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

**Abstract Number: 3668** 

**Publication Number: P267** 

Abstract Group: 1.3. Imaging

Keyword 1: COPD - diagnosis Keyword 2: Imaging Keyword 3: Systemic effect

**Title:** Epicardial fat mass is increased in patients with COPD: A non-invasive cardiovascular marker in a high risk population

Dr. Jorge 21337 Zagaceta Guevara zagaz505@yahoo.es MD ¹, Dr. Gorka 21338 Bastarrika Aleman bastarrika@unav.es MD ¹, Dr. Javier 21339 Zulueta Frances jzulueta@unav.es MD ¹, Dr. Aránzazu 21340 Campo Ezquibela acampoe@unav.es MD ¹, Dr. Ana Belen 21341 Alcaide Ocaña abalcaide@unav.es MD ¹, Dr. María 21357 Sánchez-Carpintero Abad msabad@unav.es MD ¹, Dr. Pablo 21358 Sánchez Salcedo pssalcedo@unav.es MD ¹, Dr. Juan 21361 Bertó Botella jberto@unav.es MD ¹, Dr. Pilar 21363 Rivera privera@unav.es MD ¹, Dr. Luis 21364 Seijo Maceiras Iseijo@hotmail.com MD ¹ and Dr. Juan Pablo 22674 De Torres Tajes jupa65@hotmail.com MD ¹. ¹ Pulmonary Clinic, University Clinic of Navarra, Pamplona, Navarra, Spain, 31008 .

**Body:** Background: Epicardial Fat Mass is associated with an increased cardiovascular events in the general population. This marker has not been explored in patients with COPD. Hypotesis: COPD patients have an increased Epicardial Fat Mass volume (EFMV). Methods and Results: This cross-sectional observational study evaluated 120 participants (53 smokers without COPD and 67 with COPD). They underwent a clinical and radiological evaluation (Chest CT measuring cm3). Patients' general characteristics and differences between groups are presented in Table 1.

Variables with statistically significant differences were included in the multivariate analysis to determine those that independently predict EFMV.

Male gender, hypertension, pack years history and COPD diagnosis were predictors of EFMV. Conclusions: COPD is an independent risk factor for an increased EFMV. Further studies should assess the impact of this finding as a non invasive marker of cardiovascular events in this high risk population.