

## SUPPLEMENTARY FILES

### STUDIES INCLUDED IN META-ANALYSIS

1. Abdelsattar S, Kasemy ZA, Ewida SF, Abo-Elsoud RAA, Zytoon AA, Abdelaal GA, Abdelgawad AS, Khalil FO, Kamel HFM. ACE2 and TMPRSS2 SNPs as Determinants of Susceptibility to, and Severity of, a COVID-19 Infection. *Br J Biomed Sci* 2022;79:10238.
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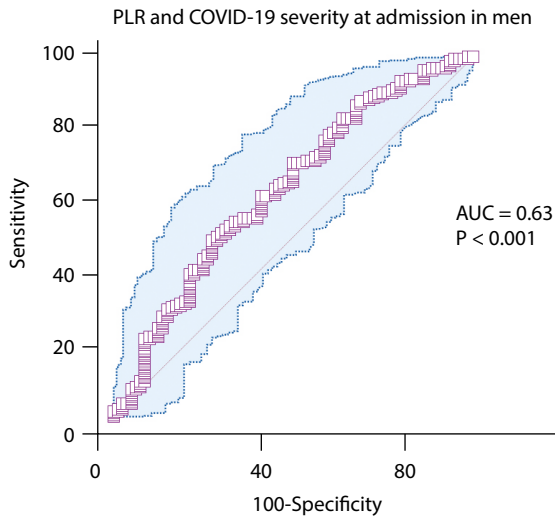
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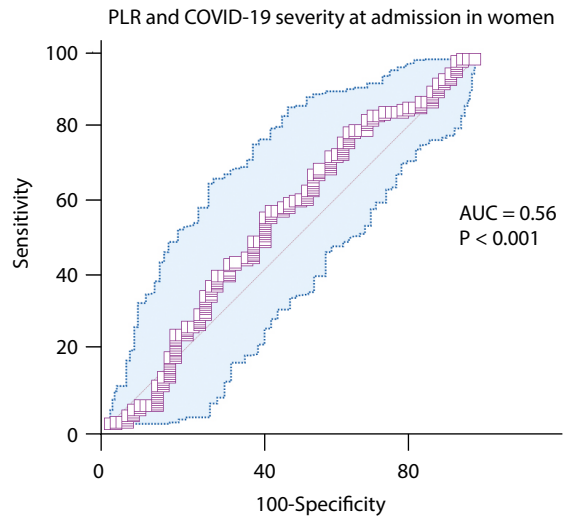
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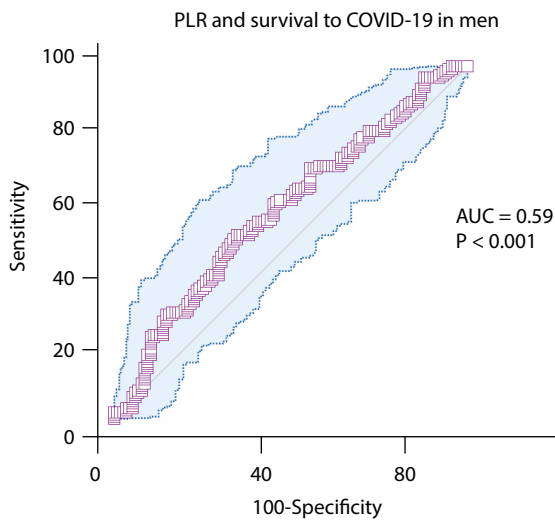
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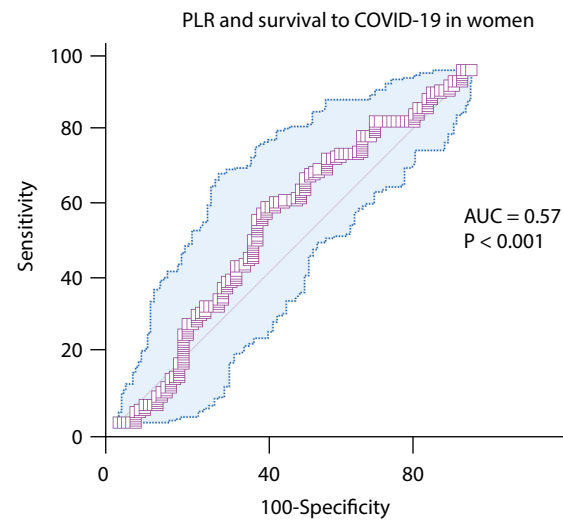
**FIGURE S1.** Platelet to lymphocyte ratio (PLR) and COVID-19 severity at admission in men population; AUC — area under the curve



**FIGURE S2.** Platelet to lymphocyte ratio (PLR) and COVID-19 severity at admission in women population; AUC — area under the curve



**FIGURE S3.** Platelet to lymphocyte ratio (PLR) to COVID-19 survival among men population; AUC — area under the curve



**FIGURE S4.** Platelet to lymphocyte ratio (PLR) to COVID-19 survival among women population; AUC — area under the curve



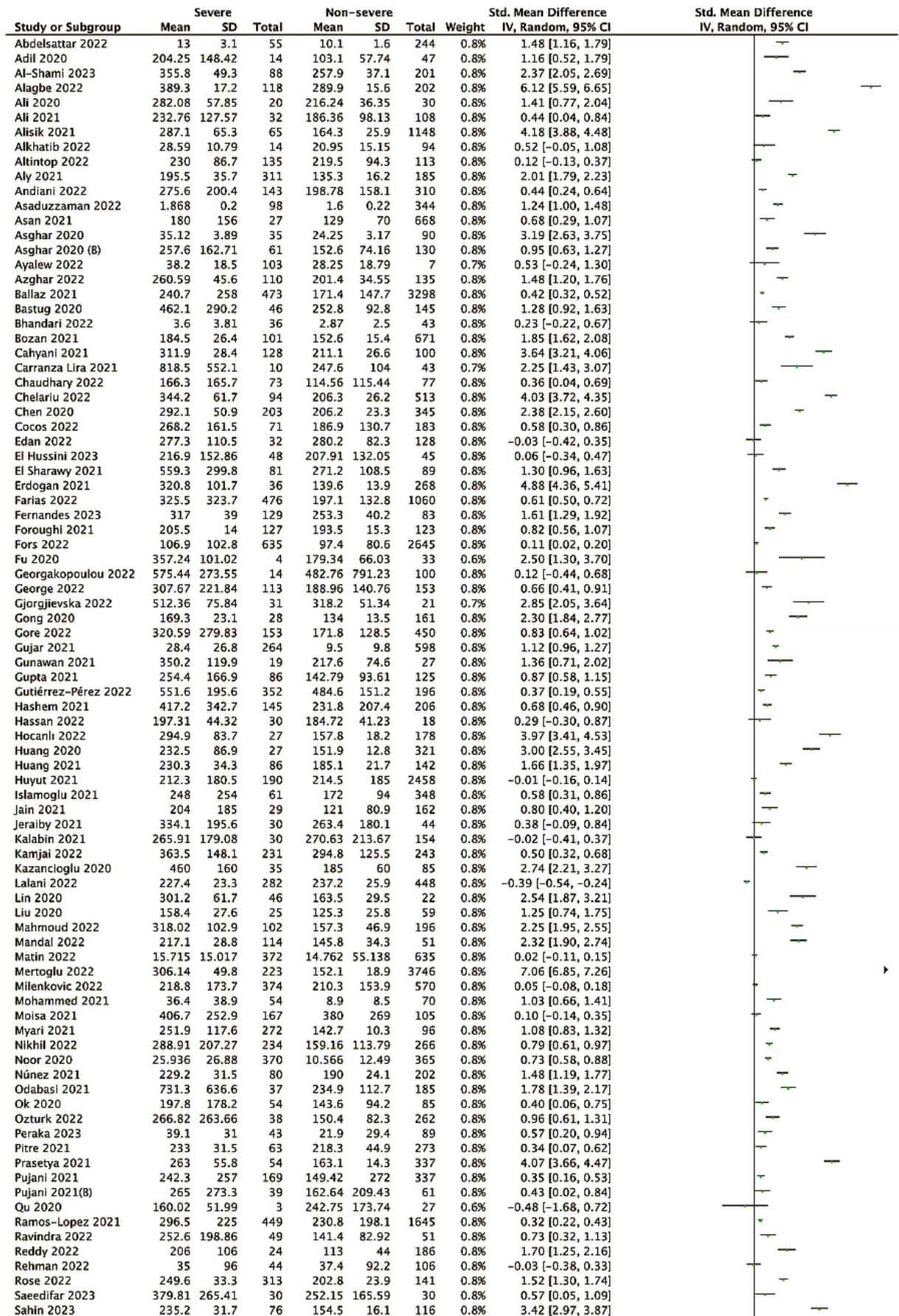


FIGURE S5. Pooled characteristics of platelet-to-lymphocyte ratio among severe vs non-severe COVID-19 groups

