

# Tables and Figures

Table S1. Research strategy.

Database Searched	N.º	Search Words	Search Strategy	Results
PubMed	1	COVID-19 Myocarditis athletes	("COVID-19"[All Fields] OR "COVID-2019"[All Fields] OR "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "2019-nCoV"[All Fields] OR "SARS-CoV-2"[All Fields] OR "2019nCoV"[All Fields] OR ("Wuhan"[All Fields] AND ("coronavirus"[MeSH Terms] OR "coronavirus"[All Fields])) AND (2019/12[PDAT] OR 2020[PDAT])) AND ("myocarditis"[MeSH Terms] OR "athletes"[All Fields])	52
PubMed	2	Sars-CoV-2 Myocarditis athletes	("COVID-19"[All Fields] OR "COVID-2019"[All Fields] OR "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "2019-nCoV"[All Fields] OR "SARS-CoV-2"[All Fields] OR "2019nCoV"[All Fields] OR ("Wuhan"[All Fields] AND ("coronavirus"[MeSH Terms] OR "coronavirus"[All Fields])) AND (2019/12[PDAT] OR 2020[PDAT])) AND ("myocarditis"[MeSH Terms] OR "athletes"[All Fields])	38
PubMed	3	COVID-19 CMR athletes	("COVID-19"[All Fields] OR "COVID-2019"[All Fields] OR "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "2019-nCoV"[All Fields] OR "SARS-CoV-2"[All Fields] OR "2019nCoV"[All Fields] OR ("Wuhan"[All Fields] AND ("coronavirus"[MeSH Terms] OR "coronavirus"[All Fields])) AND (2019/12[PDAT] OR 2020[PDAT])) AND ("CMR"[MeSH Terms] OR "CMR"[All Fields] OR "athletes"[All Fields])	17
PubMed	4	Sars-CoV-2 CMR athletes	("COVID-19"[All Fields] OR "COVID-2019"[All Fields] OR "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "2019-nCoV"[All Fields] OR "SARS-CoV-2"[All Fields] OR "2019nCoV"[All Fields] OR ("Wuhan"[All Fields] AND ("coronavirus"[MeSH Terms] OR "coronavirus"[All Fields])) AND (2019/12[PDAT] OR 2020[PDAT])) AND ("CMR"[MeSH Terms] OR "CMR"[All Fields] OR "athletes"[All Fields])	14
PubMed	5	COVID-19 Pericardial effusion athletes	("COVID-19"[All Fields] OR "COVID-2019"[All Fields] OR "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "2019-nCoV"[All Fields] OR "SARS-CoV-2"[All Fields] OR "2019nCoV"[All Fields] OR ("Wuhan"[All Fields] AND ("coronavirus"[MeSH Terms] OR "coronavirus"[All Fields])) AND (2019/12[PDAT] OR 2020[PDAT])) AND ("pericardial effusion"[MeSH Terms] OR "athletes"[All Fields] AND "athletes"[All Fields]) OR "pericardial"[All Fields] OR "athletes"[All Fields])	4
PubMed	6	Sars-CoV-2 Pericardial effusion athletes	("COVID-19"[All Fields] OR "COVID-2019"[All Fields] OR "severe acute respiratory syndrome coronavirus 2"[Supplementary Concept] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "2019-nCoV"[All Fields] OR "SARS-CoV-2"[All Fields] OR "2019nCoV"[All Fields] OR ("Wuhan"[All Fields] AND ("coronavirus"[MeSH Terms] OR "coronavirus"[All Fields])) AND (2019/12[PDAT] OR 2020[PDAT])) AND ("pericardial effusion"[MeSH Terms] OR "athletes"[All Fields] AND "athletes"[All Fields]) OR "pericardial"[All Fields] OR "athletes"[All Fields])	4
PubMed	6		Results	129
SCOPUS	1	COVID-19 Myocarditis athletes	(Covid 19 myocarditis AND athletes)	54
SCOPUS	2	Sars-CoV-2 Myocarditis athletes	(Sars-Cov-2 AND myocarditis AND athletes)	24
SCOPUS	2		Results	78
Web of Science	1	COVID-19 Myocarditis athletes	(Covid 19 myocarditis athletes)	35
Web of Science	2	Sars-CoV-2 Myocarditis athletes	(Sars-Cov-2 myocarditis athletes)	11
Web of Science	2		Results	46
Total			Results	253

Table S2. Critical appraisal included cohort studies

	Clark et al. (2021)	Cavigli et al. (2021)	Cavigli et al. (2021)	Daniels et al. (2021)	Hendrickson et al. (2021)	Malek et al. (2021)	Moulson et al. (2021)	Guevarra et al. (2022)	Vago et al. (2020)	Mascia et al. (2020)
1 Similar groups	+	-	-	-	-	-	-	-	+	+
2 Exposures similar in different groups	-	-	-	-	-	-	-	-	-	-
3 Exposures validly measured	+	-	-	+	+	+	+	+	+	-
4 Identification confounding factors	-	-	-	-	-	-	-	-	-	-
5 Strategies confounding factors	-	-	-	-	-	-	-	-	-	-
6 Participants free of outcome at the start	-	-	-	-	-	-	-	-	-	-
7 Outcomes validly measured	-	+	+	+	+	+	+	+	+	+
8 Follow-up long enough	-	-	-	+	-	-	+	-	-	-
9 Follow-up complete or reasons described	-	-	-	-	-	-	+	-	-	-
10 Strategies incomplete follow- up utilized	-	-	-	-	-	-	-	-	-	-
11 Appropriate statistical analysis	+	+	+	+	+	+	+	+	+	+
Total yes answers:	3	2	2	4	3	3	5	3	4	3
('+' = yes, '-' = no, and ' ' = not applicable) according to the Joanna Briggs Institute Critical Appraisal tools checklists.										

