

[Supplementary online material](#)

Clinical Assessment of Endothelial Function in Convalescent COVID-19 patients

Undergoing Multidisciplinary Pulmonary Rehabilitation.

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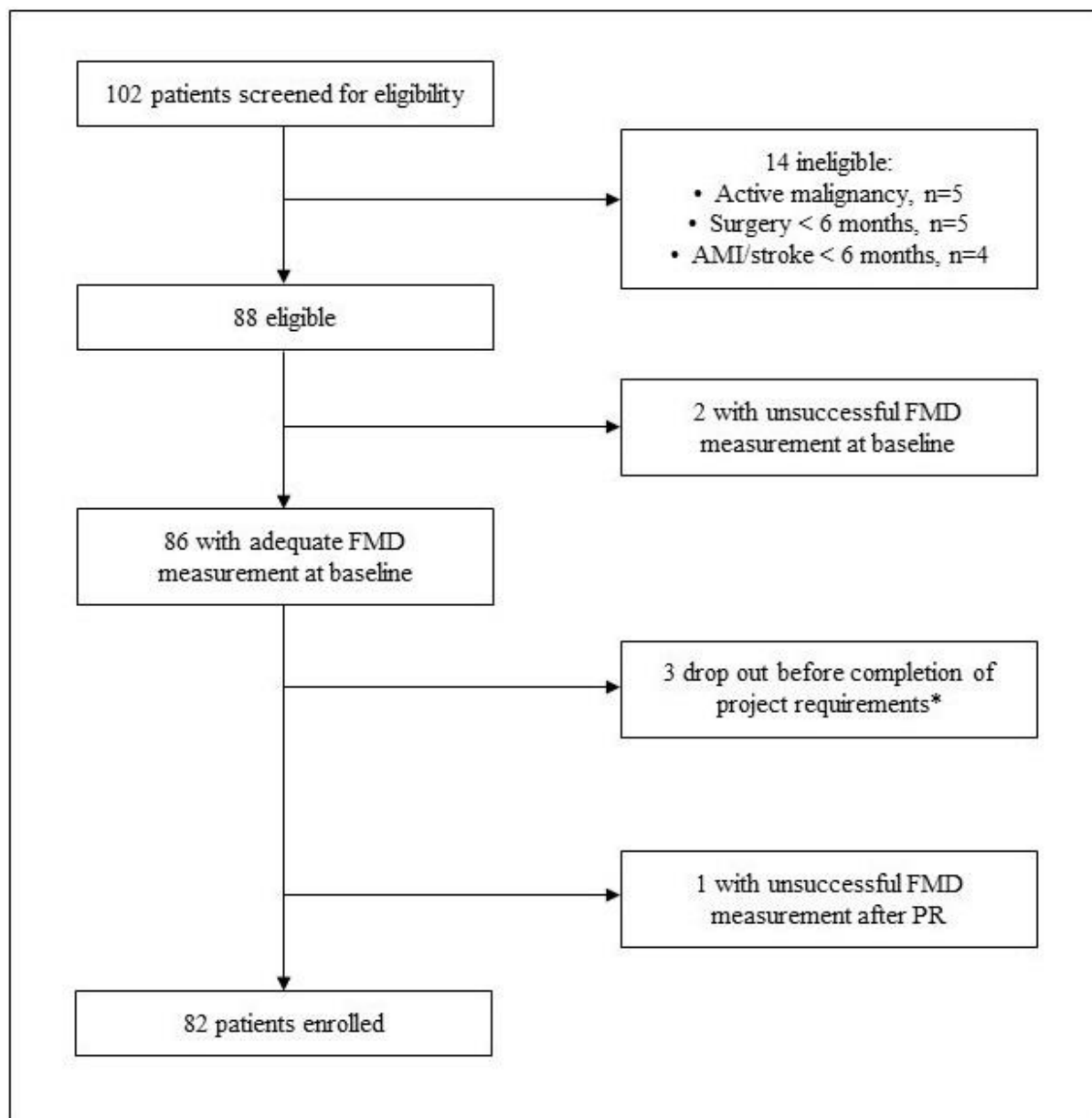
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Supplementary Figure S1. Flow chart of study participants.



AMI: acute myocardial infarction; FMD: flow-mediated dilation; PR; pulmonary rehabilitation.

*2 patients withdrawn informed consent for personal reasons, 1 patient transferred for clinical reasons.

Supplemental Table S1. Pharmacological therapies and oxygen supplementation in convalescent COVID-19 patients undergoing pulmonary rehabilitation.

	Baseline N=82	After PR N=82	P values
Statins (%)	29.3	-	-
Oral Antidiabetics (%)	15.8	-	-
Insulin (%)	12.2	-	-
Allopurinol (%)	4.9	-	-
β-blockers (%)	23.2	-	-
ACE-I (%)	25.6	-	-
CCB (%)	8.5	-	-
ARB (%)	8.5	-	-
Diuretics (%)	15.8	-	-
Antiplatelet Drugs (%)	22.0	-	-
Oral Anticoagulants (%)	17.1	-	-
NSAIDs (%)	23.2	-	-
Corticosteroids (%)	62.2	56.1	0.525
Antibiotics (%)	22.0	3.7	0.001
LMWH (%)	54.9	23.2	<0.001
O ₂ at Rest (%)	31.7	12.2	0.004
O ₂ Overnight (%)	26.8	12.2	0.029
O ₂ During Exercise (%)	30.5	12.2	0.007

N: number; **PR:** pulmonary rehabilitation; **ACE-I:** angiotensin-converting enzyme inhibitors; **CCB:** calcium channel blockers; **ARB:** angiotensin II receptor blockers; **NSAIDs:** non-steroidal anti-inflammatory drugs; **LMWH:** low molecular weight heparin; **O₂:** oxygen.

Supplemental Table S2. Impact of major clinical and demographic characteristics on changes in flow-mediated dilation (Δ FMD) in convalescent COVID-19 patients undergoing pulmonary rehabilitation.

Independent variable	Δ FMD (presence vs. absence)	P value
Elderly (≥ 65 years)	+2.20% \pm 2.76 vs. +1.49% \pm 1.91	0.174
Female gender	+1.84% \pm 3.63 vs. +1.74% \pm 1.99	0.899
Mechanical ventilation	+1.89% \pm 1.57 vs. +1.72% \pm 2.46	0.779
High-flow O ₂	+1.46% \pm 1.80 vs. +1.87% \pm 2.43	0.475
WHO class IV	+1.91% \pm 2.51 vs. +1.49% \pm 1.78	0.428
Hypertension	+1.65% \pm 2.68 vs. +1.86% \pm 1.89	0.682
Hypercholesterolemia	+2.54% \pm 2.19 vs. +1.71% \pm 2.29	0.434
Hypertriglyceridemia	+2.89% \pm 2.85 vs. +1.71% \pm 2.25	0.383
Diabetes mellitus	+2.29% \pm 2.44 vs. +1.65% \pm 2.25	0.335
Smoking	+1.47% \pm 2.11 vs. +1.79% \pm 2.31	0.710
Obesity	+1.24% \pm 1.66 vs. +1.99% \pm 2.48	0.171
Heart failure	+2.23% \pm 3.21 vs. +1.73% \pm 2.23	0.637
COPD	+1.33% \pm 2.51 vs. +1.79% \pm 2.27	0.634
History of malignancy	+0.77% \pm 1.77 vs. +1.82% \pm 2.30	0.321

WHO: world health organization; O₂: oxygen; COPD: chronic obstructive pulmonary disease.