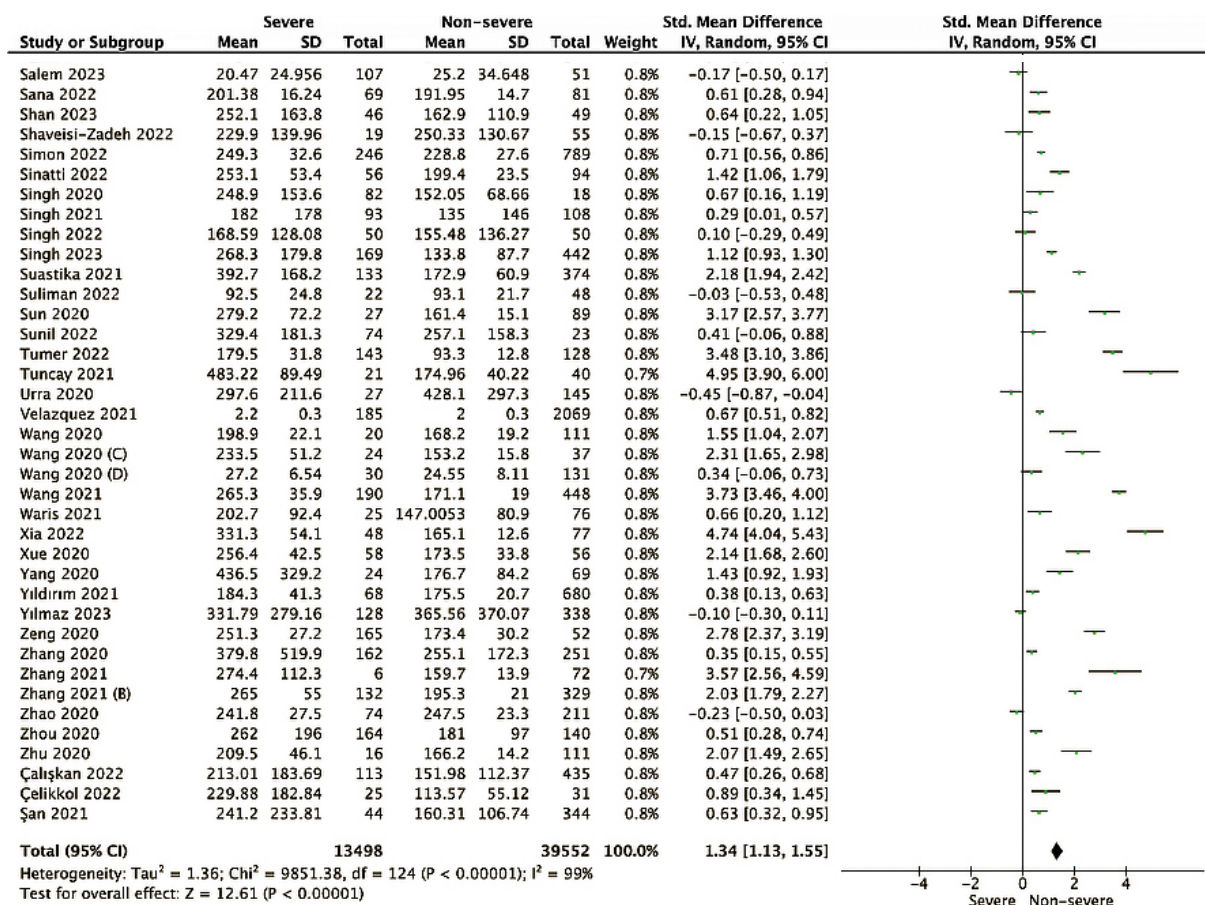


FIGURE S5 (cont.) Pooled characteristics of platelet-to-lymphocyte ratio among severe vs. non-severe COVID-19 groups

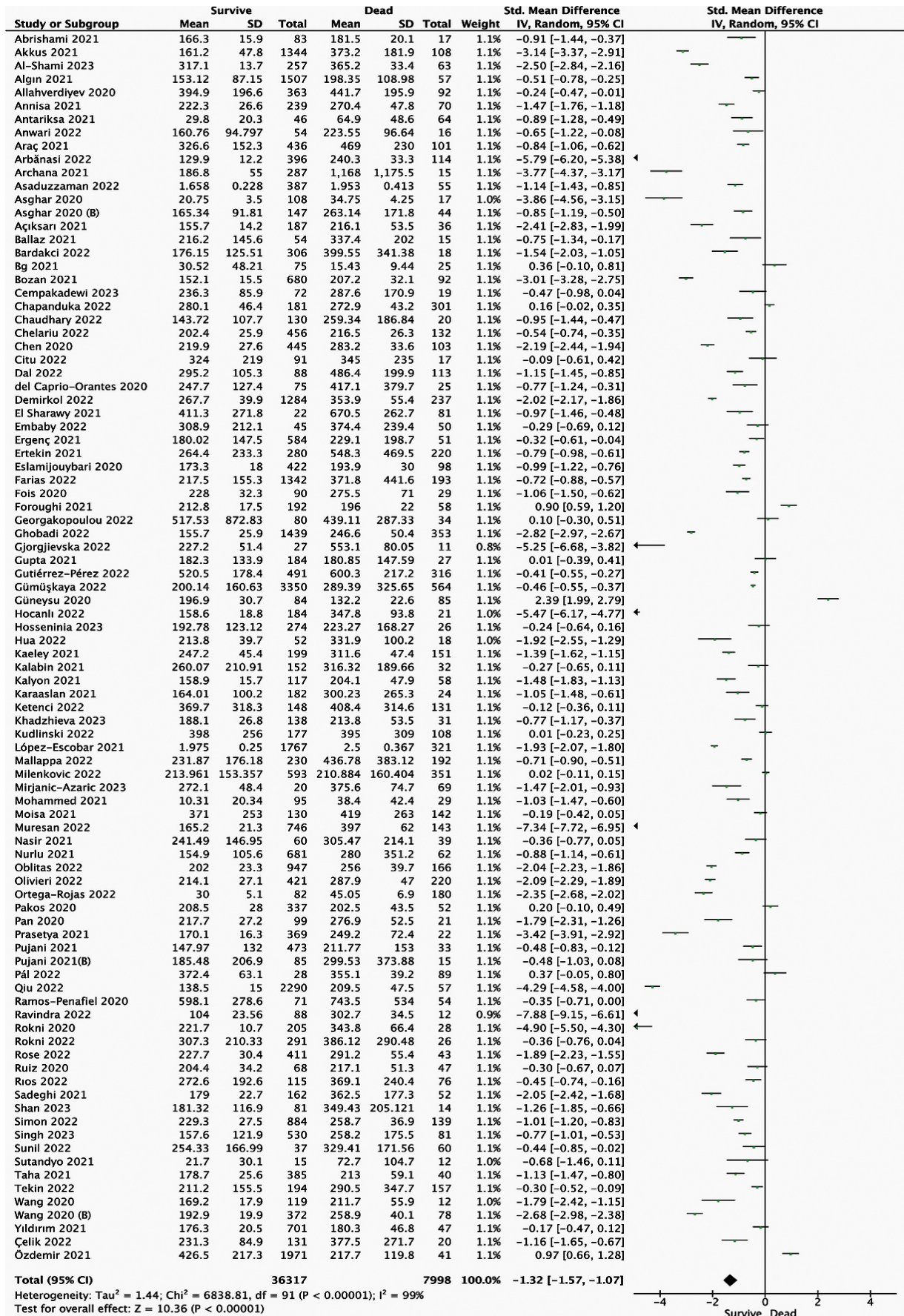


FIGURE S6. Pooled characteristics of platelet-to-lymphocyte ratio among survive vs. decrease COVID-19 groups

**Table S1. Pooled characteristics of analyzed in articles variables among studies referred to severe and non-severe COVID-19 groups**

