

Figure S1 Flow diagram of the study selection process.

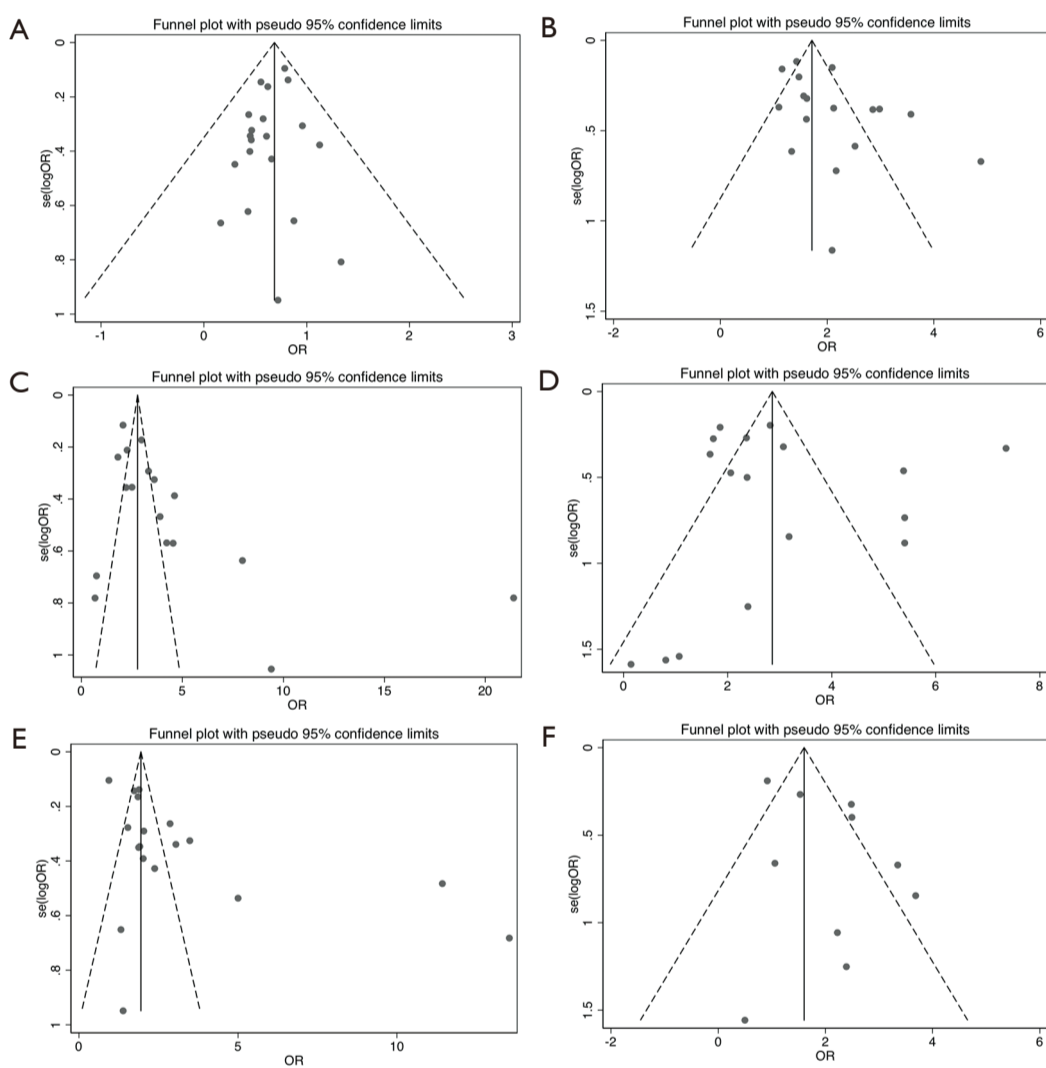


Figure S2 Egger's funnel plot of the comparisons of female (A), diabetes (B), cardiovascular disease (C), respiratory disease (D), hypertension (E) and cancer (F) between survivors and non-survivors.

