

European Respiratory Society Annual Congress 2012

Abstract Number: 7254

Publication Number: P450

Abstract Group: 6.1. Epidemiology

Keyword 1: COPD - diagnosis **Keyword 2:** Epidemiology **Keyword 3:** Comorbidities

Title: Prevalence and under-diagnosis of airflow limitation and other lung function abnormalities in patients with ischaemic heart disease: an interim analysis of the ALICE study

Dr. Joan 583 Soriano jbsoriano@caubet-cimera.es MD ¹, Dr. Nicolas 584 Roche nicolas.roche@htd.aphp.fr MD ³, Dr. John 589 Cockcroft cockcroftjr@cardiff.ac.uk MD ⁴, Dr. Klaus 588 Rabe k.f.rabe@kh-grosshansdorf.de MD ⁹, Dr. Mark 592 Kearney M.T.Kearney@leeds.ac.uk MD ⁷, Dr. Guy 952 Brusselle guy.brusselle@ugent.be MD ⁵, Dr. Frits 587 Franssen fritsfranssen@ciro-horn.nl MD ², Dr. Francisco 590 Garcia Rio fgr01m@gmail.com MD ¹¹, Dr. Bo 591 Lundbäck bo.lundback@gu.se MD ⁸, Dr. Helen 594 Marsden Helen.C.Marsden@gsk.com ¹⁰, Dr. Hana 595 Muellerova Hana.X.Muellerova@gsk.com ¹⁰, Dr. Paul 596 Bloomfield Paul.H.Bloomfield@gsk.com MD ¹⁰, Gilbert 597 Nadeau Gilbert.A.Nadeau@gsk.com ¹⁰, Mathieu 598 Vasselle Mathieu.X.Vasselle@gsk.com ¹², Zoe 599 Adams Zoe.x.Adams@gsk.com ¹⁰, Angus 600 Henderson Angus.J.Henderson@gsk.com ¹⁰ and Dr. Leo 593 Fabbri leonardo.fabbri@unimore.it MD ⁶. ¹ Fundación Caubet-CIMERA Illes Balears, CIMERA, Bunyola, Spain ; ² Program Development Centre, CIRO, Horn, Netherlands ; ³ Respiratory and Intensive Care Medicine, Hôtel-Dieu Hospital, University Paris Descartes, Paris, France, F-75004 ; ⁴ Wales Heart Research Institute, Cardiff University School of Medicine, Cardiff, United Kingdom ; ⁵ Department of Respiratory Medicine, Ghent University Hospital, Ghent, Belgium, B-9000 ; ⁶ Department of Oncology Haematology and Respiratory Diseases, Section of Respiratory Diseases, University of Modena & Reggio Emilia, Modena, Italy, 41124 ; ⁷ Multidisciplinary Cardiovascular Research Centre, University of Leeds Medical School, United Kingdom ; ⁸ Dept of Internal Medicine, Sahlgrenska Academy, University of Gothenburg, Sweden ; ⁹ Department of Medicine, University Kiel, Germany ; ¹⁰ Respiratory Centre of Excellence, GlaxoSmithKline, Uxbridge, United Kingdom ; ¹¹ Hospital La Paz, IdiPAZ, Madrid, Spain and ¹² Excellence Medicale, GSK France, Marly Le Roi, France .

Body: Background: Although ischaemic heart disease (IHD) and chronic pulmonary diseases, eg COPD, share similar risk factors, the prevalence and rate of diagnosis of airflow limitation (AL) compatible with COPD, and other lung function abnormalities, in patients with IHD are largely unknown. Methods: In a cross-sectional study conducted in 15 sites across nine European countries (Belgium, France, Germany, Greece, Ireland, Italy, the Netherlands, Spain, and Sweden), we investigated the prevalence of airflow limitation compatible with COPD (defined as post-bronchodilator (BD) FEV₁/FVC <0.70) and other lung function abnormalities in outpatients with documented IHD who were ≥40 years, and current or former smokers. Each participant completed a core questionnaire and performed full pre- and post-BD spirometry. Quality control of spirometry readings was performed by a centralized system. Results: Up to April 2012, we studied 1803 evaluable IHD patients, 86.0% male, mean±SD age of 65.0±9.8 years. The prevalence of AL

was 30.6% (95% C.I. 28.5%-32.8%, n=552) and, from 547 with available data, only 29.4% (n=161) of these had a prior diagnosis of COPD. In addition, we found a restrictive lung disease prevalence of 11.0% (defined as pre BD FVC<80% predicted and post BD FEV₁/FVC≥70% predicted) in a subset of 1685 patients with available data. Conclusions: Airflow limitation, compatible with COPD, and spirometry results suggestive of restrictive lung disease are frequent in individuals with IHD and are largely under-diagnosed, which has implications for the treatment and prognosis of both respiratory and cardiovascular diseases.