Variables	Total (n = 521)	Non-severe (n = 380)	Severe (n = 141)	p value	Univariable analysis	
					OR (95% CI)/ MD (95% CI)	p value
<b>Age [yr]</b>						
Mean ± SD	72.4 ± 13.4	71.3 ± 14.2	75.5 ± 10.6	0.001	-4.20	< 0.001
Median (IQR)	74 (67–81)	73 (66–81)	76 (71–81.5)		(-6.46 to -1.94)	
<b>Male sex</b>	241 (46.3)	180 (47.4)	61 (43.3)	0.35	1.18	0.40
					(0.80 to 1.74)	
<b>VITAL SIGNS</b>						
<b>SBP</b>						
Mean ± SD	126.1 ± 21.4	126.7 ± 18.4	124.5 ± 27.9	0.304	2.20	0.38
Median (IQR)	125 (110–136)	125 (111–135)	125 (110–140)		(-2.76 to 7.16)	
<b>DBP</b>						
Mean ± SD	71.4 ± 12.6	71.5 ± 10.2	71 ± 17.6	0.716	0.50	0.75
Median (IQR)	71.3 (63–80)	70 (65–78)	70 (60–80)		(-2.58 to 3.58)	
<b>HR</b>						
Mean ± SD	88.8 ± 17.9	85.3 ± 14.5	98.5 ± 22.1	< 0.001	-13.20	< 0.001
Median (IQR)	88.8 (77–97)	84 (75–92)	96 (80–110)		(-17.13 to -9.27)	
<b>SpO2</b>						
Mean ± SD	90.8 ± 7.7	92.5 ± 5.9	86.1 ± 9.6	< 0.001	6.40	< 0.001
Median (IQR)	90.8 (88–96)	94 (90–96)	87 (80–93)		(4.71 to 8.09)	
<b>RR</b>						
Mean ± SD	24.5 ± 7.2	22 ± 5.4	29.6 ± 7.8	< 0.001	-7.60	< 0.001
Median (IQR)	24.5 (20–30)	22 (18–24)	30 (24.5–35.5)		(-9.00 to -6.20)	
<b>Fever</b>						
Mean ± SD	36.8 ± 0.8	36.8 ± 0.8	36.8 ± 0.8	0.349	0.00	1.00
Median (IQR)	36.8 (36.3–37)	36.6 (26.3–37)	36.8 (36.4–37)		(-0.15 to 0.15)	
<b>COMORBIDITIES</b>						
<b>Hypertension</b>	185 (35.5)	133 (35.0)	52 (36.9)	0.103	0.92	0.69
					(0.62 to 1.38)	
<b>Diabetes</b>	138 (26.5)	103 (27.1)	35 (24.8)	0.056	1.13	0.60
					(0.72 to 1.76)	
<b>COPD</b>	47 (9.0)	28 (7.4)	19 (13.5)	0.294	0.51	0.03
					(0.28 to 0.95)	
<b>Congestive heart failure</b>	45 (8.6)	25 (6.6)	20 (14.2)	0.066	0.43	0.007
					(0.23 to 0.79)	
<b>CAD</b>	55 (10.6)	35 (9.2)	20 (14.2)	0.196	0.61	0.10
					(0.34 to 1.10)	
<b>AF</b>	10 (1.9)	4 (1.1)	6 (4.3)	0.065	0.24	0.03
					(0.07 to 0.86)	
<b>Chronic renal failure</b>	34 (6.5)	22 (5.8)	12 (8.5)	0.744	0.66	0.27
					(0.32 to 1.37)	
<b>LABORATORY FINDINGS</b>						
<b>WBC</b>						
Mean ± SD	9.08 ± 9.04	7.98 ± 4.61	12.03 ± 15.29	< 0.001	-4.05	< 0.001
Median (IQR)	7.3 (5.3–10.9)	6.8 (5.1–9.4)	10.1 (6.9–13.6)		(-6.62 to -1.48)	
<b>NE</b>						
Mean ± SD	7.19 ± 5.81	6.22 ± 4.31	9.83 ± 8.09	< 0.001	-3.61	< 0.001
Median (IQR)	5.65 (3.7–9.15)	5 (3.4–7.6)	8.4 (5.5–12.1)		(-5.01 to -2.21)	

→

**Table S1 cont. Pooled characteristics of analyzed in articles variables among studies referred to severe and non-severe COVID-19 groups**

Variables	Total (n = 521)	Non-severe (n = 380)	Severe (n = 141)	p value	Univariable analysis	
					OR (95% CI)/ MD (95% CI)	p value
<b>PLT</b> Mean ± SD Median (IQR)	225.36 ± 99.29 208 (161–271)	218.74 ± 95.16 201 (157.5–263.5)	243.2 ± 107.98 244 (172–296)	0.002	–24.46 (–44.69 to –4.23)	0.02
<b>Urea</b> Mean ± SD Median (IQR)	60.49 ± 46.98 46 (33–69.5)	52.78 ± 36.14 43 (31–60)	81.24 ± 63.31 59 (40–97)	< 0.001	–28.46 (–39.52 to –17.40)	< 0.001
<b>Albumin</b> Mean ± SD Median (IQR)	33.31 ± 5.93 33 (30–37)	34.42 ± 5.76 34 (31–37)	30.35 ± 5.34 30 (28–33.5)	< 0.001	4.07 (3.02 to 5.12)	< 0.001
<b>D-Dimer</b> Mean ± SD Median (IQR)	2033.87 ± 2713.69 1290 (740–2510)	1777.51 ± 2436.31 1170 (680–2130)	2830.75 ± 3323.44 2225 (1120–3965)	< 0.001	–1053.24 (–1654.01 to –452.47)	< 0.001
<b>AST</b> Mean ± SD Median (IQR)	53.93 ± 193.16 35 (25–51)	41.71 ± 33.78 32.5 (24–48)	86.84 ± 366.05 45 (29–61)	< 0.001	–45.13 (–105.64 to 15.38)	0.14
<b>ALT</b> Mean ± SD Median (IQR)	36.06 ± 102.86 22 (14–38)	29.86 ± 27.88 22 (14–37)	52.77 ± 191.86 26 (16–39)	0.162	–22.91 (–54.70 to 8.88)	0.16
<b>Creatinine</b> Mean ± SD Median (IQR)	1.39 ± 2.23 0.9 (0.72–1.28)	1.21 ± 1.27 0.87 (0.7–1.19)	1.89 ± 3.71 1.02 (0.77–1.67)	< 0.001	–0.68 (–1.31 to –0.05)	0.03
<b>PLR</b> Mean ± SD Median (IQR)	308.3 ± 292.0 227.1 (139.4376.7)	275.4 ± 220.7 208 (128.8–345)	396.3 ± 416.8 282.2 (165–497.1)	< 0.001	–120.90 (–183.19 to –48.61)	0.001

OR — odds ratio; MD — mean difference SD — standard deviation; IQR — interquartile range; SBP — systolic blood pressure; DBP — diastolic blood pressure; HR — heart rate; RR — respiratory rate; COPD — Chronic obstructive pulmonary disease; CAD — Coronary artery disease; AF — atrial fibrillation; WBC — white blood cells; NE — Neutrophils; LY — Lymphocytes; HGB — Hemoglobin; PLT — Platelet; AST — aspartate aminotransferase; ALT — alanine transaminase; PLR — platelet-to-lymphocyte ratio

**Table S2. Pooled characteristics of analyzed in articles variables among studies referred to survive vs decrease COVID-19 groups**

Variables	Survive (n = 324)	Decrease (n = 197)	p value	Univariable analysis	
				OR (95% CI)/MD (95% CI)	p value
<b>Age [yr]</b> Mean ± SD Median (IQR)	69.9 ± 14.6 72 (65–80)	76.6 ± 9.8 77 (71–83)	< 0.001	-6.70 (-8.80 to -4.60)	< 0.001
<b>Male sex</b>	164 (50.6)	77 (39.1)	0.049	1.60 (1.11 to 2.29)	0.01
<b>VITAL SIGNS</b>					
<b>SBP</b> Mean ± SD Median (IQR)	125.6 ± 17.9 125 (110–132)	126.9 ± 26.1 128 (110–140)	0.491	-1.30 (-5.43 to 2.83)	0.54
<b>DBP</b> Mean ± SD Median (IQR)	71.5 ± 10.9 70 (64–80)	71.1 ± 15.1 70 (63–78)	0.677	0.40 (-2.02 to 2.82)	0.75
<b>HR</b> Mean ± SD Median (IQR)	84.9 ± 14.9 83 (75–92)	95.3 ± 20.4 95 (80–105)	< 0.001	-10.40 (-13.68 to -7.12)	< 0.001
<b>SpO2</b> Mean ± SD Median (IQR)	92.5 ± 5.5 94 (90–96)	88.4 ± 9.7 90 (84–95)	< 0.001	4.10 (2.62 to 5.58)	< 0.001
<b>RR</b> Mean ± SD Median (IQR)	22.8 ± 5.9 22 (18–26)	27.7 ± 8.2 28 (20–35)	< 0.001	-4.90 (-6.21 to -3.59)	< 0.001
<b>Fever</b> Mean ± SD Median (IQR)	36.7 ± 0.7 36.6 (36.2–37)	36.8 ± 0.8 36.6 (36.2–37)	0.178	-0.10 (-0.24 to 0.04)	0.15
<b>COMORBIDITIES</b>					
<b>Hypertension</b>	117 (36.1)	68 (34.5)	0.027	1.07 (0.74 to 1.55)	0.71
<b>Diabetes</b>	91 (28.1)	47 (23.9)	0.020	1.25 (0.83 to 1.87)	0.29
<b>COPD</b>	24 (7.4)	23 (11.7)	0.445	0.61 (0.33 to 1.10)	0.10
<b>Congestive heart failure</b>	19 (5.9)	35 (17.8)	0.034	0.29 (0.16 to 0.52)	< 0.001
<b>CAD</b>	37 (11.4)	18 (9.1)	0.242	1.28 (0.71 to 2.32)	0.41
<b>AF</b>	6 (1.9)	4 (2.0)	0.817	1.22 (0.30 to 4.93)	0.78
<b>Chronic renal failure</b>	12 (3.7)	22 (11.2)	0.007	0.31 (0.15 to 0.63)	0.001
<b>LABORATORY FINDINGS</b>					
<b>WBC</b> Mean ± SD Median (IQR)	7.78 ± 4.25 6.5 (5.1–9.36)	11.22 ± 13.4 9.1 (6.6–13.3)	< 0.001	-3.44 (-5.75 to -1.51)	< 0.001
<b>NE</b> Mean ± SD Median (IQR)	6.29 ± 5.82 4.9 (3.3–7.6)	8.68 ± 5.51 7.5 (5–10.8)	< 0.001	-2.39 (-3.39 to -1.39)	< 0.001
<b>LY</b> Mean ± SD Median (IQR)	1.32 ± 2.25 1.0 (0.6–1.5)	1.92 ± 10.89 0.8 (0.5–1.2)	0.002	-0.60 (-2.14 to 0.94)	0.45