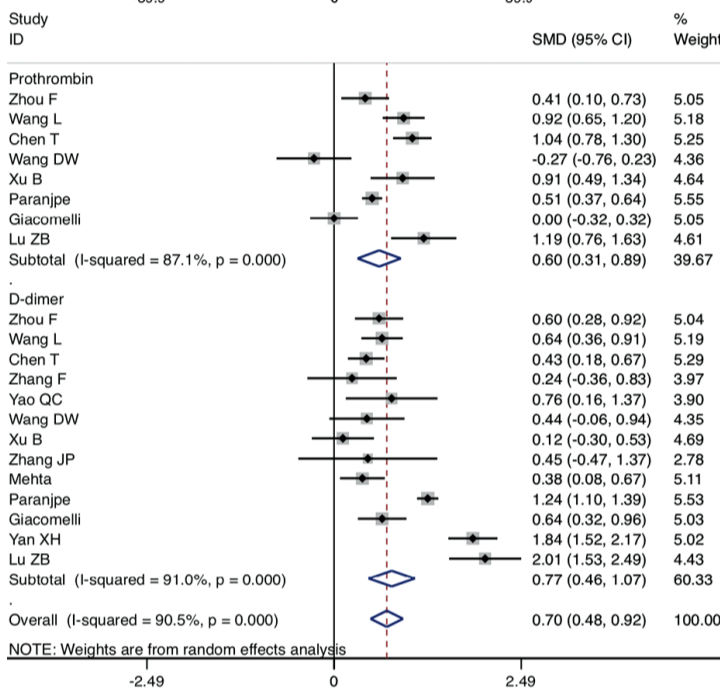
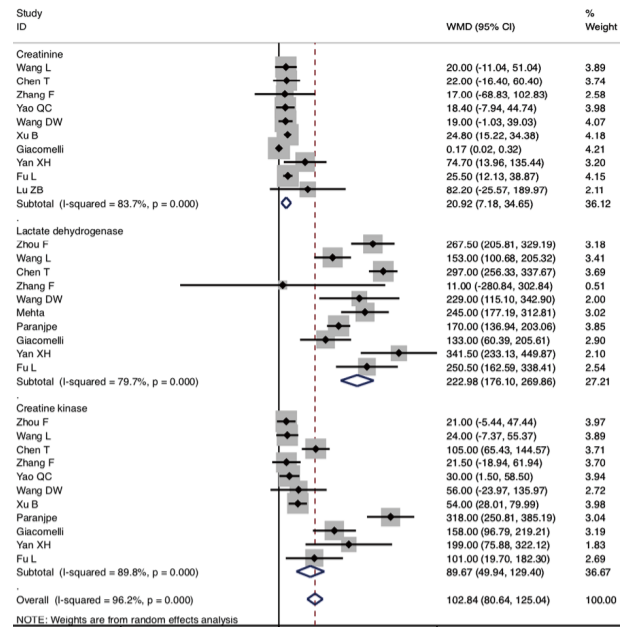
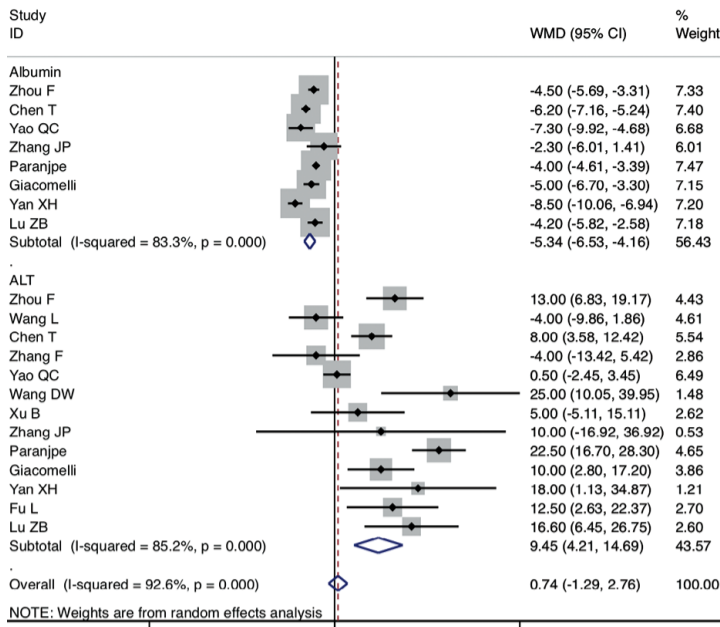


Figure S3 Forest plots of blood biochemistry in non-survivors vs survivors.

Table S1 Quality control of the selected studies according to the criteria of the Agency for Healthcare Research and Quality (AHRQ).

