

***CHRNA3* genotype, nicotine dependence, lung function and disease in the
general population**

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Supplementary material

Legends

Webfigure 1: Risk of COPD by *CHRNA3* genotype adjusted for age and gender in never-smokers in the Copenhagen General Population Study. Dot symbolises the point estimate of the odds ratio and line symbolises the 95% confidence interval of the estimate. P-trend were calculated with genotypes coded 0, 1, and 2. Individuals aged < 40 years with self-reported asthma (n=274) were excluded from analyses of COPD. LLN=lower limit of normal. GOLD 1-4 was $FEV_1/FVC < 0.7$. GOLD 2-4 was $FEV_1/FVC < 0.7$ and $FEV_1\% < 80\%$ predicted. GOLD 3-4 was $FEV_1/FVC < 0.7$ and $FEV_1\% < 50\%$ predicted.

Webtable 1. Baseline characteristics of 57,657 participants by *CHRNA3* (rs1051730) genotype in the Danish general population, The Copenhagen General Population Study

Characteristics	<i>CHRNA3</i>			P-trend
	Non-carriers (CC)	Heterozygotes (CT)	Homozygotes (TT)	
Participants, no. (%)	25,846 (45)	25,605 (44)	6206 (11)	
Women, no. (%)	14,295 (55)	14,167 (55)	3423 (55)	0.89
Age, years	57 (47-66)	57 (47-66)	56 (46-66)	0.31

Values are median (interquartile range) for age and frequencies (%) for gender. P-trend were calculated with genotypes coded 0, 1 and 2.

Webtable 2. Participation by smoking status for genotype and spirometry

	Participants with genotype	Participants with spirometry	Participants with genotype and spirometry
All	57,657	54,358	54,289
Eversmokers	34,592	32,552	32,513

Neversmokers	21,475	20,302	20,274
No smoking information	1590	1505	1502

Webtable 3. Residuals of lung function in ever smokers after linear regression with cumulative tobacco consumption.