**Table S2 (cont.) Pooled characteristics of analyzed in articles variables among studies referred to survive vs decrease COVID-19 groups**

Variables	Survive (n = 324)	Decrease (n = 197)	p value	Univariable analysis	
				OR (95% CI)/MD (95% CI)	p value
<b>PLT</b> Mean ± SD Median (IQR)	220.74 ± 96.55 203.5 (157.5– 265.5)	232.97 ± 103.27 217 (171–284)	0.173	-12.23 (-30.08 to 5.62)	0.18
<b>Urea</b> Mean ± SD Median (IQR)	47.71 ± 31.94 40.5 (30–53)	81.64 ± 58.86 62.5 (43–96)	< 0.001	-33.93 (-42.85 to -25.01)	< 0.001
<b>Albumin</b> Mean ± SD Median (IQR)	34.35 ± 5.34 34 (31–37)	31.62 ± 6.42 31 (28–34.5)	< 0.001	2.73 (1.66 to 3.80)	< 0.001
<b>D-Dimer</b> Mean ± SD Median (IQR)	1581 ± 1673.9 1100 (640–1840)	2849.5 ± 3821.4 1965 (1150–3910)	< 0.001	-1268.50 (-1832.40 to -703.60)	< 0.001
<b>AST</b> Mean ± SD Median (IQR)	41.18 ± 29.8 32 (24–48)	74.9 ± 29.8 40 (26–57)	0.053	-33.72 (-39.00 to -28.44)	< 0.001
<b>ALT</b> Mean ± SD Median (IQR)	30.3 ± 23.1 23 (14.5–39.5)	45.5 ± 164.47 21 (14–35)	0.350	-15.20 (-38.30 to 7.90)	0.20
<b>Creatinine</b> Mean ± SD Median (IQR)	1.19 ± 2.47 0.84 (0.69–1.06)	1.73 ± 1.72 1.08 (0.8–1.8)	< 0.001	-0.54 (-0.90 to -0.18)	0.003
<b>PLR</b> Mean ± SD Median (IQR)	272.8 ± 214.9 202.9 (126–345)	366.7 ± 380.4 269.4 (161.9– 433.1)	< 0.001	-93.90 (-151.95 to -35.85)	0.002

OR — odds ratio; MD — mean difference SD — standard deviation; IQR — interquartile range; SBP — systolic blood pressure; DBP — diastolic blood pressure; HR — heart rate; RR — respiratory rate; COPD — Chronic obstructive pulmonary disease; CAD — Coronary artery disease; AF — atrial fibrillation; WBC — white blood cells; NE — Neutrophils; LY — Lymphocytes; HGB — Hemoglobin; PLT — Platelet; AST — aspartate aminotransferase; ALT — alanine transaminase; PLR — platelet-to-lymphocyte ratio

**Table S3. Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Abdelsattar et al., 2022	Egypt	12.2019–10.2020	Severe	55	58.0 ± 14.7	31 (56.4%)	8
			Non-severe	244	46.3 ± 16.4	121 (49.6%)	
Abrishami et al., 2021	Iran	02.2020–04.2020	Survived	83	55.2 ± 15.6	53 (63.9%)	8
			Decreased	17	57.1 ± 13.2	15 (88.2%)	
Açiksari et al., 2021	Turkey	03.2020–08.2020	Survived	187	56.9 ± 17.5	103 (55.1%)	8
			Decreased	36	74.0 ± 13.6	15 (41.7%)	
Adil et al., 2020	Pakistan	04.2020–07.2020	Severe	14	49.9 ± 19.4	13 (92.9%)	8
			Non-severe	47	33.2 ± 9.2	40 (87.1%)	
Akkus et al., 2021	Turkey	03.2020–12.2020	Survived	1,344	NS	NS	7
			Decreased	108	NS	NS	
Al-Shami et al., 2023	Jordan	01.2021–04.2021	Severe	88	68.5 ± 3.0	53 (60.2%)	8
			Non-severe	201	54.4 ± 3.4	122 (60.7%)	
Alagbe et al., 2022	Brazil	04.2020–03.2021	Severe	118	60.0 ± 21.0	NS	9
			Non-severe	202	56.2 ± 15.0	NS	
			Survived	257	56.0 ± 14.8	152	
			Decreased	63	64.7 ± 15.6	39	
Algin et al., 2021	Turkey	06.2021–08.2021	Survived	1,507	43 ± 16	801 (53.2%)	8
			Decreased	57	71 ± 13	36 (63.2%)	
Ali et al., 2020	India	04.2020–04.2020	Severe	20	NS	16 (80.0%)	7
			Non-severe	30	NS	14 (46.7%)	
Ali et al., 2021	Egypt	05.2020–06.2020	Severe	32	52.0 ± 12.6	22 (68.8%)	8
			Non-severe	108	34.7 ± 10.9	74 (68.5%)	
Alisik et al., 2021	Turkey	07.2020–11.2020	Severe	65	75.4 ± 4.4	41 (63.1%)	8
			Non-severe	1,148	51.8 ± 10.5	514 (44.8%)	
Alkhatib et al., 2022	Jordan	01.2021–04.2021	Severe	14	52.8 ± 13.8	9 (64.3%)	7
			Non-severe	94	47.0 ± 14.8	55 (58.5%)	



**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Abdelsattar et al., 2022	Egypt	12.2019–10.2020	Severe	55	58.0 ± 14.7	31 (56.4%)	8
			Non-severe	244	46.3 ± 16.4	121 (49.6%)	
Abrishami et al., 2021	Iran	02.2020–04.2020	Survived	83	55.2 ± 15.6	53 (63.9%)	8
			Decreased	17	57.1 ± 13.2	15 (88.2%)	
Ağsarı et al., 2021	Turkey	03.2020–08.2020	Survived	187	56.9 ± 17.5	103 (55.1%)	8
			Decreased	36	74.0 ± 13.6	15 (41.7%)	
Adil et al., 2020	Pakistan	04.2020–07.2020	Severe	14	49.9 ± 19.4	13 (92.9%)	8
			Non-severe	47	33.2 ± 9.2	40 (87.1%)	
Akkus et al., 2021	Turkey	03.2020–12.2020	Survived	1,344	NS	NS	7
			Decreased	108	NS	NS	
Al-Shami et al., 2023	Jordan	01.2021–04.2021	Severe	88	68.5 ± 3.0	53 (60.2%)	8
			Non-severe	201	54.4 ± 3.4	122 (60.7%)	
Alagbe et al., 2022	Brazil	04.2020–03.2021	Severe	118	60.0 ± 21.0	NS	9
			Non-severe	202	56.2 ± 15.0	NS	
			Survived	257	56.0 ± 14.8	152	
			Decreased	63	64.7 ± 15.6	39	
Algin et al., 2021	Turkey	06.2021–08.2021	Survived	1,507	43 ± 16	801 (53.2%)	8
			Decreased	57	71 ± 13	36 (63.2%)	
Ali et al., 2020	India	04.2020–04.2020	Severe	20	NS	16 (80.0%)	7
			Non-severe	30	NS	14 (46.7%)	
Ali et al., 2021	Egypt	05.2020–06.2020	Severe	32	52.0 ± 12.6	22 (68.8%)	8
			Non-severe	108	34.7 ± 10.9	74 (68.5%)	
Alisik et al., 2021	Turkey	07.2020–11.2020	Severe	65	75.4 ± 4.4	41 (63.1%)	8
			Non-severe	1,148	51.8 ± 10.5	514 (44.8%)	
Alkhatib et al., 2022	Jordan	01.2021–04.2021	Severe	14	52.8 ± 13.8	9 (64.3%)	7
			Non-severe	94	47.0 ± 14.8	55 (58.5%)	
Allahverdiyev et al., 2020	Turkey	01.2020–06.2020	Survived	363	55.0 ± 13.3	172 (47.4%)	8
			Decreased	172	69.0 ± 9.3	45 (48.9%)	

