

Table S1. Correlation of EASIX with variables being assessed and characteristics of patients with high EASIX (≥ 2.36) and low EASIX (< 2.36). Parameters and quantitative variables are presented as median [interquartile range - IQR]; qualitative variables are presented as frequency/number.

Variable	EASIX <i>p</i> -value	High EASIX <i>n</i> = 111	Low EASIX <i>n</i> = 258	<i>p</i> -value
Male	<0.001	82 (73.9%)	159 (66.0%)	0.023
Age	0.125	68 [61–76]	68 [60–74]	0.639
Death	<0.001	95 (85.6%)	148 (57.4%)	<0.001
Concomitant diseases				
Cardiovascular diseases	<0.001	87 (78.4%)	163 (63.2%)	0.004
Hypertension	<0.001	82 (73.9%)	148 (%)	0.003
Atrial fibrillation	0.110	17 (15.3%)	30 (11.6%)	0.330
Ischemic heart disease	0.050	34 (30.6%)	52 (20.2%)	0.029
Pulmonary diseases	0.345	8 (7.2%)	28 (10.9%)	0.279
Asthma	0.894	5 (4.5%)	14 (5.4%)	0.713
COPD	0.951	3 (2.7%)	8 (3.1%)	0.837
Other	0.424	2 (1.8%)	6 (2.3%)	0.751
Diabetes	0.223	46 (41.4%)	88 (34.1%)	0.179
Malignant neoplasm	0.033	13 (11.7%)	44 (17.1%)	0.193
Chronic kidney disease	<0.001	25 (22.3%)	8 (3.1%)	<0.001
Obesity	0.925	31 (27.9%)	74 (28.7%)	0.883
SpO ₂ without oxygen supply	0.014	83 [70–90]	87 [82–92]	<0.001
Severity (according to WHO scale)				
1	0.027	1 (0.9%)	4 (1.6%)	0.076
2		27 (24.3%)	76 (29.5%)	
3		64 (57.7%)	157 (60.8%)	
4		19 (17.1%)	21 (8.1%)	
Duration of hospitalisation, days	0.019	12 [6–20]	18 [12–25]	<0.001
Duration of symptoms before hospital admission, days	0.549	6 [4–8]	7 [5–9]	0.181
Deterioration, days (from disease onset)	<0.001	7 [4–9]	8 [5–12]	0.002
ICU admission	0.026	80 (72.1%)	135 (52.3%)	0.001
ICU admission, days (from disease onset)	0.032	9 [7–16]	12 [8–17]	0.102
ICU admission, days (from hospitalisation onset)	0.042	3 [1–7]	4 [2–8]	0.062
ICU duration, days	<0.001	9 [6–17]	13 [8–20]	0.009
Non-rebreather mask 10-15l/min	0.764	104 (93.7%)	247 (95.7%)	0.403
Non-rebreather mask 10-15l/min duration, days	<0.001	1 [0–2]	2 [1–3]	<0.001
HFNO	0.622	72 (64.9%)	181 (70.2%)	0.315
HFNO duration, days	<0.001	2 [1–6]	5 [2–9]	<0.001
NIV	0.271	24 (21.8%)	45 (17.4%)	0.325
NIV duration, days	0.835	3 [1–5]	4 [1–7]	0.604
IMV	<0.001	82 (74.6%)	137 (53.1%)	<0.001
IMV duration, days	0.008	8 [5–16]	12 [7–19]	0.006

Lab test results				
CRP	0.001	143.2 [78.5–214.7]	112.3 [55.7–188.5]	0.012
Procalcitonin	<0.001	0.722 [0.283–2.89]	0.157 [0.084–0.474]	<0.001
Ferritin	<0.001	2137.8 [985.3–3608.3]	1037 [526.7–1611.6]	<0.001
LDH	<0.001	685 [530–897]	471 [376–592]	<0.001
White blood count	0.003	7.06 [5.13–9.55]	8.04 [5.81–10.78]	0.079
Neutrophils	0.011	5.6 [4.05–8]	6.6 [4.2–8.9]	0.147
Lymphocytes	0.021	0.8 [0.6–1.1]	0.9 [0.6–1.2]	0.067
Haemoglobin	0.326	13.3 [11.6–14.7]	13.4 [12.3–14.7]	0.608
Thrombocytes	<0.001	159 [128–196]	223 [170–297]	<0.001
D-dimer	0.030	2017 [1037–3326]	1264 [822–2424]	<0.001
INR	0.042	1.12 [1.04–1.3]	1.08 [1.01–1.16]	0.001
AST	<0.001	69.4 [46.6–105]	50 [36.2–67.8]	<0.001
ALT	0.146	42 [25.9–69]	38 [25–63.3]	0.313
Creatinine	<0.001	1.71 [1.28–2.4]	0.91 [0.76–1.13]	<0.001

Table S2. Correlation of mEASIX with the variables being assessed and characteristics of patients with high mEASIX (≥ 704.05) and low mEASIX (< 704.05). Parameters and quantitative variables are presented as median [interquartile range – IQR]; qualitative variables are presented as frequency/number.

