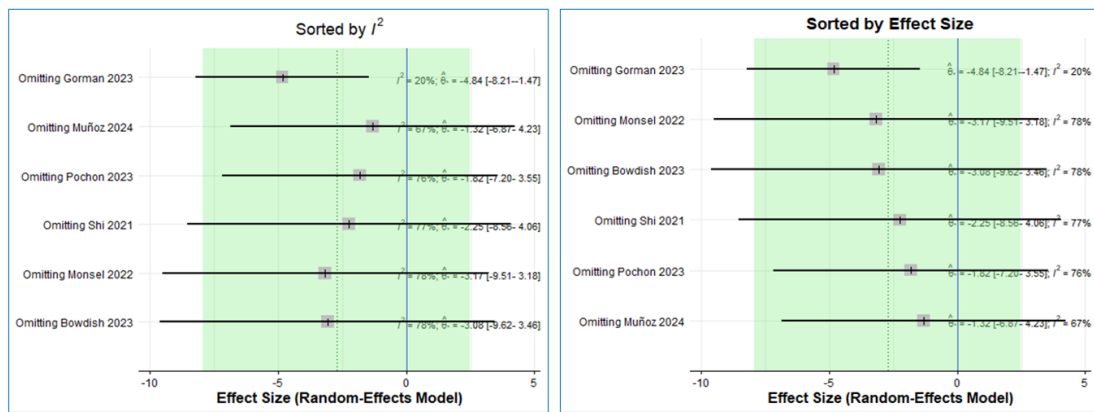
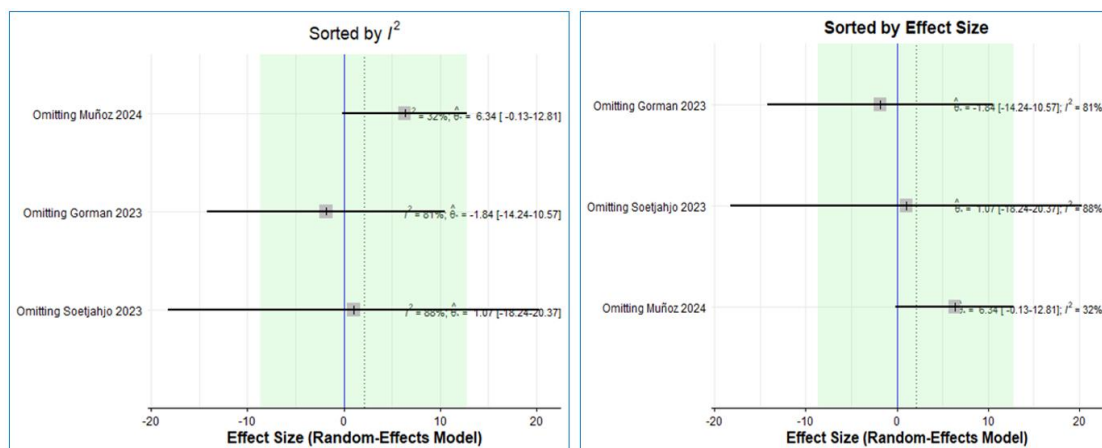
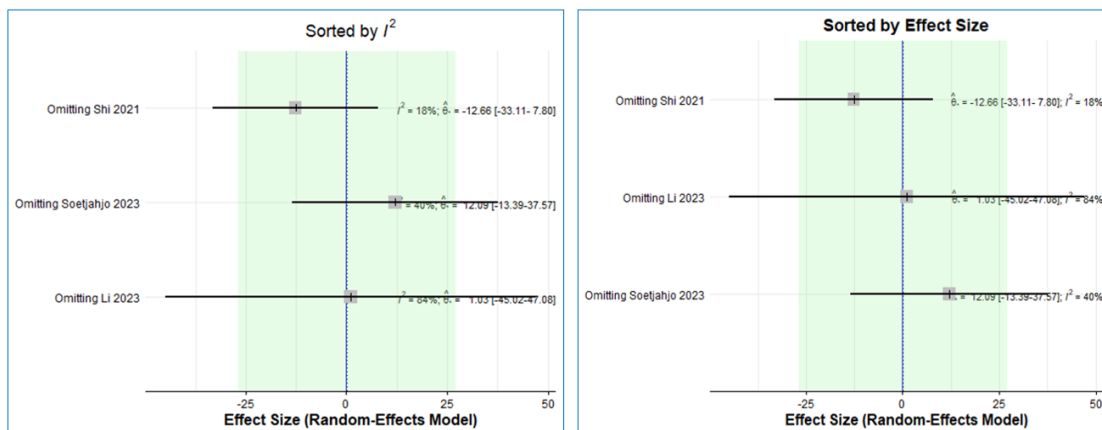