Table S3. Critical appraisal included Case control studies

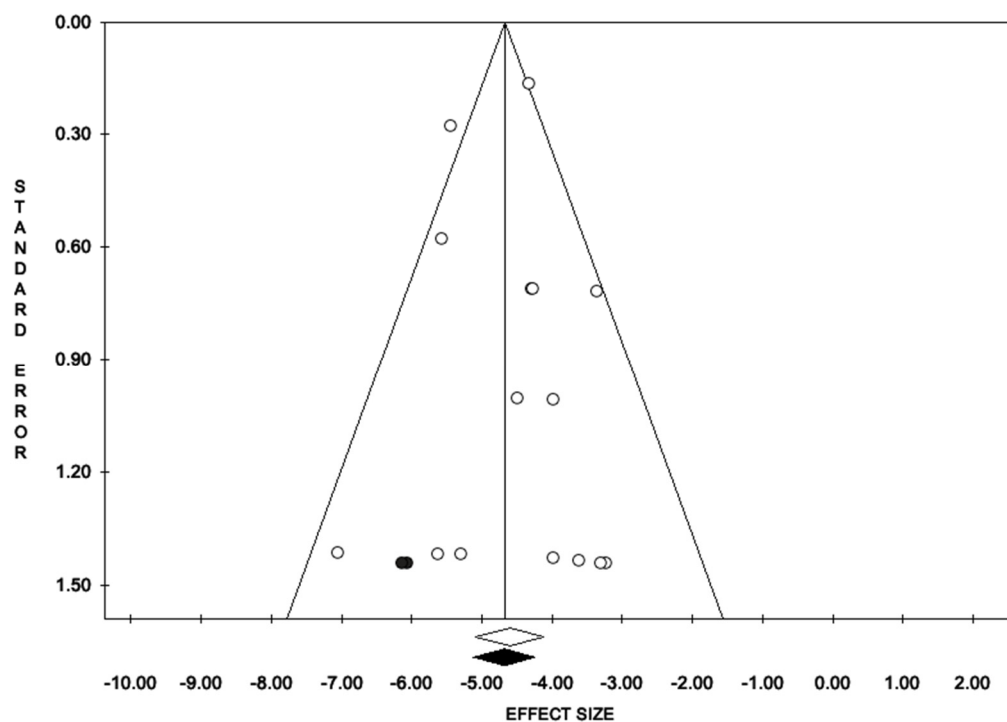
	Gervasi et al. (2020)
1 Comparable group	+
2 Cases and controls matched	+
3 Same criteria used for identification	+
4 Exposure measured in a standard, valid way	+
5 Exposure measured in the same way for both groups	+
6 Confounding factors	-
7 Strategies deal with confounding factors	-
8 Outcomes validly measured	+
9 Exposure period long enough	+
10 Appropriate statistical analysis Total yes answers:	8
('+' = yes, '-' = no, and ' ' = not applicable) according to the Joanna Briggs Institute Critical Appraisal tools checklists.	

Table S4. Critical appraisal included Cross sectional studies

	Brito et al. (2020)	Martinez et al. (2021)	Liliána Szabó et al. (2021)
1 Inclusion criteria clearly defined	-	-	-
2 Study subjects and setting described in detail	-	-	+
3 Exposure measured in a standard, valid way	+	+	+
4 Objective, standard criteria used for measurement of the condition?	-	+	+
5 Confounding factors	-	-	-
6 Strategies deal with confounding factors	-	-	-
7 Outcomes validly measured	-	+	+
8 Appropriate statistical analysis	+	-	+
Total yes answers:	2	3	5
('+' = yes, '-' = no, and ' ' = not applicable) according to the Joanna Briggs Institute Critical Appraisal tools checklists.			

Table S5. Critical appraisal included case series

	Starekova et al. (2021)
1 Inclusion criteria clearly defined	-
2 Condition measured in a standard, valid way	+
3 Valid methods used for identification of the condition	-
4 Consecutive inclusion	+
5 Complete inclusion	+
6 Clear reporting of demographics	+
7 Clear reporting of clinical information	-
8 Outcomes clearly reported	+
9 Clear reporting of presenting clinic demographic information	-
10 Appropriate statistical analysis	+
Total yes answers:	6
('+' = yes, '-' = no, and ' ' = not applicable) according to the Joanna Briggs Institute Critical Appraisal tools checklists.	



**Figure S1:** Funnel plot showing publication bias on myocarditis in total sample of athletes (n° 7988) who recovered from COVID-19 infection. Egger's linear regress test was not significant (p-value 0.98)

Tables and Figures legend

TAB. s1 Research strategy

TAB. s2-5 Full Quality Assestement JBI

FIG. s1 Funnel plot showing publication bias on myocarditis in total sample of athletes (n° 7988) who recovered from COVID-19 infection. Egger's linear regress test was not significant (p-value 0.98)