

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

Submission date 15/02/2008	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 16/04/2008	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 23/03/2018	Condition category Respiratory	☐ Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

Contact name
Prof Daiana Stolz

Contact details
Clinic of Pulmonary Medicine and Respiratory Cell Research
University Hospital Basel
Petersgraben 4
Basel
Switzerland
4031
+41 (0)61 265 5184
dstolz@uhbs.ch

Additional identifiers

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

Primary study design

Observational

Study design

International multicentre longitudinal closed observational cohort study

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

4031

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?
Results article	results	18/12/2015		Yes	No
Results article	results	21/03/2018		Yes	No