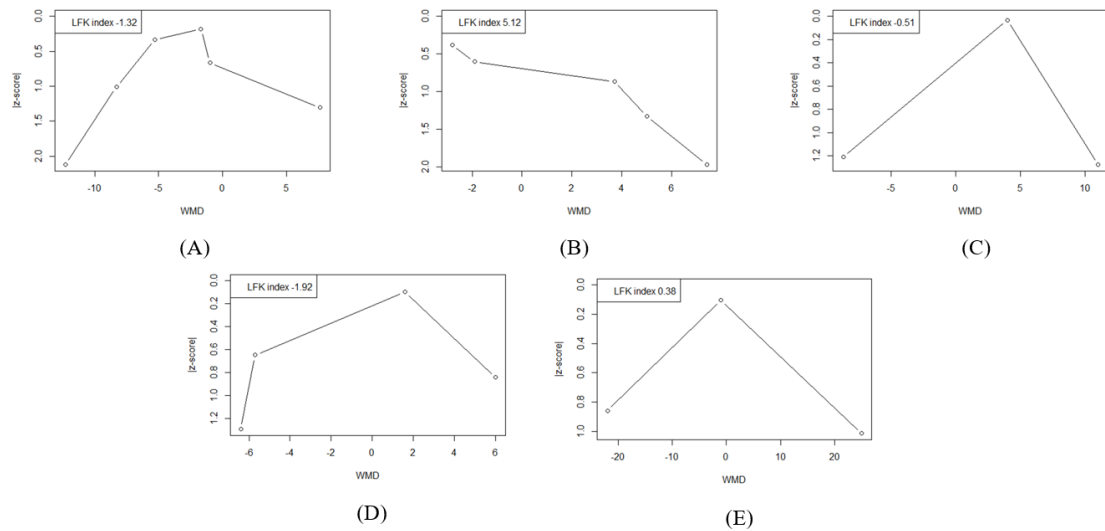
Supplementary Figure 1 Sensitivity analysis of ventilation duration days.



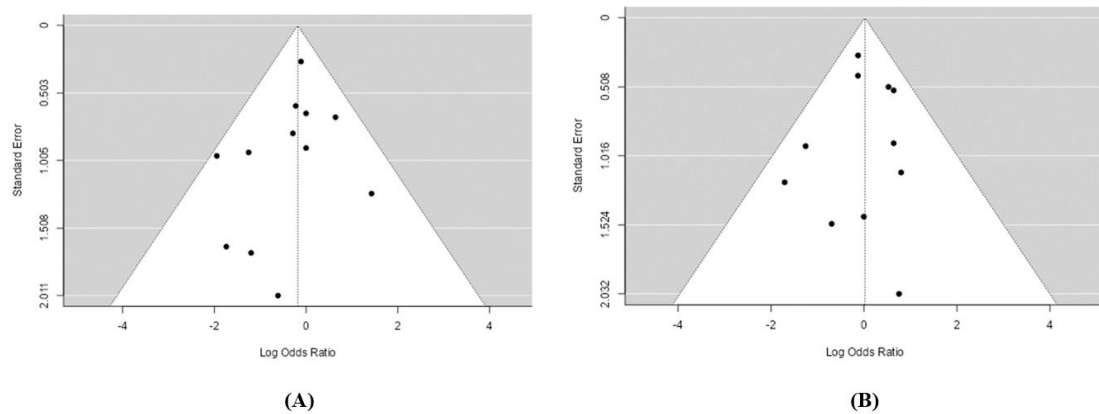
Supplementary Figure 2 Sensitivity analysis of the length of hospital stay.



Supplementary Figure 3 Sensitivity analysis of 6MWD.



Supplementary Figure 4 Doi plot showing the risk of publication bias in the meta-analysis. A: Duration of mechanical ventilation; B: Duration of ventilation-free days; C: Duration of hospital stay; D: duration of ICU stay; E: 6-MWD.



Supplementary Figure 5 Funnel plot. Funnel plot showing the risk of publication bias of (A) mortality odds ratio and (B) adverse events odds ratio.

Supplementary Table 1 Search strategy for PubMed database

Search number	Query	Results
1	COVID-19[MeSH]	269278
2	"Covid-19"[tw] OR "coronavirus"[tw] OR "SARS-CoV-2" OR "novel coronavirus"[tw] OR "Coronavirus infections"[tw]	448216
3	#1 OR #2	448216
4	Respiratory Distress Syndrome[MeSH]	41646
5	"ARDS"[tw] OR "acute respiratory distress syndrome"[tw] OR "adult respiratory distress syndrome"[tw] OR "acute lung injury"[tw] OR "respiratory failure"[tw]	88933
6	#4 OR #5	110025
7	Mesenchymal Stem Cells[MeSH]	53561
8	"mesenchymal stem cells"[tw] OR "mesenchymal stromal cells"[tw] OR "MSCs"[tw] OR "stem cells"[tw] OR "bone marrow mesenchymal stem cells"[tw] OR "umbilical cord mesenchymal stem cells" OR "adipose tissue derived mesenchymal stem cells"[tw] OR "wharton's jelly mesenchymal stem cells"[tw]	347639
9	Exosomes[MeSH]	15809
10	"exosomes"[tw] OR "extracellular vesicles"[tw] OR "secretomes"[tw]	46908
11	#7 OR #8 OR #9 OR #10	385407
12	#3 AND #6 AND #11	323