Study	Quality assessment by AHRQ											Score
	1	2	3	4	5	6	7	8	9	10	11	
Zhou F (28)	★	★	★	★	★	★	★	★	★	★	○	10
Wang L (29)	★	★	★	★	★	★	★	★	★	★	○	10
Chen T (30)	★	★	★	★	★	★	★	★	★	★	○	10
Zhang F (31)	★	★	★	★	★	★	★	○	★	○	○	8
Yao QC (32)	★	★	★	★	★	★	★	★	★	○	○	9
Wang DW (33)	★	★	★	★	★	★	★	★	★	○	○	9
Xu B (34)	★	★	★	★	★	★	★	○	★	★	○	9
Zhang JP (35)	★	★	★	★	★	★	○	○	★	★	○	8
Mehra (36)	★	★	★	★	★	★	★	★	★	★	○	10
Mehta (37)	★	★	★	★	★	★	★	★	★	★	○	10
Paranjpe (38)	★	★	★	★	★	★	★	★	★	★	○	10
Nowak (39)	★	★	★	★	○	★	★	★	★	★	○	9
Giacomelli (40)	★	★	★	★	○	○	★	★	★	★	○	8
Yan XH (41)	★	★	★	★	★	○	★	○	★	★	○	8
Fu L (42)	★	★	★	★	★	★	★	○	○	★	○	8
Lu ZB (43)	★	★	★	★	○	★	★	★	★	○	○	8
Yuan ML (44)	★	★	★	★	★	★	★	★	○	○	○	8
Borghesi (45)	★	★	★	★	★	○	★	★	○	★	○	8
Lee Y W (46)	★	★	★	★	★	★	★	★	★	★	○	10
Bhangu (47)	★	★	★	★	★	★	★	★	★	★	○	10

1, source of information; 2, inclusion and exclusion criteria; 3, time period; 4, consecutive subjects; 5, mask of subjective components; 6, quality assurance; 7, explanation of exclusions; 8, control of confounding factors; 9, handling of missing data; 10, completeness of data collection; 11, follow-up. ★, present and score = 1; ○, not present or unclear and score = 0.

Table S2 Complications of patients with COVID-19

Study	Sepsis	Respiratory failure	ARDS	Heart failure	Septic shock	Acute cardiac injury	Acute kidney injury	Secondary infection
Zhou F (28)	54 [100]; 58 [42]	53 [98]; 50 [36]	50 [93]; 9 [7]	28 [52]; 16 [12]	38 [70]; 0 [0]	32 [59]; 1 [1]	27 [50]; 1 [1]	27 [50]; 1 [1]
Wang L (29)	NA	NA	56 [88]; 15 [6]	39 [65]; 33 [12]	3 [5]; 5 [2]	39 [65]; 33 [12]	17 [28]; 11 [4]	49 [82]; 94 [34]
Chen T (30)	113 [100]; 83 [52]	18/35 [51]; 0/32 [0]	113 [100]; 83 [52]	41/83 [49]; 3/94 [3]	46 [41]; 0 [0]	72/94 [77]; 18/109 [17]	28 [25]; 1 [1]	NA
Zhang F (31)	NA	NA	NA	NA	NA	NA	NA	NA
Yao QC (32)	11 [92]; 24 [25]	NA	12 [100]; 33 [34]	NA	6 [50]; 0 [0]	6 [50]; 2 [2]	7 [58]; 9 [9]	NA
Wang DW (33)	NA	NA	17 [89.5]; 11 [12.5]	NA	19 [100]; 3 [3.4]	8 [42.1]; 4 [4.5]	14 [73.7]; 0 [0]	4 [21.1]; 1 [1.1]
Xu B (34)	NA	NA	NA	NA	NA	NA	NA	12 [42.9]; 10 [8.5]
Zhang JP (35)	NA	NA	NA	NA	NA	NA	NA	NA
Mehra (36)	NA	NA	NA	NA	NA	NA	NA	NA
Mehta (37)	NA	NA	NA	NA	NA	NA	NA	NA
Paranjpe (38)	NA	NA	NA	NA	NA	NA	NA	NA
Nowak (39)	NA	NA	30 [65.2]; 11 [8.9]	NA	11 [23.9]; 6 [4.9]	NA	10 [21.7]; 7 [5.7]	38 [82.6]; 49 [39.8]
Giacomelli (40)	NA	NA	NA	NA	NA	NA	NA	NA
Yan XH (41)	NA	NA	NA	NA	NA	NA	NA	NA
Fu L (42)	NA	NA	NA	NA	NA	NA	NA	NA
Lu ZB (43)	NA	NA	31 [100]; 11 [12]	NA	14 [45.2]; 0 [0]	25 [80.6]; 9 [9.8]	15 [48.4]; 3 [3.3]	NA
Yuan ML (44)	NA	NA	10 [100]; 1 [6]	NA	NA	NA	NA	NA
Borghesi (45)	NA	NA	NA	NA	NA	NA	NA	NA
Lee YW (46)	NA	NA	NA	NA	NA	NA	NA	NA
Bhangu (47)	NA	NA	NA	NA	NA	NA	NA	NA

Data are n [%] or n/N [%]; showed as: non-survivors; survivors. ARDS, acute respiratory distress syndrome; NA, not available.