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Altıntop et al., 2022	Turkey	02.2021–06.2021	Severe	135	75.0 ± 6.0	73 (54.1%)	8
			Non-severe	113	73.3 ± 5.2	43 (38.1%)	
Aly et al., 2021	Egypt	06.2020–06.2020	Severe	311	57.3 ± 3.2	181 (58.2%)	8
			Non-severe	185	36.8 ± 4.7	92 (49.7%)	
Andiani et al., 2022	Indonesia	01.2021–03.2021	Severe	143	NS	72 (50.3%)	8
			Non-severe	310	NS	159 (51.3%)	
Annisa et al., 2021	Indonesia	03.2020–08.2020	Survived	239	49 (46-57)	111 (46.4%)	8
			Decreased	70	54 (44-60)	49 (70.0%)	
Antariksa et al., 2021	India	03.2020–04.2020	Survived	46	52.8 ± 14.1	30 (65.2%)	8
			Decreased	64	58.1 ± 12.1	46 (71.9%)	
Anwari et al., 2022	Indonesia	06.2020–01.2021	Survived	54	50.6 ± 12.8	7 (14.0%)	7
			Decreased	16	53.2 ± 7.3	3 (18.8%)	
Araç et al., 2021	Turkey	03.2020–04.2020	Survived	436	53.4 ± 13.2	226 (51.8%)	8
			Decreased	101	66.5 ± 10.3	63 (62.4%)	
Arbănăsi et al., 2022	Romania	01.2020–12.2021	Survived	396	69.6 ± 10.8	247 (62.4%)	
			Decreased	114	73.4 ± 11.3	58 (50.9%)	
Archana et al., 2021	India	10.2020–12.2020	Survived	287	53.9 ± 15.4	200 (69.7%)	8
			Decreased	15	67.6 ± 6.9	10 (66.7%)	
Asaduzzaman et al., 2022 (A + B)	Baangladesh	10.2020–01.2021	Severe	98	65.3 ± 14.9	60 (61.2%)	8
			Non-severe	344	58.8 ± 13.1	231 (67.2%)	
Asan et al., 2021	Turkey	03.2020–04.2020	Survived	387	59 ± 14	257 (66.4%)	8
			Decreased	55	69 ± 13	34 (61.8%)	
Asghar et al., 2020	Pakistan	03.2020–05.2020	Severe	27	69 ± 21	15 (55.6%)	9
			Non-severe	668	41 ± 15.7	316 (47.3%)	
			Severe	35	57.8 ± 12.8	8 (22.9%)	
			Non-severe	90	38.9 ± 13.8	13 (14.4%)	
			Survived	108	41.8 ± 15.4	13 (12.0%)	
			Decreased	17	59.4 ± 10.1	4 (23.5%)	

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Asghar et al., 2020 (B)	Pakistan	02.2020–06.2020	Severe	61	NS	NS	7
			Non-severe	130	NS	NS	
			Survived	147	NS	NS	
			Decreased	44	NS	NS	
Ayalew et al., 2022	Ethiopia	07.2021–08.2021	Severe	103	55.5 ± 12	61 (59.2%)	7
			Non-severe	7	48.5 ± 15.6	5 (71.4%)	
Azghar et al., 2022	Marocco	03.2020–11.2020	Severe	110	61.3 ± 4.5	61 (55.5%)	8
			Non-severe	135	59.5 ± 3.7	65 (48.1%)	
			Severe	473	NS	NS	
Ballaz et al., 2021	Ecuador	03.2020–06.2020	Non-severe	3,298	NS	NS	7
			Survived	54	NS	NS	
			Decreased	54	NS	NS	
			Survived	306	52.3 ± 15.6	152 (49.7%)	
Bardakci et al., 2022	Turkey	03.2020–10.2020	Decreased	18	71.0 ± 10.8	13 (72.2%)	8
			Severe	46	65.5 ± 16.0	26 (56.5%)	
Bostug et al., 2020	Turkey	03.2020–04.2020	Non-severe	145	46.8 ± 10.8	81 (55.9%)	8
			Survived	75	43.0 ± 13.6	44 (58.7%)	
Bg et al., 2021	India	07.2020–08.2020	Decreased	25	59.1 ± 11.5	13 (52.0%)	8
			Severe	36	50.7 ± 19.2	29 (80.6%)	
Bhandari et al., 2022	India	01.2020–05.2020	Non-severe	139	42.7 ± 13.6	106 (76.3%)	7
			Severe	101	65.6 ± 12.9	61 (60.4%)	
Bozan et al., 2021	Turkey	03.2020–04.2020	Non-severe	671	56.3 ± 16.9	337 (50.2%)	9
			Survived	680	56.0 ± 16.7	343 (50.4%)	
			Decreased	92	68.5 ± 11.6	55 (59.8%)	
			Severe	128	56.3 ± 1.5	61 (47.7%)	
Cahyani et al., 02021	Indonesia	05.2020–09.2020	Non-severe	100	53.4 ± 1.8	55 (55.0%)	8
			Severe	113	64.0 ± 21.0	71 (62.8%)	
Çalışkan et al., 2022	Turkey	03.2020–04.2020	Non-severe	435	56.0 ± 26.0	215 (49.4%)	8
			Severe				

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Carranza Lira et al., 2021	Mexico	01.2021–04.2021	Severe	10	32.5 ± 4.6	NS	7
			Non-severe	43	28.9 ± 6.5	NS	
Çelik et al., 2022	Turkey	03.2020–08.2020	Survived	131	59.3 ± 11.8	79 (60.3%)	8
			Decreased	20	68.0 ± 11.8	11 (55.5%)	
Çelikkol et al., 2022	Turkey	03.2020–06.2020	Severe	25	NS	NS	7
			Non-severe	31	NS	NS	
Cempakadewi et al., 2023	Indonesia	01.2021–08.2021	Survived	72	NS	38 (52.8%)	8
			Decreased	19	NS	10 (52.6%)	
Chapanduka et al., 2022	South Africa	03.2020–02.2021	Survived	181	50.3 ± 2.6	107 (59.1%)	8
			Decreased	309	55.7 ± 2.4	146 (47.2%)	
Chaudhary et al., 2022	Pakistan	04.2020–06.2020	Survived	130	46.3 ± 17.2	73 (56.2%)	7
			Decreased	20	65.7 ± 12.2	12 (60.0%)	
Chelariu et al., 2022	Romania	10.2020–04.2022	Severe	94	NS	47 (50.0%)	8
			Non-severe	513	NS	247 (48.1%)	
			Survived	456	NS	216 (47.4%)	
			Decreased	132	NS	74 (56.1%)	
Chen et al., 2020	China	01.2020–03.2020	Severe	203	64.3 ± 13.9	131 (64.5%)	9
			Non-severe	345	67.3 ± 12.1	182 (52.8%)	
			Survived	445	53.5 ± 13.9	244 (54.8%)	
			Decreased	103	66.9 ± 12.1	69 (67.0%)	
Cîtu et al., 2022	Romania	05.2021–10.2021	Survived	91	62.0 ± 14.7	NS	8
			Decreased	17	70.2 ± 13.8	NS	
Cocos et al., 2022	Romania	04.2021–06.2021	Severe	71	66.7 ± 13.9	44 (62.0%)	8
			Non-severe	183	51.5 ± 16.9	97 (53.0%)	
			Survived	88	62.6 ± 16.2	28 (31.8%)	
Del et al., 2022	Turkey	08.2020–02.2021	Decreased	113	71.9 ± 11.5	44 (38.9%)	8
			Survived	75	45.9 ± 18.6	45 (60.0%)	
del Caprio-Orantes et al., 2020	Mexico	04.2020–05.2020	Survived	25	60.0 ± 17.5	9 (36.0%)	8
			Decreased				

