disease (COPD): the PROMISE-COPD cohort study

## Acronym

PROMISE-COPD

## Study objectives

Circulating biomarkers might be able to predict exacerbations during the stable state of the disease and the clinical outcome of the exacerbations in patients with chronic obstructive pulmonary disease (COPD). Thus, we aim to:

1. Describe the four-week course of clinical, laboratorial, and lung function parameters during exacerbations of COPD as compared to the stable state of the disease
2. Explore predictors that might identify recurrence and poor outcome in the stable state and during exacerbations
3. Analyse the potential of circulating biomarkers for the diagnosis and prognosis of COPD in the stable state and during exacerbations, including a correlation with the number of hospitalisations and death of any cause
4. Assess whether easily to determine circulating biomarkers are capable to replace the widely accepted BODE (body mass index, airflow obstruction, dyspnea, and exercise capacity) index as predictor of long term prognosis in COPD
5. Analyse the impact of viral and bacterial infections as well as pulmonary embolism on in-hospital and long-term clinical outcomes

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Ethics Committee of Basel (Ethikkommission Beider Basel) (Switzerland), 24/09/2007, ref: EKBB 295/07

## Study design

International multicentre longitudinal closed observational cohort study

## Primary study design

Observational

## Study type(s)

Diagnostic

## Health condition(s) or problem(s) studied

Chronic obstructive pulmonary disease (COPD)

## Interventions

COPD will be diagnosed according to the GOLD guidelines (forced expiratory volume in one second [FEV1]/forced vital capacity [FVC] ratio below 70% and an absolute reduction of FEV1 below 80% of the predicted value). Acute exacerbation of COPD will be defined as "an event in the natural course of the disease characterised by a change in the patient's baseline dyspnea, cough, and/or sputum that is beyond normal day-to-day variations, is acute in onset, and may warrant a change in regular medication in a patient with underlying COPD".

## Intervention Type

Other

## **Phase**

Not Applicable

## **Primary outcome(s)**

Clinical end-points include the following (duration of follow-up: two years):

1. Number of exacerbations, including exacerbations requiring hospitalisation and exacerbations managed by the primary care physicians
2. Number of deaths of any cause
3. Number of respiratory-related deaths
4. Time to next exacerbation, time to next exacerbation requiring hospitalisation and time to death
5. Duration of hospitalisation
6. Admission and length of stay in intensive care unit
7. Need for intubation or non-invasive ventilation
8. Need for oral steroids and antibiotics
9. Lung function and 6-minute walk test changes

## **Key secondary outcome(s)**

1. Quality of life assessed by Saint Georges Respiratory Questionnaire and the 36-item Short Form Health Survey (SF-36) at every scheduled visits during the follow-up phase (every 6 months) and 4 weeks after an exacerbation
2. Dyspnea and respiratory symptoms as assessed by the Modified Medical Research Council (MMRC) scale and Lower Respiratory Tract Illness - Visual Analogue Scale (LRTI-VAS) at every scheduled visits during the follow-up phase (every 6 months) and 4 weeks after an exacerbation

Added 27/10/2010:

3. Measurement of daily physical activity as assessed by a triaxial accelerometer at stable phase of the disease and exacerbation

## **Completion date**

31/12/2012

# **Eligibility**

## **Key inclusion criteria**

1. Age above 40 years, both men and women
2. Smoking history greater than or equal to 10 pack years
3. Moderate to very severe COPD (Global Initiative for chronic Obstructive Lung Disease [GOLD] II to IV)
4. Currently stable disease (at least 4 weeks after resolution of the last exacerbation)
5. Willingness to participate in a longitudinal, cohort study
6. Willingness of the family physician to have the patient included in a cohort study
7. Written informed consent

## **Participant type(s)**

Patient

## **Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

All

**Key exclusion criteria**

1. Rapid fatal disease
2. Pulmonary condition other than COPD as the main respiratory disease, e.g. bronchiectasis, asthma or pulmonary fibrosis
3. Immunosuppression including human immunodeficiency virus (HIV), organ transplantation or chronic steroid use (more than 10 mg prednisolone-equivalent per day)
4. Patients unable and unwilling to give written informed consent
5. Musculoskeletal process preventing ambulation

**Date of first enrolment**

01/01/2008

**Date of final enrolment**

31/12/2012

**Locations****Countries of recruitment**

Belgium

Germany

Greece

Italy

Netherlands

Serbia

Spain

Switzerland

**Study participating centre**

University Hospital Basel

Basel

Switzerland

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# Sponsor information

## Organisation

University Hospital Basel (Switzerland)

## ROR

<https://ror.org/04k51q396>

# Funder(s)

## Funder type

Hospital/treatment centre

## Funder Name

University Hospital Basel (Switzerland)

# Results and Publications

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	18/12/2015		Yes	No
<a href="#">Results article</a>	results	21/03/2018		Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes