Classification of COPD as ABCD according to GOLD 2011 and 2017 versions in COPD patients at University Medical Center in Ho Chi Minh City, Vietnam

Vinh Nguyen-Nhu[1,2], Lam-Phuoc Nguyen[1], Sy Duong-Quy[3,4], Pham Le An[1,5], Tri Bui-Minh[5]

[1]Faculty of Medicine, University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, Vietnam
[2]Department of Respiratory Functional Exploration, University Medical Center, Ho Chi Minh City, Vietnam
[3]Bio-Medical Research Centre, Lam Dong Medical College, Da Lat, Vietnam;
[4]Penn State Medical College, Hershey Medical Center, Hershey PA, USA
[5]Grant Innovation Center, University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, Vietnam

Corresponding Author: Tri Bui-Minh, Grant Innovation Center, University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, Vietnam. E-mail: buiminhtri17041992@gmail.com

pagepress

Supplementary Table 1. Comparison of patients in different GOLD stages.

Subjects	Total	GOLD 1 n = 36	GOLD 2 n = 194	GOLD 3 n = 190	GOLD 4 n = 37	p-value
Age group, n (%)						<0.001
40-49	28 (6.1%)	5 (13.9%)	7 (3.61%)	13 (6.84%)	3 (8.11%)	
50-59	102 (22.3%)	6 (16.7%)	38 (19.6%)	44 (23.2%)	14 (37.8%)	
60-69	167 (36.5%)	7 (19.4%)	66 (34.0%)	76 (40.0%)	18 (48.6%)	
>= 70	160 (35.0%)	18 (50.0%)	83 (42.8%)	57 (30.0%)	2 (5.41%)	

Supplementary Table 2. Comparison of patients between low-risk group (A-B) and high-risk group (C-D) according to GOLD 2017 criteria.

Subjects	Low-risk group n=184	High-risk group n=273	p-value
Age (years), mean ± SD	65.3 ± 10.7	65.3 ± 9.84	0.981
Age group, n (%)			0.063
40-49	13 (7.07%)	15 (5.49%)	
50-59	48 (26.1%)	54 (19.8%)	
60-69	54 (29.3%)	113 (41.4%)	
>=70	69 (37.5%)	91 (33.3%)	
Male, n(%)	173 (94.0%)	260 (95.2%)	0.567
BMI°	21.1 (4.62)	21.0 (5.22)	0.442
BMI classification, n(%)			0.683
Underweight	42 (22.8%)	67 (24.5%)	
Normale range	86 (46.7%)	121 (44.3%)	
Overweight	27 (14.7%)	49 (17.9%)	
Obese	29 (15.8%)	36 (13.2%)	
Dyspnoea, n (%)	138 (75.0%)	232 (85.0%)	0.011
Cough, n (%)	143 (77.7%)	235 (86.1%)	0.024
Sputum, n (%)	126 (68.5%)	226 (82.8%)	0.001
Wheezing, n (%)	115 (62.5%)	219 (80.2%)	<0.001
FVC°	73.0 (22.3)	67.0 (24.0)	<0.001
FEV1°	56.0 (23.0)	45.0 (20.0)	<0.001
FEV1FVC°	56.0 (11.0)	52.0 (12.0)	<0.001
GOLD_therapy, n(%)			<0.001
LABA	70 (38.0%)	10 (3.66%)	
LABA + ICS	29 (15.8%)	47 (17.2%)	
LAMA	12 (6.52%)	11 (4.03%)	
LAMA + LABA	57 (31.0%)	105 (38.5%)	
LAMA + LABA + ICS	7 (3.80%)	97 (35.5%)	
SABA/ SABA + SAMA	9 (4.89%)	3 (1.10%)	

°Non-normal distribution data were expressed as medians (interquartile range).

Supplementary Table 3. Percentage of reclassified group in some studies.

Country	Year of research	Sample size	%C to %A (% change)	%D to %B (% change)	References
China	2019	1278	2.2% - 1.2% (1%)	70.7% - 48.4% (22.3%)	[9]
China	2017	1532	26.8% - 12% (14.9%)	43% - 25.2% (17.8%)	[7]
Korea	2018	1880	6.6% - 2.2% (4.4%)	38.1% - 14.4% (22.4%)	[12]
Taiwan	2018	1053	6.7% - 1.9% (4.8%)	34.2% - 11.6% (22.6%)	[10]
Japan	2018	1168	9.9% - 2.7% (7.2%)	29.8% - 10% (19.8%)	[11]
Switzerland	2018	571	10.9% - 5.1% (5.8%)	36.1% - 19.3% (16.8%)	[15]
Our study	2021	457	13.1% - 12% (1.1%)	61.1% - 47.8% (13.3%)	