## **European Respiratory Society Annual Congress 2012**

**Abstract Number:** 5178

**Publication Number:** P999

**Abstract Group:** 6.1. Epidemiology

Keyword 1: COPD - exacerbations Keyword 2: Comorbidities Keyword 3: Epidemiology

**Title:** Factors related to discontinuous use of inhaled drugs in COPD patients: A population-based cohort study in Lazio (Italy)

Dr. Lisa 20329 Bauleo bauleo@asplazio.it <sup>1</sup>, Dr. Nera 20331 Agabiti agabiti@asplazio.it MD <sup>1</sup>, Dr. Ursula 20332 Kirchmayer kirchmayer@asplazio.it <sup>1</sup>, Dr. Riccardo 20333 Pistelli riccardopistelli@h-columbus.it MD <sup>2</sup>, Dr. Vittoria 20334 Colamesta vittoria81@hotmail.it MD <sup>2</sup>, Dr. Silvia 20335 Cascini cascini@asplazio.it <sup>1</sup> and Dr. Marina 20337 Davoli davoli@asplazio.it MD <sup>1</sup>. <sup>1</sup> Department of Epidemiology, Lazio Regional Health Service, Rome, Italy, 00198 and <sup>2</sup> Department of Respiratory Physiology, Catholic University, Rome, Italy.

**Body:** Inhaled therapy is essential to control symptoms in COPD, but information on real-life clinical practice is limited. We measured treatment discontinuity and its predictors among COPD patients. A cohort of residents in Lazio discharged after COPD exacerbation in 2006-7 was enrolled. The two-years follow-up was segmented in six months time-windows, in order to dynamically evaluate prescriptions of long-acting beta-agonists (LABA), tiotropium and inhaled corticosteroids (ICS). Patients were classified in two groups: "regularly treated" (at least one prescription of LABA and/or tiotropium in each time-window); "not regularly treated" (defined as those never treated or with late onset of treatment or with any interruption of treatment for at least six months). Multivariate logistic regression was performed. A total of 7982 patients were included, 55% males, mean age (SD) 74 (10) years. Only 33% patients were regularly treated during follow-up. Old people (OR=1.01), females (OR=1.7) and those with comorbidities (diabetes OR=1.4, heart failure OR=1.3, psychiatric OR=2.1, nephropathy OR=1.6, cerebrovascular OR=1.4, obesity OR=1.4) were more likely to have discontinuity. Risk of discontinuity was lower among more severe patients (respiratory failure OR=0.7). Large heterogeneity in discontinuity was observed across areas of residence. This observational study evidences that discontinuity of COPD therapy is influenced not only by demographic factors and COPD severity, but also by the presence of comorbidities. This information may be an important input for clinicians caring COPD patients. Partially funded by National Medicines Agency; Prot. FARM8ZBT93.