Supplementary Materials: Real-Life Characteristics of Patients with COPD and Discordant CAT-mMRC Questionnaires

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Table S1: Clinical and functional features of the overall cohort according to GOLD classes.

	GOLD A	GOLD B	GOLD E	GOLD D	P value
Patients (%, n)	24.8 (55)	34.2 (76)	28.4 (63)	12.6 (28)	
Age (Years, Median, IQR)	68 [61-74]	72 [63.2-79]	73 [64-78]	69.5 [63.7-77.2]	0.2
Gender (Male/Female, %)	78.2/21.8	80.3/19.7	73/27	92.9/7.1	0.19
BMI (Days, Median, IQR)	26 [23-29]	29 [25-33.7]	28 [24.9-33]	25 [22.5-27.3]	**0.002**
Smoke habits (%, n)					0.71
Current smoker	43.6 (24)	44.7 (34)	34.9 (22)	28.6 (8)	
Former smoker	47.3 (26)	48.7 (37)	55.6 (35)	64.3 (18)	
No smoker	9.1 (5)	6.6 (5)	8.1 (18)	7.1 (2)	
Atopy (%, n)	20 (11)	18.4 (14)	15.9 (10)	21.4 (6)	0.91
Familiarity (%, n)	23.6 (13)	11.8 (9)	33.3 (21)	10.7 (3)	**0.008**
Work exposure (%, n)	32.7 (18)	38.2 (29)	39.7 (25)	3.6 (1)	**0.004**
Comorbidities (%, n)					
Arterial hypertension	70.9 (39)	64.5 (49)	71.4 (45)	50 (14)	0.19
Ischemic cardiomyopathy	12.7 (7)	31.6 (24)	9.5 (6)	25 (7)	**0.005**
Atrial fibrillation	9.1 (5)	15.8 (12)	20.6 (13)	17.9 (5)	0.38
Pulmonary hypertension	1.8 (1)	2.6 (2)	1.6 (1)	3.6 (1)	0.93
Asthma	0	5.3 (4)	4.8 (3)	0	0.23
GERD	12.7 (7)	10.5 (8)	11.1 (7)	3.6 (1)	0.62
OSAS	9.1 (5)	21.1 (16)	25.4 (16)	7.1 (2)	**0.04**
Cancer	23.6 (13)	15.8 (12)	19 (12)	21.6 (6)	0.72
CKD	5.5 (3)	11.8 (9)	4.8 (3)	3.6 (1)	0.28
Type2 Diabetes	20 (11)	19.7 (15)	23.8 (15)	28.6 (8)	0.76
Dyslipidemia	41.8 (23)	32.9 (25)	31.7 (20)	25 (7)	0.44
Thyroid disease	18.2 (10)	18.4 (14)	11.1 (7)	14.3 (4)	0.63
Depression	7.3 (4)	7.9 (6)	9.5 (6)	3.6 (1)	0.8
Total comorbidities (Median, IQR)	3 [1-4]	3 [1.2-5]	3 [2-4]	2 [1-3.7]	0.55
Symptoms at first visit (%, n)					
Dyspnea	81.8 (45)	91.6 (73)	95.2 (60)	82.1 (23)	**0.009**

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Table S1: Clinical and functional features of the overall cohort according to GOLD classes. (Continued)

	GOLD A	GOLD B	GOLD E	GOLD D	P value
Cough	52.7 (29)	52.6 (40)	63.5 (40)	50 (14)	0.49
Phlegm	50.9 (28)	51.3 (39)	57.1 (36)	46.4 (13)	0.79
Wheezing	1.8 (1)	0	3.2 (2)	0	0.38
Weight loss	0	3.9 (3)	0	0	0.12
CAT (Median, IQR)	6 [4-8]	16 [13-23]	15 [12-21]	11 [8.2-15.7]	**<0.0001**
mMRC (Median, IQR)	1 [1-1]	3 [2-3]	2 [2-3]	1 [1-2]	**<0.0001**
Exacerbations (%, n)	16.4 (9)	26.3 (20)	96.8 (61)	17.9 (5)	**<0.0001**
Exacerbations with hospital admission (%, n)	0	0	28.6 (18)	0	**<0.0001**
Lung function					
FEV1 (%, Mean, SD)	75.5 ± 17.9	61.3 ± 18.1	58.1 ± 19.9	67.9 ± 18	**<0.0001**
FVC (%, Mean, SD)	94 ± 17.9	77.9 ± 20.9	78.3 ± 17.5	88.2 ± 18	**<0.0001**
FEV1/FVC (%, Mean, SD)	60.2 ± 6.9	58.4 ± 12.7	53.4 ± 12.7	55.3 ± 12	**<0.0001**
RV/TLC (%, Median, IQR)	122 [112-133]	135 [116-156.8]	134 [125-156]	127 [110-145.5]	**0.0001**
Treatments (%,n)					
LAMA	34.5 (19)	7.9 (6)	7.9 (5)	14.3 (4)	**<0.0001**
LAMA + LABA	32.7 (18)	28.9(22)	12.7 (8)	31.1 (9)	**0.04**
LAMA + LABA + ICS	18.2 (10)	44.7 (34)	73 (46)	42.9 (12)	**<0.0001**
OCS	1.8 (1)	2.6 (2)	6.3 (4)	3.6 (1)	0.56
LTOT	1.8 (1)	34.2 (26)	33.3 (21)	10.7 (3)	**<0.0001**
N-Acetylcysteine	5.5 (3)	9.2 (7)	22.2 (14)	3.6 (1)	0.01

