were no cannabis-only smokers and only 6/62 (9.7%) were never-smokers (tobacco&cannabis).

56/62 (90%) abnormal HRCTs were in ex/current tobacco smokers and 27/62 (44%) were in current tobacco&cannabis smokers. There was a higher prevalence of pneumothoraces and bullae with a cannabis and tobacco smoking history than for tobacco alone but this was not statistically significant different (chi-squared STATA) (Table1).

Conclusion More than half of tobacco smokers with abnormal HRCTs also had a history of previous and current cannabis smoking. Despite these findings 25% of patients with abnormal HRCTs had no documentation regarding cannabis smoking. This population of ≤ 50 years olds with abnormal HRCTs did not smoke cannabis without tobacco. While not statistically significant, bullae and pneumothoraces were more frequently observed in patients who smoked tobacco with cannabis compared to tobacco alone. Larger studies are needed to further understand the additive effect of cannabis smoking to tobacco-induced lung damage. These studies will require systematic recording of both tobacco and cannabis smoking histories.

Abstract P127 Table 1. The association between specific CT findings and tobacco smoking history (without a cannabis smoking history), compared to cannabis and tobacco smoking history.

	Emphysema (%)	Previous/current pneumothorax (%)	Bullae (%)	>1 abnormality (%)
Previous/current cannabis smoking history and previous/current tobacco smoking history (n = 43)	29/43 (67.4)	19/43 (44.1)	25/43 (58.1)	24/43 (55.8)
Previous/current tobacco smoking history with no previous/current cannabis smoking history (n = 13)	10/13 (76.9)	4/13 (30.8)	5/13 (38.5)	5/13 (38.5)

COPD exacerbations: the heart of the matter

P128 CARDIOVASCULAR EFFECTS OF STATIN THERAPY ON ARTERIAL STIFFNESS IN PATIENTS WITH COPD: A DOUBLE BLIND RANDOMISED CONTROLLED TRIAL

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10.1136/thoraxjnl-2013-204457.278

Background As cardiovascular disease is a comorbidity and major cause of death in patients with COPD, primary preventative strategies are required. Arterial stiffness, as measured by aortic pulse wave velocity (PWV) is increased in patients with COPD¹, and is an independent predictor of cardiovascular risk², which is modifiable over the short term. We hypothesised that

aortic PWV, would be reduced by six weeks treatment of simvastatin 20mg once daily compared to placebo in selected patients with COPD without concurrent heart disease, diabetes or hypercholesterolemia.

Methods Clinically stable patients with confirmed COPD were recruited and randomised to either simvastatin 20mg od (active) or placebo in double blinded fashion. Aortic PWV, blood pressure, spirometry, six minute walking distance, and lipids were measured pre- and post- 6 weeks treatment. Primary analysis compared PWV between groups. A predefined subgroup analysis compared those with a baseline PWV ≥ 10 m/s.

Results The patients were well matched for age, sex, smoking and lung function; active, n = 33 and placebo, n = 37. The recruitment target was met. Compliance was high with the active group achieving significantly lower total cholesterol - between arms mean (95% CI): -1.1 (-1.3, -0.8)mmol/L, p < 0.001. There was no significant change in aortic PWV after treatment in the active compared to placebo group: -0.7 (-1.8, 0.5)m/s, p = 0.24. In the subgroup with aortic PWV ≥ 10 m/s, n = 22, aortic PWV improved in the active arm compared to placebo: -2.8 (-5.2, -0.3)m/s, p = 0.03. This latter difference remained statistically significant after adjusting for age and sex. Blood pressure, lung function and six minute walking distance did not change.

Conclusions In this pilot study, despite a significant reduction in total cholesterol there was no improvement in aortic PWV in patients with COPD taking simvastatin 20mg compared to placebo over 6 weeks. The positive findings in the subgroup with a higher baseline aortic PWV warrants further studies in high risk patients to confirm the impact of statin use on the cardiovascular outcome of COPD.

Trial reference: NCT01151306

Supported by NIHR RfPB grant

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P129 SKELETAL MUSCLE WEAKNESS, NOT ARTERIAL STIFFNESS, DIFFERS ACCORDING TO GOLD GROUP IN COPD

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10.1136/thoraxjnl-2013-204457.279

Introduction In the GOLD 2011 COPD classification, patients in Group D are considered to be at highest risk of mortality, due to airflow limitation and exacerbations and also to be most symptomatic. Skeletal muscle weakness and cardiovascular disease are associated with mortality in patients with COPD and elderly people *per se*. We hypothesised that GOLD D patients would have more severe extra-pulmonary manifestations of COPD than A-C.

Objectives To measure skeletal muscle weakness and arterial stiffness (an independent predictor of cardiovascular risk) in the ERICA (Evaluating the Role of Inflammation in Chronic Airways