Variable	mEASIX <i>p</i> -value	High mEASIX <i>n</i> = 124	Low mEASIX <i>n</i> = 246	<i>p</i> -value
Male	<0.001	93 (75.0%)	149 (60.6%)	0.006
Age	0.032	67 [60–74]	68 [61–74.5]	0.682
Death	<0.001	91 (73.4%)	152 (61.8%)	0.027
Concomitant diseases				
Cardiovascular diseases	0.334	89 (71.8%)	162 (65.9%)	0.569
Hypertension	0.672	79 (63.7%)	152 (61.8%)	0.719
Atrial fibrillation	0.484	21 (16.9%)	26 (10.6%)	0.083
Ischemic heart disease	0.723	32 (25.8%)	54 (22.0%)	0.407
Pulmonary diseases	0.608	11 (8.9%)	25 (10.2%)	0.692
Asthma	0.388	9 (7.3%)	10 (4.1%)	0.189
COPD	0.875	3 (2.4%)	8 (3.3%)	0.656
Other	0.196	1 (0.8%)	7 (2.8%)	0.203
Diabetes	0.474	46 (37.1%)	88 (35.8%)	0.802
Malignant neoplasm	0.026	16 (12.9%)	41 (16.7%)	0.344
Chronic kidney disease	0.793	8 (6.5%)	24 (9.8%)	0.286
Obesity	0.843	33 (26.6%)	72 (29.3%)	0.593
SpO ₂ without oxygen supply	<0.001	80 [68–88]	87 [81–92]	<0.001
Severity (according to WHO scale)				
1	0.296	0 (0.0%)	5 (2.0%)	<0.001
2		17 (13.7%)	86 (35.0%)	
3		87 (70.2%)	135 (54.9%)	
4		20 (16.1%)	20 (8.1%)	
Duration of hospitalisation, days	0.226	12 [5–20]	17 [11–25]	<0.001
Duration of symptoms before hospital admission, days	0.025	7 [5–8]	7 [4–9]	0.617
Deterioration, days (from disease onset)	0.064	7 [5–9]	8 [5–10]	0.199
ICU admission	0.019	84 (67.7%)	132 (53.7%)	0.017

ICU admission, days (from disease onset)	0.098	9 [6.5–15]	12 [7–17]	0.050
ICU admission, days (from hospitalisation onset)	0.241	2 [0–4]	5 [2–8]	<0.001
ICU duration, days	0.134	11 [5–18]	11.5 [6–18]	0.314
Non-rebreather mask 10-15l/min	0.127	114 (91.9%)	238 (96.8%)	0.042
Non-rebreather mask 10-15l/min duration, days	0.321	1 [0–2]	2 [1–3]	<0.001
HFNO	0.959	79 (63.7%)	174 (70.7%)	0.170
HFNO duration, days	0.126	2 [1–5]	5 [2–9]	<0.001
NIV	0.133	27 (21.8%)	42 (17.1%)	0.273
NIV duration, days	0.057	3 [2–5]	4 [1–6]	0.741
IMV	0.138	87 (70.2%)	133 (54.1%)	0.003
IMV duration, days	0.178	10 [4–16]	11 [6–18]	0.062
Lab test results				
CRP	<0.001	233.3 [180.2–296.1]	96.4 [51.6–155.7]	<0.001
Procalcitonin	<0.001	0.91 [0.25–1.69]	0.16 [0.07–0.49]	<0.001
Ferritin	<0.001	2321 [979–4474]	1086 [546–1750]	<0.001
LDH	<0.001	777 [588–954]	476 [374–602]	<0.001
White blood count	0.245	8.18 [5.49–11.08]	7.55 [5.51–10.34]	0.671
Neutrophils	0.003	6.7 [4.6–10.0]	6 [3.9–8.6]	0.162
Lymphocytes	<0.001	0.7 [0.5–0.9]	0.9 [0.6–1.2]	0.004
Haemoglobin	0.711	13.3 [10.9–14.6]	13.4 [12.2–14.7]	0.216
Thrombocytes	<0.001	153 [123–204]	211 [163–281]	<0.001
D-dimer	<0.001	2180 [1173–3950]	1258 [797–2426]	<0.001
INR	<0.001	1.14 [1.05–1.22]	1.08 [1.0–1.1]	0.002
AST	<0.001	74 [52–106]	50 [36–69]	<0.001
ALT	<0.001	46 [31–82]	37 [25–61]	0.005
Creatinine	<0.001	1.36 [0.98–1.79]	0.99 [0.79–1.29]	<0.001