Table S2. Radiological features of the overall cohort according to GOLD classes.

	GOLD A	GOLD B	GOLD E	GOLD D	P value
HRCT assessed (%, n)	63.6 (35)	64 (48)	85.7 (54)	78.6 (22)	**0.01**
HRCT findings (%, n)					
Emphysema	36.4 (20)	40 (30)	55.6 (35)	39.3 (11)	0.14
GGO	3.6 (2)	8 (6)	14.3 (9)	10.7 (3)	0.24
Consolidations	3.6 (2)	4 (3)	12.7 (8)	21.4 (6)	**0.01**
Septal thickening	14.5 (8)	13.3 (10)	14.3 (9)	10.7 (3)	0.97
Lung scars	21.8 (12)	18.7 (14)	28.6 (18)	7.1 (2)	0.13
Bronchiectasis	12.7 (7)	13.3 (10)	23.8 (15)	14.3 (4)	0.3
Mosaic attenuation	1.8 (1)	4 (3)	3.2 (2)	3.6 (1)	0.92
Multiple nodules	10.9 (6)	10.7 (8)	20.6 (13)	32.1 (9)	**0.03**
Solitary nodules	14.5 (8)	16 (12)	17.5 (11)	14.3 (4)	0.97
Pleural effusion	0	1.3 (1)	3.2 (2)	0	0.44

Table S3. Comparison of arterial blood gas analysis and 6 minute walking test according to GOLD classes.

	GOLD A	GOLD B	GOLD E	GOLD D	P value
Arterial blood gas analysis					
pH (median, IQR)	7.43 [7.42-7.44]	7.43 [7.41-7.45]	7.43 [7.42-7.45]	7.43 [7.41-7.44]	0.84
PaO_2 (mmHg, mean, SD)	86 ± 9.3	78.3 ± 11.9	74.8 ± 12.4	80.4 ± 11.8	<**0.0001**
$PaCO_2$ (mmHg, median, IQR)	39 [36-41.6]	40 [37-43.2]	41.5 [38-45]	39 [37.5-43]	0.12
HCO_3^- (mEq/L, median, IQR)	25.7 [24.2-27.9]	26.8 [24.5-28.1]	27.4 [25.5-29.2]	26 [25-27.5]	0.08
6MWT					
Pre-test Borg scale (median, IQR)	0 [0-0]	0.25 [0-1.25]	0 [0-1]	0 [0-1.75]	0.07
Post-test Borg scale (median, IQR)	2 [1-3]	4 [2-7]	4 [2-5]	3 [2-4.75]	**0.005**
Pre-test SpO_2 (%, median, IQR)	97 [95-97]	95.5 [94-97]	97 [95-97]	97 [95.2-98]	**0.04**
Post-test SpO_2 (%, median, IQR)	93 [95-92]	92 [89-95]	92.5 [89.2-95]	94 [91-95]	0.3
Pre-test HR (bpm, mean, SD)	77.5 ± 12.9	81.5 ± 13	80.1 ± 16.4	75.4 ± 19.1	0.51
Post-test HR (bpm, mean, SD)	93.8 ± 18.1	96.4 ± 20.4	95 ± 24.3	93.3 ± 17.8	0.95
6MWD (m, median, IQR)	460 [391.5-501]	310 [212-440]	350 [166-450]	445 [352.5-485]	<**0.0001**