

**Supplementary Table 2:** Baseline characteristics of patients using complete cases and imputed data set.

	Missing data (n)	Complete cases	Multiple imputation
	N=114		
Clinical data			
Age (years)	0	70 (8)	70 (8)
Sex: male	0	94%	94%
Smoking status: active	0	30%	30%
Charlson index $\geq$ 2	0	55%	55%
Work status	6		
Working		7%	9%
Social status	9		
Non-manual work		18%	19%
Manual work		82%	81%
Marital status	0		
Single		7%	7%
Married or living together		82%	82%
Widow		7%	7%
Separated or divorced		4%	4%
Participation in pulmonary rehabilitation	0	4%	4%
$\geq$ 1 COPD admission in the previous 12 months	0	11%	11%
Lung function			
Spirometric severity (ATS/ERS I/II/III/IV)	0	6%/59%/27%/8%	6%/59%/27%/8%

FEV <sub>1</sub> (ml)	0	1620 (525)	1620 (525)
FEV <sub>1</sub> (% predicted)	0	54 (16)	54 (16)
FVC (ml)	0	2942 (651)	2942 (651)
FVC (% predicted)	0	72 (15)	72 (15)
DL <sub>co</sub> (ml/min/mmHg)	14	17 (5)	16 (6)
DL <sub>co</sub> (% predicted)	14	66 (21)	66 (24)
<b>Exercise capacity and muscle force</b>			
6MWD (m)	5	415 (95)	411 (98)
HGF (N)	0	295 (87)	295 (87)
MIP (cm H <sub>2</sub> O)	17	-74 (26)	-73 (28)
MEP (cm H <sub>2</sub> O)	17	109 (36)	106 (38)
<b>Symptoms and quality of life</b>			
mMRC (0/1/2/3/4)	0	21/35/23/6/15	21/35/23/6/15
SGRQ total score (points)	0	29 (17)	29 (17)
SGRQ symptoms (points)	0	26 (19)	26 (19)
SGRQ activity (points)	0	42 (24)	42 (24)
SGRQ impacts (points)	0	22 (16)	22 (16)
<b>Body composition</b>			
BMI (kg.m <sup>-2</sup> )	0	29 (5)	29 (5)
FFM (kg)	7	55 (10)	55 (10)
FFMi (kg.m <sup>-2</sup> )	7	20 (3)	20 (3)
<b>Physical activity and sedentary time</b>			
Step count (n.day <sup>-1</sup> )	0	7362 (4589)	7362 (4589)
MVPA (min.day <sup>-1</sup> )	0	52 [22-91]	52 [22-91]
Sedentary time (min.day <sup>-1</sup> )	0	624 (118)	624 (118)
<b>Annual change in outcomes of COPD progression</b>			
FEV <sub>1</sub> (ml.year <sup>-1</sup> )	0	-24.2 (112)	-24.2 (112)

FVC (ml.year <sup>-1</sup> )	0	-30.2 (189)	-30.2 (189)
DL <sub>co</sub> (ml/min/mmHg.year <sup>-1</sup> )	32	-1.20 (1.92)	-1.33 (3)
6MWD (m.year <sup>-1</sup> )	15	-8.0 (23)	-7.7 (27)
HGF (N.year <sup>-1</sup> )	0	-7.8 (23)	-7.8 (23)
MIP (cm H <sub>2</sub> O.year <sup>-1</sup> )	21	0.82 (8.8)	1.44 (10)
MEP (cm H <sub>2</sub> O.year <sup>-1</sup> )	22	-1.19 (13)	-0.87 (15)
SGRQ total score (points.year <sup>-1</sup> )	2	1.50 (5.0)	1.33 (5)
SGRQ symptoms (points.year <sup>-1</sup> )	2	0.66 (7.4)	0.58 (8)
SGRQ activity (points.year <sup>-1</sup> )	2	2.56 (6.8)	2.30 (7)
SGRQ impacts (points.year <sup>-1</sup> )	2	1.16 (5.8)	1.00 (6)
BMI (kg.m <sup>-2</sup> .year <sup>-1</sup> )	0	-0.13 (0.72)	-0.13 (0.72)
FFM (kg.year <sup>-1</sup> )	10	-0.40 (1.8)	-0.48 (2)
FFMi (kg.m <sup>-2</sup> .year <sup>-1</sup> )	10	-0.11 (0.7)	-0.14 (0.8)

FEV<sub>1</sub> = forced expiratory volume in 1 second, FVC = forced vital capacity, DL<sub>co</sub> = diffusion capacity of the lung carbon monoxide, 6MWD= 6-min walk distance, HGF = hand grip force, MIP = maximal inspiratory pressure, MEP = maximal expiratory pressure, mMRC = modified Medical Research Council dyspnea scale, SGRQ = Saint George's respiratory questionnaire, BMI = body mass index, FFM = fat free mass, FFMi = fat free mass index, MVPA = time in moderate-to-vigorous physical activity. Lung function results were expressed as a % of reference values of a Mediterranean population (Roca, 1986 and Roca, 1990).

Data are presented as %, mean (SD) or median [25<sup>th</sup>-75<sup>th</sup> percentile]