

Supplementary Materials

Suppl. Table 1. Baseline characteristics and main features during mid-term follow-up in recovered COVID-19 patients according to the presence of persistent dyspnea in outpatients.

Suppl. Table 2. Baseline characteristics and main features during mid-term follow-up in recovered COVID-19 patients according to the presence of persistent dyspnea among hospitalized patients.

Suppl. Figure 1. Schematic flowchart of the recovered COVID-19 patients included in the study, showing main findings.

Suppl. Table S1. Baseline characteristics and main features during mid-term Figure 19. patients according to the presence of persistent dyspnea in outpatients.

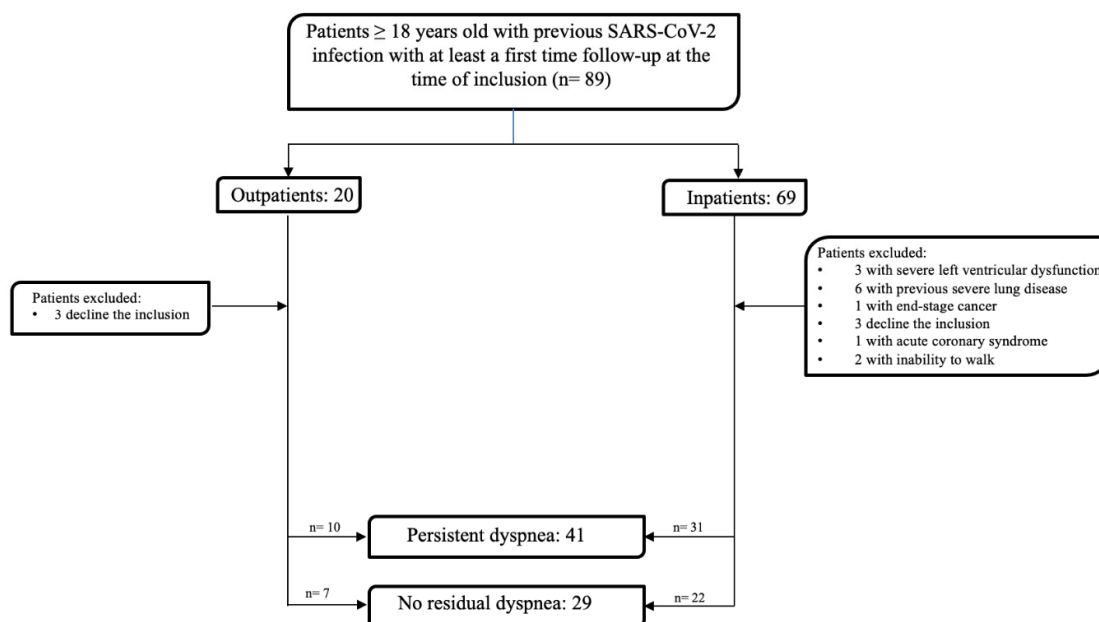
	Persistent Dyspnea* n = 10 (59)	No residual dyspnea n= 7 (40)	p-value
Demographics, comorbidities, and symptoms			
Female sex (%)	6 (85)	8 (80)	0.999
Age (years)	47.5 (38–57)	46 (36–51)	0.406
BSA (m ²)	1.86 (1.69–1.94)	1.69 (1.67–1.74)	0.187
Dyslipidemia (%)	1 (10)	1 (14)	0.999
Hypertension (%)	1 (10)	0	0.999
KCCQ summary score	48.8±7.1	89.4±6.5	<0.001
Fatigue (%)	5 (50)	0	0.044
Myalgia (%)	3 (30)	0	0.228
Neurological symptoms (%)	2 (28.6)	3 (30)	0.999
Resting echocardiographic findings			
LAVI (mL/m ²)	21.2 (20.5–26)	21.3 (17.7–23)	0.848
LVEF (%)	59 (58–70)	64 (62–68.5)	0.630
Mitral E/A ratio	1.2 (0.89–1.8)	1.4 (1.23–1.71)	0.368
Average E/e' ratio	6.2 (4.64–6.6)	6 (5.6–7.2)	0.832
TAPSE (mm)	20.5 (20–26)	22 (21–27)	0.237
Global longitudinal strain (%)	22 (22.5–21)	22.5 (23–21)	0.471
Cardiopulmonary exercise test			
Peak Vo ₂ (ml/min/kg)	20.3 (17.2–23.2)	29.5 (24.5–33.2)	0.023
% of predicted pVo ₂	82 (76–94)	103 (101–108)	0.011
Vo ₂ at AT ₁ (ml/min/kg)	15.8 (15.2–19.8)	22.2 (18.7–25.3)	0.142
Vo ₂ /HR	10 (8.4–9.2)	10.2 (9.8–11.8)	0.427
VE/Vco ₂ slope	27.6 (23.6–29.8)	29.7 (27.1–30.7)	0.672
PETCO ₂ at AT ₁ (mmHg)	40 (35–43)	38 (38–41)	0.948
% of predicted HR	85.6 (80.8–88.8)	95 (92.6–96)	0.017
Resting O ₂ saturation (%)	97 (98–99)	97 (97–98.5)	0.324
Peak O ₂ saturation (%)	98 (96–99)	97 (97–98)	0.387
Pulmonary lung function			
DLCO % of predicted	95 (87–99)	87.3 (81–91)	0.278
KCO % of predicted	104 (94–115)	89 (87–92)	0.06
FEV1 % of predicted	106 (103–117)	1109.8 (109–114)	0.514
FVC % of predicted	112.5 (106–118)	113.8 (111–118)	0.664
FEV1/FVC (%)	94 (86–105)	101.5 (90–106)	0.55
6-MWT distance (meters)	511 (470–542)	633.5 (615–655)	0.009