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Demirkol et al., 2022	Turkey	04.2020–12.2020	Survived	1,284	62.5 ± 15.1	643 (50.1%)	8
			Decreased	237	72.9 ± 10.8	139 (58.6%)	
Edan et al., 2022	Iraq	05.2020–10.2020	Severe	32	64.3 ± 13.8	10 (31.3%)	7
			Non-severe	128	57.4 ± 13.2	54 (42.2%)	
El Hussini et al., 2023	Egypt	03.2020–04.2021	Severe	48	57.4 ± 15.7	22 (45.8%)	8
			Non-severe	45	54.7 ± 11.9	18 (40.0%)	
El Sharawy et al., 2021	Egypt	08.2020–01.2021	Severe	81	52.0 ± 10.0	47 (58.0%)	8
			Non-severe	89	50.3 ± 10.8	50 (56.2%)	
Elmorschedy et al., 2022	Egypt	06.2020–07.2020	Survived	22	53.2 ± 15.6	10 (45.5%)	8
			Decreased	81	63.3 ± 12.2	45 (55.6%)	
Embaby et al., 2022	Egypt	03.2021–08.2021	Survived	45	58.0 ± 12.5	28 (62.2%)	8
			Decreased	50	57.8 ± 14.8	29 (58.0%)	
Erdogan et al., 2021	Turkey	04.2020–08.2020	Severe	36	66.3 ± 6.0	26 (72.2%)	8
			Non-severe	268	43.3 ± 3.3	150 (56.0%)	
Ergenc et al., 2021	Turkey	02.2020–05.2020	Survived	584	54.2 ± 22.3	287 (49.1%)	8
			Decreased	51	75.6 ± 11.1	35 (68.6%)	
Ertekin et al., 2021	Turkey	04.2020–02.2021	Survived	280	56.5 ± 22.0	128 (45.7%)	8
			Decreased	220	80.0 ± 18.0	131 (59.5%)	
Eslamijouybari et al., 2020	Iran	01.2020–12.2020	Survived	422	NS	NS	7
			Decreased	98	NS	NS	
Farias et al., 2022	Brazil	03.2020–03.2021	Severe	422	67.9 ± 15.7	260 (61.6%)	9
			Non-severe	1,060	52.0 ± 17.3	470 (44.3%)	
Fernandes et al., 2023	Brazil	04.2020–03.2021	Survived	1,342	54.5 ± 17.7	630 (46.9%)	8
			Decreased	193	73.5 ± 13.7	107 (55.4%)	
Fois et al., 2020	Italy	03.2020–05.2020	Severe	129	61.0 ± 3.0	81 (62.8%)	8
			Non-severe	83	59.5 ± 4.0	50 (60.2%)	
			Survived	90	67.8 ± 3.5	56 (62.2%)	8
			Decreased	29	79.8 ± 2.8	21 (72.4%)	

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Foroughi et al., 2021	Iran	07.2020–08.2020	Severe	127	64.6 ± 16.9	73 (57.5%)	9
			Non-severe	123	58.1 ± 15.5	71 (57.7%)	
			Survived	192	59.3 ± 16.4	113 (58.9%)	
			Decreased	58	68.5 ± 14.7	31 (53.4%)	
Fors et al., 2022	Ecuador	03.2020–07.2020	Severe	635	NS	NS	7
			Non-severe	2,645	NS	NS	
Fu et al., 2020	China	01.2020–03.2020	Severe	4	66.0 ± 13.6	NS	7
			Non-severe	33	40.2 ± 17.4	NS	
Georgakopoulou et al., 2022	Greece	09.2020–04.2022	Survived	84	65.0 ± 18.0	NS	7
			Decreased	32	73.5 ± 11.5	NS	
George et al., 2022	India	09.2020–12.2020	Severe	113	63.5 ± 12.0	69 (61.1%)	8
			Non-severe	153	51.9 ± 18.5	72 (47.1%)	
Ghobadi et al., 2022	Iran	09.2020–12.2020	Survived	1,439	57.2 ± 16.8	786 (54.6%)	8
			Decreased	353	68.6 ± 14.1	202 (57.2%)	
Gjorgjevska et al., 2022	Macedonia	03.2020–04.2020	Severe	31	58.4 ± 10.0	23 (74.2%)	8
			Non-severe	21	53.1 ± 13.3	10 (47.6%)	
Gong et al., 2020	China	01.2020–03.2020	Severe	28	63.4 ± 4.4	16 (57.1%)	8
			Non-severe	161	46.3 ± 4.8	72 (44.7%)	
Gore et al., 2022	India	07.2020–12.2021	Severe	153	NS	102 (66.7%)	7
			Non-severe	450	NS	302 (67.1%)	
Gujar et al., 2021	India	07.2020–06.2021	Severe	264	59.3 ± 14.8	171 (64.8%)	8
			Non-severe	598	45.8 ± 16.9	388 (64.9%)	
Gümüşkaya et al., 2022	Turkey	03.2020–09.2020	Survived	3,350	58.3 ± 17.1	1,811 (54.1%)	8
			Decreased	564	70.0 ± 13.7	337 (59.8%)	
Gunawan et al., 2021	Indonesia	05.2021–07.2021	Severe	19	NS	NS	7
			Non-severe	27	NS	NS	
Güneysu et al., 2020	Turkey	03.2020–05.2020	Survived	85	56.8 ± 19.4	45 (52.9%)	8
			Decreased	84	72.0 ± 11.4	50 (59.5%)	

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Gupta et al., 2021	India	05.2020–08.2020	Survived	54	57.3 ± 11.4	42 (77.8%)	8
			Decreased	32	57.3 ± 15.2	27 (84.4%)	
Gutiérrez-Pérez et al., 2022	Mexico	10.2020–12.2021	Severe	353	NS	NS	8
			Non-severe	196	NS	NS	
Hashem et al., 2021	Egypt	06.2020–07.2020	Severe	145	57.4 ± 14.0	85 (58.6%)	8
			Non-severe	206	45.1 ± 17.1	98 (47.6%)	
Hassan et al., 2022	Egypt	03.2020–03.2020	Severe	30	NS	22 (73.3%)	7
			Non-severe	18	NS	9 (50.0%)	
Hocanlı et al., 2022	Turkey	06.2021–09.2021	Severe	27	73.3 ± 5.3	22 (81.5%)	8
			Non-severe	178	57.2 ± 8.7	91 (51.1%)	
			Survived	184	NS	NS	
			Decreased	21	NS	NS	
Hosseninia et al., 2023	Iran	08.2020–12.2020	Survived	274	68.1 ± 12.9	70 (25.5%)	8
			Decreased	46	72.5 ± 12.4	28 (60.9%)	
Hua et al., 2022	China	01.2020–02.2020	Survived	52	52.1 ± 17.0	31 (59.6%)	8
			Decreased	18	65.6 ± 15.6	11 (61.1%)	
Huang et al., 2020	China	01.2020–04.2020	Severe	29	66.5 ± 3.1	22 (75.9%)	8
			Non-severe	386	42.8 ± 4.8	195 (50.5%)	
Huyut et al., 2021	Turkey	03.2020–12.2020	Severe	190	72.9 ± 11.9	114 (60%)	8
			Non-severe	2,458	53.6 ± 18.6	1,219 (49.6%)	
Islamoglu et al., 2021	Turkey	03.2020–09.2020	Severe	61	64.9 ± 14.1	30 (49.2%)	8
			Non-severe	348	47.4 ± 17.6	180 (51.7%)	
Jain et al., 2021	India	07.2020–08.2020	Severe	29	59.9 ± 13.8	23 (79.3%)	8
			Non-severe	162	41.1 ± 15.3	117 (72.2%)	
Jeraiby et al., 2021	Saudi Arabia	05.2020–08.2020	Severe	30	52.1 ± 17.1	NS	8
			Non-severe	44	49.2 ± 17.3	NS	
Kaeley et al., 2021	India	05.2020–08.2020	Survived	199	52.3 ± 15.6	137 (68.8%)	8
			Decreased	137	65.2 ± 13.7	109 (79.6%)	

Table S3 (cont.) Baseline characteristics of studies included in meta-analysis

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Kalabin et al., 2021	USA	03.2020–04.2020	Severe	30	59.5 ± 11.6	18 (60%)	9
			Non-severe	154	65.8 ± 15.3	93 (60.4%)	
			Survived	152	63.9 ± 14.8	88 (57.9%)	
			Decreased	32	68.7 ± 16.1	23 (71.9%)	
Kalyon et al., 2021	Turkey	03.2020–06.2020	Survived	117	74.3 ± 3.3	44 (37.6%)	8
			Decreased	58	74.8 ± 2.8	28 (48.3%)	
Kamjai et al., 2022	Thailand	05.2021–08.2021	Severe	231	58.5 ± 11.7	102 (44.2%)	8
			Non-severe	243	53.5 ± 11.3	96 (39.5%)	
Karaaslan et al., 2021	Turkey	03.2020–07.2020	Survived	182	50.6 ± 15.4	91 (50.0%)	8
			Decreased	24	69.7 ± 16.0	12 (50.0%)	
Kazancıoğlu et al., 2020	Turkey	03.2020–04.2020	Severe	35	59.5 ± 11.5	20 (57.1%)	8
			Non-severe	85	42.3 ± 9.8	52 (61.2%)	
Ketenci et al., 2022	Turkey	10.2020–03.2021	Survived	148	62.6 ± 16.3	100 (67.6%)	8
			Decreased	131	72.5 ± 12.6	78 (59.5%)	
Khadzhieva et al., 2023	Russia	04.2020–12.2020	Survived	138	56.3 ± 3.2	73 (52.9%)	8
			Decreased	31	63.3 ± 2.8	18 (58.1%)	
Kudlinski et al., 2022	Poland	12.2020–06.2021	Survived	177	57	114 (64.4%)	8
			Decreased	108	63	75 (69.4%)	
Lalani et al., 2022	India	05.2020–06.2021	Severe	282	58.9 ± 14.6	NS	7
			Non-severe	448	58.7 ± 18.1	NS	
Lin et al., 2020	China	01.2020–02.2020	Severe	46	56.4 ± 13.4	29 (63.0%)	8
			Non-severe	22	44.0 ± 11.3	11 (50.0%)	
Liu et al., 2020	China	01.2020–02.2020	Severe	25	54.0 ± 5.5	14 (56.0%)	8
			Non-severe	59	47.0 ± 6.0	31 (52.5%)	
López-Escobar et al., 2021	Spain	03.2020–06.2020	Survived	1,767	66.0 ± 3.7	1,032 (58.4%)	9
			Decreased	321	82.5 ± 2.3	213 (66.4%)	
Mahmoud et al., 2022	Egypt	05.2020–10.2020	Severe	102	53.5 ± 12.0	67 (65.7%)	8
			Non-severe	196	39.1 ± 13.6	93 (47.4%)	



