

		Risk of bias domains							
		D1	D2	D3	D4	D5	D6	D7	Overall
Study	1	+	-	X	+	+	+	+	+
	2	+	-	X	X	+	+	+	X
	3	+	+	+	X	+	+	+	+
	4	+	-	X	X	+	+	+	X
	5	+	-	+	X	+	+	+	+
	6	+	+	+	X	+	+	+	+
	7	+	+	X	X	+	+	+	+
	8	+	-	-	X	+	+	+	X
	9	+	-	X	X	+	+	+	X
	10	+	-	+	X	+	+	+	+
	11	+	+	+	+	+	+	+	+
	12	+	-	+	X	+	+	+	+
	13	+	-	X	+	+	+	+	+

D1: Random sequence generation
D2: Allocation concealment
D3: Blinding of participants and personnel
D4: Blinding of outcome assessment
D5: Incomplete outcome data
D6: Selective reporting
D7: Other bias

Judgement
 Low
 Unclear
 High

Figure S1. Risk of bias of included studies.

(1) Cannata-Andía et al., 2022; (2) Cervero et al., 2022; (3) Murai et al., 2021; (4) Karonova et al., 2022; (5) Jaun e al., 2023; (6) Bychinin et al., 2022; (7) Zurita-Cruz et al., 2022; (8) Sarhan et al., 2022; (9) Annweiler et al., 2022; (10) Mariani et al., 2022; (11) De Niet et al., 2022; (12) Maghbooli et al., 2021; (13) Domazet Bugarin et al.,2023.

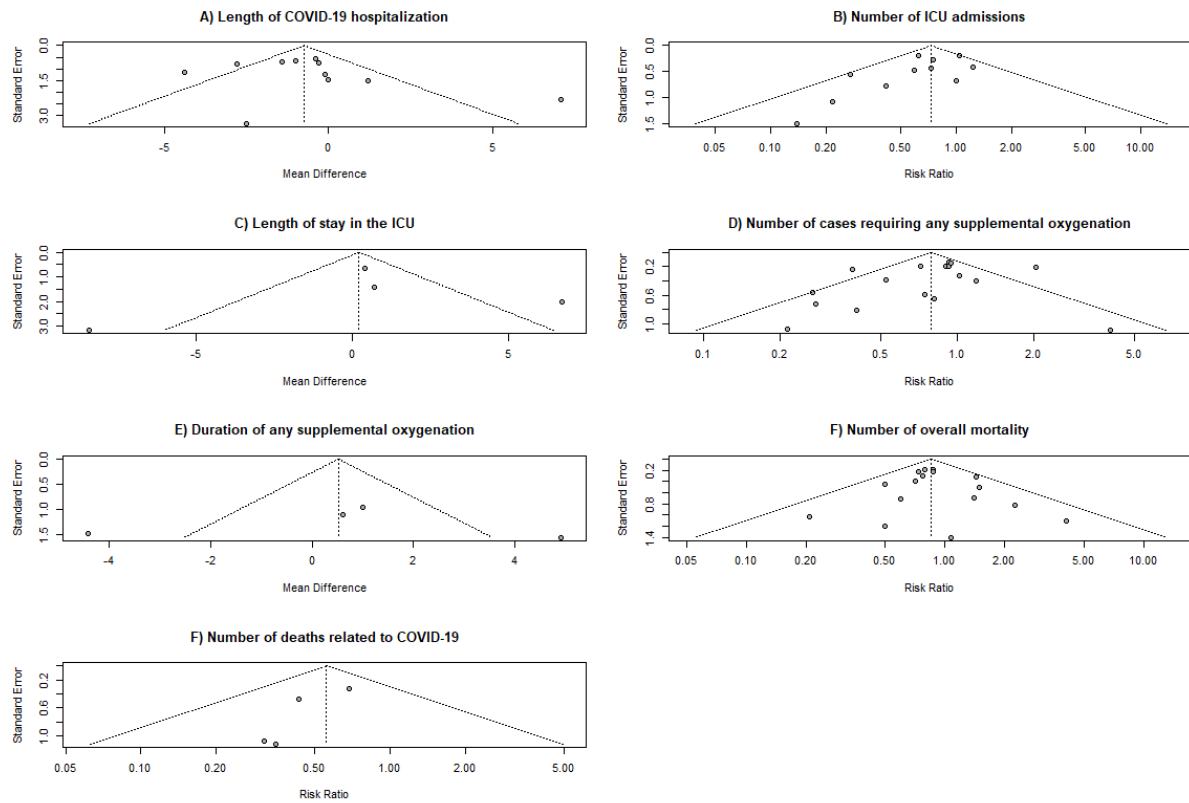


Figure S2. Funnel plots for the associations of between vitamin D3 supplementation and COVID-19.