Table S3. Correlation of sEASIX with variables being assessed and characteristics of patients with high sEASIX (≥ 3.81) and low sEASIX (< 3.81). Parameters and quantitative variables are presented as median [interquartile range—IQR]; qualitative variables are presented as frequency/number.

	sEASIX <i>p</i> -value	High sEASIX	Low sEASIX	<i>p</i> -value
Variable		<i>n</i> = 91	<i>n</i> = 279	
Male	0.052	60 (66.7%)	182 (65.2%)	0.903
Age	0.087	68 [60–74]	68 [61–75]	0.582
Death	<0.001	77 (84.6%)	166 (59.5%)	<0.001
Concomitant diseases				
Cardiovascular diseases	0.027	69 (75.8%)	182 (65.2%)	0.060
Hypertension	0.319	65 (72.2%)	166 (59.5%)	0.051
Atrial fibrillation	0.411	14 (15.6%)	33 (11.8%)	0.376
Ischemic heart disease	0.644	23 (25.6%)	63 (22.6%)	0.597
Pulmonary diseases	0.782	10 (11.0%)	26 (9.3%)	0.641
Asthma	0.358	7 (7.8%)	12 (4.3%)	0.203
COPD	0.963	3 (3.3%)	8 (2.9%)	0.834
Other	0.948	2 (2.2%)	6 (2.2%)	0.979
Diabetes	0.658	36 (39.6%)	98 (35.1%)	0.614
Malignant neoplasm	0.046	15 (16.5%)	42 (15.1%)	0.743
Chronic kidney disease	0.420	11 (12.1%)	22 (7.9%)	0.222
Obesity	0.799	22 (24.2%)	83 (29.8%)	0.306
SpO ₂ without oxygen supply	0.001	84 [72–90]	87 [80–92]	0.015

Severity (according to WHO scale)				
1	0.095	1 (1.1%)	4 (1.4%)	0.049
2		22 (24.4%)	81 (29.1%)	
3		51 (56.6%)	171 (61.3%)	
4		17 (18.9%)	23 (8.2%)	
Duration of hospitalisation, days	0.160	13.5 [7–21]	17 [11–25]	0.003
Duration of symptoms before hospital admission, days	0.949	7 [5–8]	7 [4–9]	0.860
Deterioration, days (from disease onset)	0.089	7 [5–9]	8 [5–11]	0.306
ICU admission	0.001	66 (73.3%)	150 (53.8%)	0.004
ICU admission, days (from disease onset)	0.078	10 [7–15.5]	12 [7–17]	0.301
ICU admission, days (from hospitalisation onset)	0.154	3 [0–6]	4 [2–8]	0.033
ICU duration, days	0.035	11 [6–17.5]	11 [6–18]	0.621
Non-rebreather mask 10-15l/min	0.300	84 (92.3%)	268 (96.1%)	0.149
Non-rebreather mask 10-15l/min duration, days	0.187	1 [0–3]	2 [1–3]	0.001
HFNO	0.825	53 (58.2%)	200 (71.7%)	0.017
HFNO duration, days	0.161	2 [1–4]	5 [2–9]	<0.001
NIV	0.404	17 (18.9%)	52 (18.6%)	0.958
NIV duration, days	0.003	3 [1–7]	3 [1–6]	0.871
IMV	0.134	68 (75.6%)	152 (54.5%)	<0.001
IMV duration, days	0.056	10 [6–17]	11 [6–17]	0.490
Lab test results				
CRP	0.011	150.4 [86.3–220.1]	113.9 [57.7–186.8]	0.018
Procalcitonin	<0.001	0.49 [0.19–1.21]	0.18 [0.09–0.66]	<0.001
Ferritin	<0.001	2116 [740–3340]	1146 [566–1672]	0.004
LDH	<0.001	772 [619–935]	464 [374–588]	<0.001
White blood count	<0.001	7.02 [4.66–9.04]	8.21 [5.81–10.97]	0.002
Neutrophils	<0.001	5.4 [3.7–7.9]	6.7 [4.2–9.4]	0.010
Lymphocytes	<0.001	0.8 [0.5–1.0]	0.9 [0.6–1.2]	0.009
Haemoglobin	0.089	13.2 [11.8–14.7]	13.5 [12.2–14.7]	0.512
Thrombocytes	<0.001	148 [116–183]	226 [172–297]	<0.001
D-dimer	0.286	1798 [1046–3442]	1366 [818–2644]	0.034
INR	0.848	1.12 [1.03–1.24]	1.08 [1.02–1.19]	0.122
AST	<0.001	74 [50–106]	50 [36–68]	<0.001
ALT	<0.001	43 [30–76]	37 [25–61]	0.032
Creatinine	<0.001	1.27 [0.87–1.79]	1 [0.8–1.32]	0.002