**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Mallappa et al., 2022	India	03.2020–03.2021	Survived	230	37.6 ± 19.8	135 (58.7%)	7
			Decreased	192	60.9 ± 13.8	133 (69.3%)	
Mandal et al., 2022	Nepal	11.2020–01.2021	Severe	114	57.5 ± 15.3	86 (75.4%)	8
			Non-severe	51	44.4 ± 14.3	38 (74.5%)	
Matin et al., 2022	Iran	03.2020–05.2020	Severe	372	NS	NS	7
			Non-severe	635	NS	NS	
Mertoglu et al., 2022	Turkey	03.2020–11.2020	Severe	223	NS	134 (60.1%)	7
			Non-severe	3,746	NS	1,868 (49.9%)	
Milenkovic et al., 2022	Serbia	04.2021–04.2021	Severe	374	73.0 ± 17.0	225 (60.2%)	9
			Non-severe	570	68.0 ± 18.0	306 (53.7%)	
			Survived	593	67.0 ± 18.0	324 (54.6%)	
			Decreased	351	74.0 ± 15.0	207 (59.0%)	
Mirjanic-Azaric et al., 2023	Bosnia and Herzegovina	03.2021–04.2021	Survived	20	63.0 ± 12.4	12 (60.0%)	8
			Decreased	69	70.0 ± 8.2	45 (65.2%)	
Mohammed et al., 2021	Saudi Arabia	NS	Survived	95	NS	NS	7
			Decreased	29	NS	NS	
Moisa et al., 2021	Romania	04.2020–02.2021	Severe	167	65.2 ± 10.7	109 (65.3%)	9
			Non-severe	105	58.5 ± 12.4	77 (73.3%)	
			Survived	130	58.2 ± 11.8	93 (71.5%)	
			Decreased	142	66.8 ± 10.5	93 (65.5%)	
Muresan et al., 2022	Romania	01.2020–03.2022	Survived	746	70.2 ± 12.7	397 (53.2%)	8
			Decreased	143	72.2 ± 13.8	77 (53.8%)	
Myari et al., 2021	Greece	03.2020–06.2021	Severe	272	69.0 ± 4.0	169 (62.1%)	8
			Non-severe	96	49.5 ± 4.0	47 (49.0%)	
Nasir et al., 2021	Bangladesh	05.2020–09.2020	Survived	60	58.2 ± 12.0	42 (70.0%)	8
			Decreased	39	65.0 ± 11.9	30 (76.9%)	
Nikhil et al., 2022	India	09.2020–04.2021	Severe	234	NS	170 (72.6%)	7
			Non-severe	266	NS	189 (71.1%)	

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Noor et al., 2020	Pakistan	03.2020–04.2020	Severe	370	48.1 ± 17.0	330 (89.2%)	8
			Non-severe	365	44.5 ± 15.5	323 (88.5%)	
Núñez et al., 2021	Mexico	03.2020–04.2020	Severe	80	51.8 ± 2.8	62 (77.5%)	8
			Non-severe	202	50.9 ± 3.4	115 (56.9%)	
Nurlu et al., 2021	Turkey	05.2020–05.2020	Survived	681	56.9 ± 15.0	355 (52.1%)	8
			Decreased	62	66.9 ± 12.9	38 (61.3%)	
Oblitas et al., 2022	Spain	03.2020–05.2020	Survived	947	61.4 ± 15.0	552 (58.3%)	8
			Decreased	166	79.4 ± 10.0	99 (59.6%)	
Pdabasi et al., 2021	Turkey	05.2020–06.2020	Severe	37	65.8 ± 11.8	25 (67.6%)	8
			Non-severe	111	60.5 ± 12.0	38 (34.2%)	
Ok et al., 2020	Turkey	04.2020–05.2020	Severe	54	68.3 ± 14.9	24 (44.4%)	8
			Non-severe	85	47.2 ± 15.7	38 (44.7%)	
Olivieri et al., 2022	Italy	03.2020–06.2021	Survived	421	85.6 ± 7.2	159 (37.8%)	8
			Decreased	220	88.5 ± 5.5	107 (48.6%)	
Ortega-Rojas et al., 2022	Peru	03.2020–05.2020	Survived	82	67.5 ± 1.3	59 (72.0%)	8
			Decreased	180	72.5 ± 2.3	129 (71.7%)	
Ozdemir et al., 2021	Turkey	03.2020–04.2020	Survived	1,971	40.8 ± 14.3	1,137 (57.7%)	8
			Decreased	41	69.6 ± 12.8	29 (70.7%)	
Ozturk et al., 2021	Turkey	04.2020–10.2020	Severe	48	NS	17 (35.4%)	7
			Non-severe	210	NS	79 (37.6%)	
Pakos et al., 2020	USA	03.2020–04.2020	Survived	190	NS	NS	7
			Decreased	52	NS	NS	
Pál et al., 2022	Romania	09.2020–10.2021	Survived	28	58.0 ± 14.0	20 (71.4%)	8
			Decreased	89	66.0 ± 12.0	46 (51.7%)	
Pan et al., 2020	Turkey	02.2020–03.2020	Survived	99	62.3 ± 3.2	53 (53.5%)	8
			Decreased	21	71.1 ± 3.1	17 (81.0%)	
Peraka et al., 2023	India	10.2020–02.2021	Severe	43	56.6 ± 13.7	32 (74.4%)	8
			Non-severe	99	53.4 ± 16.3	62 (62.6%)	
Pitre et al., 2021	Canada	03.2020–12.2020	Severe	63	58.8 ± 4.8	40 (63.5%)	8
			Non-severe	273	65.3 ± 6.3	130 (47.6%)	

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Prasetya et al., 2021	Indonesia	03.2020–10.2020	Severe	54	NS	NS	8
			Non-severe	337	NS	NS	
			Survived	369	NS	NS	
			Decreased	22	NS	NS	
Pujani et al., 2021	India	06.2020–07.2020	Severe	169	55.7 ± 14.5	122 (72.2%)	8
			Non-severe	337	35.3 ± 11.8	196 (58.2%)	
			Survived	473	NS	NS	
			Decreased	33	NS	NS	
Pujani et al., 2021 (B)	India	10.2020–11.2020	Severe	39	NS	22 (56.4%)	8
			Non-severe	61	NS	40 (65.6%)	
			Survived	85	NS	NS	
			Decreased	15	NS	NS	
Qiu et al., 2022	China	04.2022–06.2022	Survived	2,290	71.9 ± 16.5	959 (41.9%)	8
			Decreased	57	83.7 ± 9.5	19 (33.3%)	
Qu et al., 2020	China	01.2020–02.2020	Severe	3	60.0 ± 5.3	NS	7
			Non-severe	27	49.4 ± 14.9	NS	
Ramos-Lopez et al., 2021	Mexico	03.2020–05.2020	Survived	1,645	64.4 ± 16.0	968 (58.8%)	8
			Decreased	449	76.2 ± 14.1	301 (67.0%)	
Ramos-Penafiel et al., 2020	Mexico	04.2020–05.2020	Survived	71	52.3 ± 10.2	48 (67.6%)	8
			Decreased	54	51.8 ± 13.3	32 (59.3%)	
Ravindra et al., 2022	India	04.2021–06.2021	Severe	49	55.7 ± 16.8	34 (69.4%)	8
			Non-severe	51	45.6 ± 16.1	42 (82.4%)	
			Survived	88	NS	NS	
			Decreased	12	NS	NS	
Reddy et al., 2022	India	06.2020–05.2021	Severe	24	NS	NS	7
			Non-severe	186	NS	NS	
Rehman et al., 2022	Pakistan	12.2020–01.2021	Severe	44	55.0 ± 11.0	NS	7
			Non-severe	106	58.0 ± 14.0	NS	

