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**Title:** Cardiovascular comorbidity and mortality in patients with chronic obstructive pulmonary disease

Dr. Plamen 14418 Pavlov plpavlov@abv.bg MD <sup>1</sup>, Prof. Dr Yavor 14419 Ivanov plpavlov@abv.bg MD <sup>1</sup>, Dr. Pavlina 14420 Glogovska plpavlov@abv.bg MD <sup>1</sup>, Dr. Tsania 14421 Popova plpavlov@abv.bg MD <sup>2</sup>, Dr. Elena 14422 Borisova plpavlov@abv.bg MD <sup>1</sup> and Dr. Venzislav 14468 Nozharov plpavlov@abv.bg MD <sup>1</sup>. <sup>1</sup> Pulmonology and Phthisiatry Clinic, UMHAT "Dr.Georgi Stranski" Pleven, Pleven, Bulgaria, 5800 and <sup>2</sup> Internal Diseases Clinic, UMHAT "Dr.Georgi Stranski" Pleven, Pleven, Bulgaria, 5800 .

**Body:** Aim.To determine the prevalence of cardiovascular diseases (CVDs) and cardiovascular mortality in patients with chronic obstructive pulmonary disease (COPD). Material.COPD patients (n=3571) were checked if they had CVDs (CAD – coronary artery disease, HF - heart failure, AH - arterial hypertension, CCP – chronic cor pulmonale, CVD - cerebrovascular disease) and mortality. Of these, 2642 (74%) were male and 929 (26%) women, aged 65.4 (SD ± 9.7), and FEV1 = 49.8 (SD ± 18.9)% pred.The risk for CVDs (OR - Add Ratio) was compared with that of 150 controls. Results. Among COPD patients 84.5% had CVDs: 59% (GOLD I), 74% (GOLD II), 86% (GOLD III) and 99% (GOLD IV) (r=0.35, p=0.0001); OR=1.96. Correlation was found between age and prevalence of CVDs: 48.7% (40-49yrs), 71.6% (50-59yrs), 85% (60-69yrs) and 96.9% (> 70yrs) (r=0.38, p=0.0001). Patients with COPD had a higher prevalence of CVDs and cardiovascular risk: CAD (66%; OR = 1.8), HF (74%; OR = 1.9), AH (45%; OR = 1.2), CCP (46%; OR = 3.8) and CVD (33.3%; OR = 1.6). In 33% of COPD deaths cardiovascular causes of death were found: 36.7% myocardial infarction, 33.3% pulmonary embolism, 12% HF and 18% of CVD. Conclusion.The study found an increased risk and mortality from cardiovascular diseases, especially in adult patients with severe COPD.