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Title: Cardiovascular disease and the risk of lung cancer, the HUNT study

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Body: Background: Inflammation is involved in both lung cancer (LC) and cardio-vascular disease (CVD). Aims: We hypothesize that CVD is an independent risk factor for LC. Methods: Data from the Nord-Trøndelag Health Study linked to the Norwegian Cancer and Death Cause Registry, analyses stratified by smoking. 97,087 persons (1,634,967 person years), never smokers n=38,656, former smokers n=20,914, current smokers n=26,894, follow-up 15 years. The proportional hazard model (HR CI 95%) for CVD on LC incidence, adjusted for age, sex, BMI, burden of smoking and chronic cough. Results: LC = 1,080, cases (1.1%), CVD = 5,981 (6.9%). CVD vs LC in former smokers = HR 1.74 (CI95% 1.11-2.73), current smokers = HR 1.38 (CI95% 1.04-1.83), never smokers = HR 0.87 (CI95% 0.34-2.23).

Table 1

Former smokers	HR	CI	Current smokers	HR	CI
CVD	1,74	1,11-2,73		1,38	1,04-1,83
BMI Below 18.5	2,60	0,36-19,01		1,36	0,67-2,75
18.5-25	1			1	
25-30	0,81	0,53-1,25		0,98	0,81-1,17
Above 30	0,80	0,43-1,48		0,89	0,65-1,23
Sex (M vs F)	1,43	0,82-2,49		1,09	0,90-1,31
Chronic cough with phlegm (Y vs No)	0,88	0,32-2,42		1,55	1,22-1,97
Heavy vs light smoker	3,56	2,33-5,45	Heavy vs light smoker	2,11	1,75-2,54

Association CVD and lung cancer, former and current smokers. HR, hazard ratio

Conclusion: CVD was an independent risk factor for lung cancer in former and current smokers. CVD may

be a novel risk factor for lung cancer screening.