Supplementary material

HAND GRIP STRENGTH IS ASSOCIATED WITH FEV1 AMONG SUBJECTS WITH COPD

- REPORT FROM A POPULATION BASED COHORT STUDY

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Table S1. Comparing hand grip strength among Non-COPD and subjects with COPD GOLD 1, GOLD 2 and GOLD 3-4, respectively

	Non-COPD	GOLD 1	p-value[a]	GOLD 2	p-value[a]	GOLD 3-4	p-value[a]
	Mean (SD) HGS	Mean (SD) HGS		Mean (SD) HGS		Mean (SD) HGS	
	n=255	n=102		n=86		n=7	
Women	26.9 (6.7)	25.9 (6.0)	0.174	26.0 (5.9)	0.244	21.4 (2.7)	**0.001**
	n=315	n=92		n=132		n=22	
Men	46.3 (10.5)	47.7 (9.1)	0.241	45.4 (10.3)	0.422	41.5 (9.7)	**0.038**

[a]GOLD grade compared with non-COPD
HGS=Hand Grip Strength
P-values<0.05 in bold

Table S2. Comparing hand grip strength among normal lung function[1] (NFL) and subjects with COPD GOLD 1, GOLD 2 and GOLD 3-4, respectively

	NLF[a]	GOLD 1	p-value[b]	GOLD 2	p-value[b]	GOLD 3-4	p-value[b]
	Mean (SD) HGS	Mean (SD) HGS		Mean (SD) HGS		Mean (SD) HGS	
	n=221	n=102		n=86		n=7	
Women	27.0 (6.8)	25.9 (6.0)	0.154	26.0 (5.9)	0.217	21.4 (2.7)	**0.001**
	n=250	n=92		n=132		n=22	
Men	47.4 (10.3)	47.7 (9.1)	0.785	45.4 (10.3)	0.077	41.5 (9.7)	**0.010**

[a] Normal Lung Function (subjects with restrictive pattern excluded from the non-COPD group)
[b]GOLD grade compared with NLF
HGS=Hand Grip Strength
P-values<0.05 in bold

Table S3. Adjusted analyses of the association between hand grip strength and GOLD grades compared to non-COPD

	Women			Men			Total study population		
	B	95% CI	p-value	B	95% CI	p-value	B	95% CI	p-value
Non-COPD	Ref.			Ref.			Ref.		
GOLD 1	-0.94	(-2.17 – 0.30)	0.138	0.49	(-1.38 – 2.36)	0.609	-0.12	(-1.29 – 1.05)	0.837
GOLD 2	-1.11	(-2.45 – 0.23)	0.104	-1.33	(-3.00 – 0.35)	0.120	-1.07	(-2.22 – 0.07)	0.067
GOLD 3-4	-4.90	(-8.81 – -0.99)	**0.014**	-3.19	(-6.75 – 0.37)	0.079	-4.18	(-6.89 – -1.48)	**0.002**

B=Beta coefficient from multiple linear regression models with HGS as dependent variable, adjusted for age, height, heart disease, smoking habits and among all subjects also adjusted for sex
95% CI= 95 % confidence interval, p-values<0.05 in bold