Values are median (IQR), mean ± SD, or n (%). **Bold** indicates significant differences (p<0.05). * Persistent dyspnea was defined as NYHA ≥ II.

Suppl. Table S2. Baseline characteristics and main features during mid-term Figure 19. patients according to the presence of dyspnea in hospitalized patients.

	Persistent Dyspnea* n = 31 (60)	No residual Dyspnea n= 22 (40)	p-value
Demographics, comorbidities, and symptoms			
Female sex (%)	22 (71)	9 (29)	0.029
Age (years)	59 (54–65)	61 (47–69)	0.342
BSA (m ²)	1.77 (1.68–1.94)	1.93 (1.77–2.03)	0.095
Dyslipidemia (%)	6 (19.4)	5 (22.7)	0.999
Hypertension (%)	11 (35.5)	6 (27.3)	0.528
KCCQ summary score	63.4±19.7	80.6±11.9	0.001
Fatigue (%)	12 (38.7)	3 (13.6)	0.046
Myalgia (%)	1 (3.2)	2 (9.1)	0.563
Neurological symptoms (%)	2 (6.5)	7 (31.8)	0.025
Resting echocardiographic findings			
LAVI (mL/m ²)	22.1 (17.2–31.3)	23.7 (19.4–26.1)	0.748
LVEF (%)	65 (60.5–67.5)	61.5 (59–71)	0.745
Mitral E/A ratio	0.85 (0.76–1.08)	0.83 (0.67–1.06)	0.843
Average E/e' ratio	7 (5.4–8.9)	6.2 (4.9–7.3)	0.195
TAPSE (mm)	23 (20–27)	23 (22–25)	0.813
Global longitudinal strain (%)	19.5 (21.7–18)	19.6 (21.6–19)	0.992
Cardiopulmonary exercise test			
Peak Vo ₂ (ml/min/kg)	17.5 (14–19.7)	21.6 (18.4–25)	0.001
% of predicted pVo ₂	77 (61–89.5)	95 (85–100)	0.002
Vo ₂ at AT ₁ (ml/min/kg)	12.8 (8.7–15.4)	17 (14.5–19.1)	0.004
Vo ₂ /HR	6.9 (8.4–11)	11.2 (8.4–13.4)	0.015
VE/Vco ₂ slope	33.1 (30.9–38.3)	28.8 (26.9–31.6)	0.004
PETCO ₂ at AT ₁ (mmHg)	34 (32–38)	38 (35–40)	0.010
% of predicted HR	87 (77.8–96.1)	95 (87–103)	0.02
Resting O ₂ saturation (%)	97 (95–97)	97 (96–98)	0.216
Peak O ₂ saturation (%)	97 (96–97)	97 (95–98)	0.870
Pulmonary lung function			
DLco % of predicted	84 (70–92.1)	91 (85–102)	0.018
Kco % of predicted	93 (83–104.3)	104.3 (91–112)	0.052
FEV1 % of predicted	113 (102–122)	115 (105–124)	0.690
FVC % of predicted	119 (102–134)	118 (104–121)	0.816
FEV1/FVC (%)	99 (87–107)	102 (98–104)	0.657
6-MWT distance (meters)	550 (465–600)	582.5 (537.5–640)	0.039

Values are median (IQR), mean ± SD, or n (%). **Bold** indicates significative differences (p<0.05). * Persistent dyspnea was defined as NYHA ≥ II.



Suppl. Figure S1. Schematic flowchart of the recovered COVID-19 patients included in the study, showing main findings.