

Supplementary Table 1 Baseline characteristics of the total population and according to MAFLD presence (Validation cohort)

	<i>All (n=692)</i>	<i>No MAFLD (n=588)</i>	<i>MAFLD (n=104)</i>	<i>P VALUE</i>
Demographic features				
Sex (% Male / Female)	(33.2/66.8)	(31.6/68.4.9)	(42.3/57.7)	0.049
Age	55±14	56±14	52±12	0.021
Comorbidities (n / %)				
Normal Weight	209 (30.2)	198 (33.3)	11 (10.6)	0.000
Overweight	229 (33.1)	196 (37.8)	33 (31.7)	
Obesity G1	179 (25.9)	143 (20.4)	36 (34.6)	
Obesity G2	65 (9.4)	44 (7.5)	21 (20.2)	
Obesity G3	10 (1.4)	7 (1.0)	3 (2.9)	
T2DM	249 (35.9)	211 (35.9)	38 (36.5)	0.936
Hypertension	258 (37.3)	223 (37.9)	35 (33.7)	0.826
Chronic Kidney disease	79 (11.4)	74 (12.5)	4 (3.8)	0.530
Pulmonary obstructive disease	54 (7.8)	47 (7.9)	7 (6.7)	0.840
VIH	19 (2.7)	17 (2.9)	2 (1.9)	0.569
Use of steroids	487 (70.3)	412 (70.1)	75 (72.1)	0.817
Biochemical values				
CRP (Ref. value: 0 - 1mg/dL)	137.1 (73.4-243.7)	136.9 (72.5-245.1)	143.5 (85.7-213.8)	0.933
Ferritin (Ref. value: 11 – 306.8ng/mL)	1033.1 (552.0- 1703.4)	975.7 (536.4- 1703.5)	1139.7 (644.3- 1697.2)	0.198
D-dimer (Ref. value: 0- 500ng/mL)	402.5 (257.0-709.8)	405.5 (257.0-707.7)	407.0 (245.0-759.5)	0.797
LDH (Ref. value: 120 - 246U/L)	652.4 (491.0-878.9)	651.2 (485.4-870.6)	694.2 (521.8-884.1)	0.282
Bilirubin (Ref. value: 0/3- 1mg/dL)	0.52 (0.39-0.80)	0.51 (0.38-0.78)	0.57 (0.42-0.84)	0.134
ALT (Ref. value: 7-52U/L)	34.8 (23.1-57.4)	34.3 (22.9-56.9)	38.4 (26.0-60.1)	0.113
AST (Ref. value: 13 - 39U/L)	41.5 (28.3-60.6)	41.1 (28.2-59.7)	44.9 (31.4-63.7)	0.108

Albumin (Ref. value: 3.5-5.7g/dL)	3.35±0.52	3.33±0.52	3.53±0.42	0.000
ALP (Ref. value: 34-104U/L)	94.3 (74.5-123.9)	97.2 (75.6-126)	88.2 (69.6-110.2)	0.015
Creatinine (Ref. value: 0.6-1.2mg/dL)	0.95 (0.75-1.23)	0.95 (0.75-1.23)	0.89 (0.73-1.22)	0.256
Leukocytes (Ref. value: 4-12X 10 ³ /uL)	9.1 (6.4-12.7)	9.3 (6.4-12.9)	8.9 (6.7-12.1)	0.581
Platelets (Ref. value: 150 - 450K/uL)	211 (163-276)	213 (165-278)	196.5 (150.7-259.8)	0.065
Treatment n(%)				
Antibiotics	621 (89.7)	527 (89.6)	94 (90.3)	0.895
Tocilizumab	91 (13.2)	78 (13.3)	13 (12.5)	0.832
Antimalarials	106 (15.3)	94 (16)	12 (11.5)	0.451

BMI, body mass index; T2DM, type 2 diabetes mellitus; CRP, c-reactive protein; LDH, lactate dehydrogenase;

CPK, creatine phosphokinase; ALT, alanine aminotransferase; AST, aspartate aminotransferase; ALP, alkaline phosphatase.

Supplementary Table 2. Characteristics and outcomes in patients with MAFLD according to the LFN-COVID-19 index (Validation cohort)

	<1.67 (n=53)	>1.67 (n=51)	p value
Demographic features			
Age (years)	51.8±11.2	52.7±10.1	0.695
Biochemical values			
CRP (ref: 0-1mg/dl)	111.0 (65.4-196.71)	169.8 (108.0-248.5)	0.023
Ferritin (ref: 11- 306.8ng/ml)	1138.5 (623.9-1619.0)	1143.5 (774.2-1963.2)	0.251
D-dimer (ref: 0-500ng/ml)	310 (212-549)	541.0 (295-1026)	0.004
LDH (ref: 120 - 246u/l)	532.1 (386.2-613.0)	884. (735.1-1157.5)	<0.001
Bilirubin (ref: mg/dl)	0.61 (0.47-0.82)	0.54 (0.40-0.85)	0.632
ALT (ref: 7-52u/l)	39.6 (26.3-63.2)	38.0 (25.7-47.0)	0.337
AST (ref:13-39u/l)	35.6 (24.9-54.7)	56.8 (40.3-82.3)	<0.001

Albumin (ref:3.5 -5.7g/dl)	3.7±0.4	3.4±0.4	0.001
ALP (ref: 34-104u/l)	87.9 (70.0-102.4)	90.6 (67.6-113.1)	0.738
Creatinine (ref: 0.6-1.2mg/dl)	0.87 (0.70-1.10)	0.98 (0.73-1.40)	0.066
Leukocytes (ref: 4- 12x 10 ³ /ul)	8.5 (6.1-11.70)	9.2 (7.0-12.3)	0.341
Platelets (ref: 150-450k/ul)	199 (159-277)	190 (136-253)	0.283
Other (n / %)			
Mechanical ventilation	21 (39.6)	31 (60.8)	0.030
Severe ARDS	18 (34.0)	30 (58.8)	0.010
Death	15 (28.3)	29 (56.9)	0.005

BMI, body mass index; NFS, NAFLD fibrosis score; APRI, AST to platelet ratio index; CRP, C-reactive protein; LDH, lactate dehydrogenase; CPK, creatine phosphokinase; ALT, alanine aminotransferase; AST, aspartate aminotransferase; ALP, alkaline phosphatase; COVID-19, coronavirus disease 2019; ICU, Intensive care unit.

Supplementary Table 3 Logistic regression analysis to evaluate the association between LFN-COVID-19 index and clinical outcomes (Validation cohort)

<i>Mechanical ventilation</i>				
	OR	IC 95%	Coefficiente B	P value
LFN-COVID-19 index	2.638	1.675 – 3.346	0.862	0.000
Sex	0.638	0.442 – 1.063	-0.449	0.037
Age	1.035	1.021 – 1.049	0.035	0.000
BMI	1.131	1.121 – 1.580	0.285	0.001
<i>Death</i>				
	OR	IC 95%	Coefficiente B	Valor p
LFN-COVID-19	2.867	1.663 – 4.514	1.357	0.000
Sex	0.726	0.489 – 1.078	-0.320	0.112
Age	1.054	1.038– 1.070	0.052	0.000
BMI	1.250	1.039 – 1.503	0.223	0.018

OR= odds ratio.