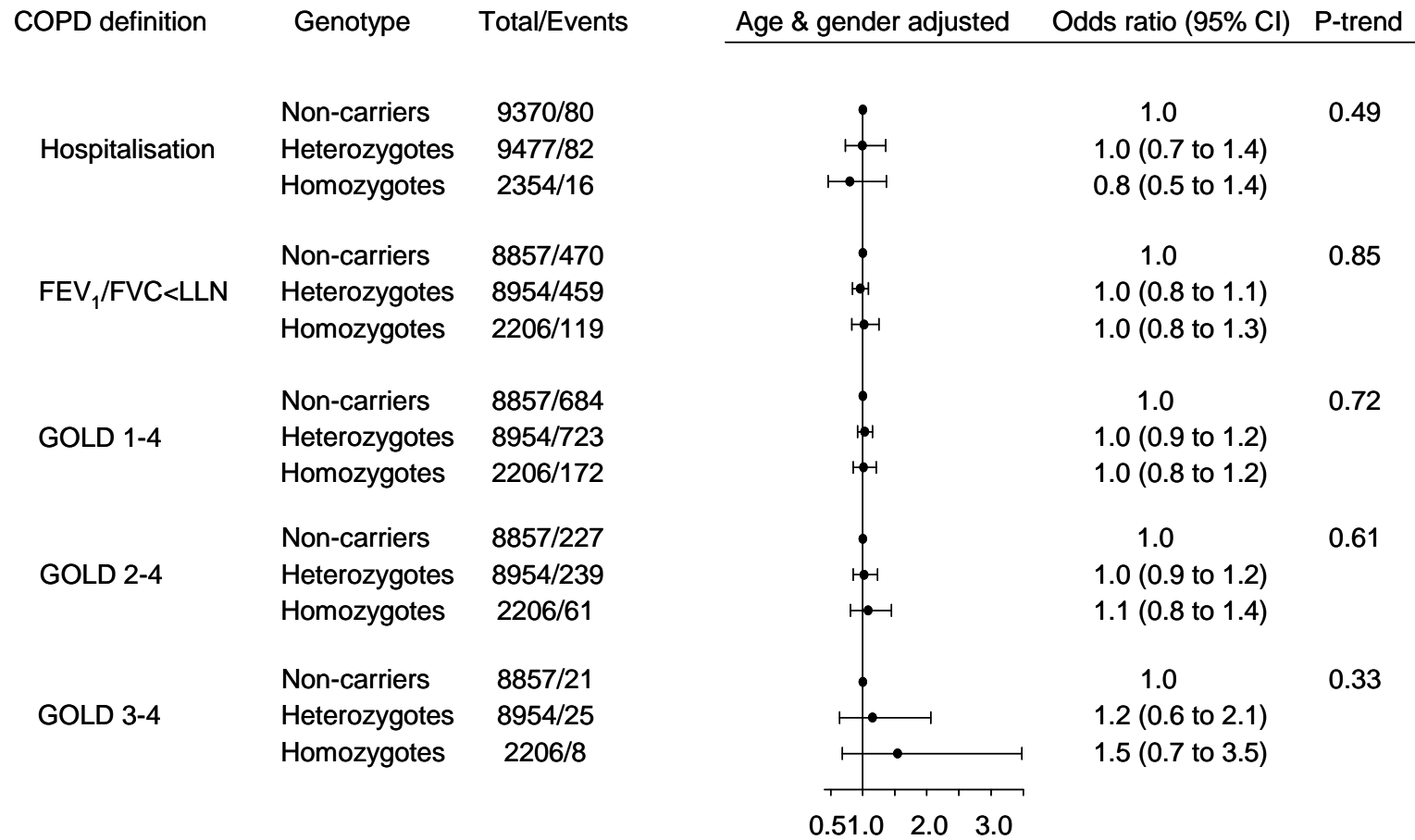
	Eversmokers (n=32,513)			P-trend
	Non-carriers (CC)=14,754	Heterozygotes (CT)=14,337	Homozygotes (TT)=3422	
FEV ₁ % predicted	1.4 (-9.0 to 11.1)	0.7 (-9.8 to 10.6)	0.3 (-10.7 to 10.4)	<0.001
FVC % predicted	0.4 (-9.4 to 10.0)	0.1 (-9.7 to 9.5)	0.3 (-10.3 to 9.4)	0.003
FEV ₁ /FVC	1.1 (-3.9 to 5.2)	1.0 (-4.0 to 5.2)	0.7 (-4.4 to 5.1)	0.03

Data are median (interquartile range). P-trend were calculated with genotypes coded 0, 1 and 2.

Webtable 4. Individuals with COPD according to age

Age (years)	Hospitalisation		Spirometry				
	Total (no.)	COPD (no.)	Total (no.)	FEV ₁ /FVC<LLN (no.)	GOLD 1-4 (no.)	GOLD 2-4 (no.)	GOLD 3-4 (no.)
20-29	1332	2	1283	50	22	7	0
30-39	4190	16	4061	212	144	47	4
40-49	14,014	149	13,355	882	880	363	31
50-59	14,813	436	13,993	1182	1553	706	116
60-69	13,314	757	12,427	1463	2253	1120	221
70-79	7422	714	6817	1187	1993	1141	223
80 and above	2069	192	1887	344	659	330	72
Total	57,154	2266	53,823	5320	7504	3714	667

The total number for participants does not add up to 57,657 because individuals aged <40 years with self-reported asthma were excluded from analyses of COPD. Furthermore, we lacked spirometry information on some individuals. LLN=lower limit of normal. GOLD 1-4 was FEV₁/FVC<0.7. GOLD 2-4 was FEV₁/FVC<0.7 and FEV₁% predicted<80%. GOLD 3-4 was FEV₁/FVC<0.7 and FEV₁% predicted<50%.



Webfigure 1