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Rios et al., 2022	Mexico	03.2020–06.2020	Survived	115	46.0 ± 12.6	79 (68.7%)	8
			Decreased	77	52.7 ± 11.9	66 (85.7%)	
Rokini et al., 2020	Iran	02.2020–04.2020	Survived	205	NS	129 (62.9%)	7
			Decreased	28	NS	20 (71.4%)	
Rokini et al., 2022	Iran	06.2020–02.2021	Survived	291	NS	NS	7
			Decreased	26	NS	NS	
Rose et al., 2022	Switzerland	02.2020–12.2020	Severe	313	64.0 ± 12.3	208 (66.5%)	9
			Non-severe	141	58.8 ± 12.8	83 (58.9%)	
			Survived	411	NS	260 (63.3%)	
Ruiz et al., 2020	Spain	03.2020–03.2020	Decreased	43	NS	31 (72.1%)	8
			Survived	68	63.7 ± 2.7	37 (54.4%)	
Sadeghi et al., 2021	Iran	02.2020–04.2020	Decreased	47	52.5 ± 6.0	31 (66.0%)	8
			Survived	162	52.5 ± 4.0	90 (55.6%)	
Saeedifar et al., 2023	Iran	NS	Decreased	52	68.7 ± 4.1	29 (55.8%)	7
			Survived	30	NS	NS	
Sahin et al., 2023	Turkey	01.2021–06.2021	Non-severe	30	NS	NS	8
			Survived	76	56.3 ± 11.3	34 (44.7%)	
Salem et al., 2023	Saudi Arabia	03.2020–12.2020	Decreased	116	37.1 ± 10.7	49 (42.2%)	7
			Survived	107	NS	NS	
Şan et al., 2021	Turkey	NS	Non-severe	51	NS	NS	8
			Severe	44	67.5 ± 13.8	27 (61.4%)	
Sana et al., 2022	India	03.2021–03.2021	Non-severe	344	42.0 ± 23.0	192 (55.8%)	7
			Severe	69	NS	NS	
Shan et al., 2023	China	01.2020–03.2020	Non-severe	81	NS	NS	8
			Severe	46	65.2 ± 13.3	27 (58.7%)	
Shaveisi-Zadeh et al., 2022	Iran	03.2020–02.2021	Non-severe	49	53.3 ± 17.5	22 (44.9%)	8
			Severe	20	60.8 ± 19.2	8 (40.0%)	
			Non-severe	57	61.9 ± 17.4	27 (47.4%)	8

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Simon et al., 2022	France	03.2020–04.2020	Severe	246	65.3 ± 2.5	176 (71.5%)	9
			Non-severe	789	69.8 ± 3.8	433 (54.9%)	
			Survived	884	66.8 ± 3.5	517 (58.5%)	
			Decreased	139	78.0 ± 2.7	85 (61.2%)	
Sinatti et al., 2022	Italy	04.2020–11.2020	Severe	56	69.5 ± 4.4	35 (62.5%)	8
			Non-severe	94	55.4 ± 3.8	57 (60.6%)	
Singh et al., 2020	India	04.2020–05.2020	Severe	44	NS	NS	7
			Non-severe	38	NS	NS	
Singh et al., 2021	India	06.2020–12.2020	Severe	93	53.7 ± 16.4	65 (69.9%)	8
			Non-severe	108	50.9 ± 16.3	66 (61.1%)	
			Survived	110	NS	NS	
			Decreased	91	NS	NS	
Singh et al., 2022	India	05.2021–06.2021	Severe	50	54.4 ± 16.9	37 (74.0%)	8
			Non-severe	50	43.1 ± 14.7	22 (44.0%)	
Singh et al., 2023	India	06.2020–07.2020	Severe	139	57.3 ± 12.5	NS	8
			Non-severe	472	44.7 ± 15.7	NS	
			Survived	530	NS	NS	
			Decreased	81	NS	NS	
Suastika et al., 2021	Indonesia	04.2020–10.2020	Severe	133	52.8 ± 10.8	85 (63.9%)	8
			Non-severe	374	40.8 ± 9.5	224 (59.9%)	
Suliman et al., 2022	Egypt	08.2020–12.2020	Severe	22	NS	NS	7
			Non-severe	48	NS	NS	
Sun et al., 2020	China	01.2020–02.2020	Severe	27	62.0 ± 4.5	18 (66.7%)	8
			Non-severe	89	46.4 ± 2.9	42 (47.2%)	
Sunil et al., 2022	India	04.2020–07.2020	Severe	74	NS	NS	7
			Non-severe	23	NS	NS	
Sutandyo et al., 2021	Indonesia	05.2020–01.2021	Survived	15	60.6 ± 9.2	10 (66.7%)	8
			Decreased	12	59.0 ± 10.3	10 (83.3%)	

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Teha et al., 2021	Egypt	02.2021–04.2021	Survived	385	46.6 ± 16.9	180 (46.8%)	8
			Decreased	40	60.3 ± 13.6	18 (45.0%)	
Tekin et al., 2022	Turkey	NS	Survived	194	66.6 ± 10.7	102 (52.6%)	7
			Decreased	157	71.5 ± 13.3	73 (46.5%)	
Tumer et al., 2022	Turkey	NS	Severe	143	59.3 ± 5.3	80 (55.9%)	8
			Non-severe	128	50.0 ± 5.7	80 (62.5%)	
Tuncay et al., 2021	Turkey	NS	Severe	21	68.1 ± 15.4	15 (71.4%)	8
			Non-severe	40	47.4 ± 12.5	22 (55.0%)	
Ulra et al., 2020	Spain	03.2020–04.2020	Severe	27	65.6 ± 14.1	20 (74.1%)	8
			Non-severe	145	57.9 ± 13.1	84 (57.9%)	
Velazquez et al., 2021	Spain	03.2020–04.2020	Severe	185	67.8 ± 2.2	138 (74.6%)	8
			Non-severe	2,069	69.5 ± 4.0	1,202 (58.1%)	
Wang et al., 2020	China	02.2020–03.2020	Survived	119	63.0 ± 2.2	49 (41.2%)	8
			Decreased	12	78.8 ± 4.3	7 (58.3%)	
Wang et al., 2020 (B)	China	01.2020–02.2020	Survived	372	53.8 ± 4.8	162 (43.5%)	8
			Decreased	78	70.8 ± 2.5	44 (56.4%)	
Wang et al., 2020 (C)	China	01.2020–03.2020	Severe	24	55.3 ± 4.8	15 (62.5%)	8
			Non-severe	37	51.0 ± 5.5	16 (43.2%)	
Wang et al., 2020 (D)	China	01.2020–02.2020	Severe	10	46.5 ± 6.0	6 (60.0%)	8
			Non-severe	35	38.5 ± 11.5	17 (48.6%)	
Wang et al., 2021	China	12.2019–03.2020	Severe	190	65.3 ± 2.8	115 (60.5%)	8
			Non-severe	448	55.6 ± 3.5	186 (41.5%)	
Waris et al., 2021	Pakistan	05.2020–09.2020	Severe	25	59.3	17 (68.0%)	8
			Non-severe	76	44.8	53 (69.7%)	
Xia et al., 2022	China	01.2020–03.2020	Severe	48	56.0 ± 15.2	28 (58.3%)	8
			Non-severe	77	44.7 ± 14.4	43 (55.8%)	
Xue et al., 2020	China	02.2020–03.2020	Severe	58	64 (49.8–73)	34 (58.6%)	8
			Non-severe	56	60.5 (52.25–68.75)	30 (53.6%)	

**Table S3 (cont.) Baseline characteristics of studies included in meta-analysis**

Study	Country	Study period	Research group	No. of participants	Age [years]	Male sex	NOS score
Yang et al., 2020	China	01.2020–02.2020	Severe	24	57.9 ± 11.8	18 (75.0%)	8
			Non-severe	69	42.1 ± 18.6	38 (55.1%)	
Yildirim et al., 2021	Turkey	09.2020–12.2020	Severe	68	71.0 ± 13.1	42 (61.8%)	9
			Non-severe	680	61.0 ± 15.2	368 (54.1%)	
			Survived	701	61.0 ± 15.1	382 (54.5%)	
			Decreased	47	74.0 ± 12.7	28 (59.6%)	
Yilmaz et al., 2023	Turkey	01.2020–01.2021	Survived	128	70.3 ± 12.9	65 (50.8%)	8
			Decreased	338	72.7 ± 12.7	200 (59.2%)	
Zeng et al., 2020	China	01.2020–03.2020	Severe	165	68 (64–75)	94 (57.0%)	8
			Non-severe	52	65 (62=70)	22 (42.3%)	
Zhang et al., 2020	China	01.2020–02.2020	Severe	113	NS	NS	7
			Non-severe	251	NS	NS	
Zhang et al., 2021	China	01.2020–03.2020	Severe	6	48.0 ± 15.5	5 (83.3%)	8
			Non-severe	72	43.5 ± 16.0	45 (62.5%)	
Zhang et al., 2021 (B)	China	01.2020–03.2020	Severe	132	NS	NS	7
			Non-severe	329	NS	NS	
Zhao et al., 2020	China	01.2020–02.2020	Severe	74	68 (60–72)	38 (51.4%)	8
			Non-severe	211	64 (56–70)	96 (45.5%)	
Zhou et al., 2020	China	01.2020–03.2020	Severe	164	NS	NS	7
			Non-severe	140	NS	NS	
Zhu et al., 2020	China	01.2020–03.2020	Severe	16	57.5 ± 11.7	9 (56.3%)	8
			Non-severe	111	50.0 ± 15.5	73 (65.8%)	

NOS — Newcastle Ottawa scale; NS — not specified