C44 Abstracts

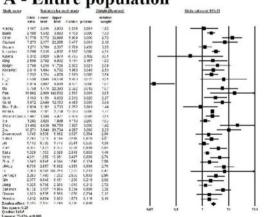
C90 PRE-EXISTING CORONARY ARTERY DISEASE AMONG COVID-19 PATIENTS: A

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Background: The prevalence and prognostic implications of coronary artery disease (CAD) in patients infected by the novel coronavirus 2019 (COVID-19) disease remain unclear. Methods: We conducted a systematic review and meta-analysis to investigate the prevalence and mortality risk in COVID-19 patients with pre-existing CAD. We searched Medline and Scopus to locate all articles published up to December 8, 2021, reporting data of COVID-19 survivors and non-survivors with pre-existing CAD. Data were pooled using the Mantel-Haenszel random effects models with odds ratio (OR) as the effect measure with the related 95% confidence interval (CI).

A - Entire population

SYSTEMATIC REVIEW AND META-ANALYSIS



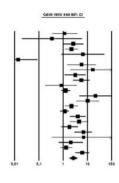
B - ICU patients

Study name	Statistics for each study					Weight (Random)		Odds ratio and Res CI			
	Odds	Lower	Upper limit	Z-Vatue	p-Value	Relative weight					
Aladag	1,167	0.345	3,933	0.249	0,804	16,34	1	1	-	- T	- 1
Wendal Garcia	2/07	1,308	4,427	2,874	0,000	24,46			-	-	- 1
Xire	1,205	0,025	1,999	1,113	0,286	27,02			-		- 1
Cou	10,271	3,543	29,794	4,297	0,000	17,35				-	
2waenepoc!	1,746	0,538	5,562	0,927	0,364	16,83		- 1	-	_	- 1
Random effect	2 222	1,132	4,363	2319	0,020			- 1	-	-	- 1
Lau-square: 0.1	135										
Q value: 13.8 Langue: 71.15		we					0,01	0.1	1	10	10

Results: Thirty-eight studies including 27.435 patients [mean age 61.5 and 70.9 years] were analysed. The pooled prevalence of pre-existing CAD was 12.6% (95% Cl: 11.2-16.5%, 12:95.6%), and resulted higher in ICU patients (17.5%, 95% Cl: 11.9-25.1, 12: 88.4%) and in European cohorts (13.1%, 95% Cl: 7.8-21.6%, p < 0.001, 12: 98.4%). COVID-19 patients with pre-existing CAD had a twofold risk of short-term mortality (OR 2.61, 95% Cl 2.10-3.24, p < 0.001, 12=73.6%) (Figure 1); this risk was higher among Asian cohorts (OR: 2.66, 95% Cl: 1.79-3.90, p < 0.001, 12: 77.3%) compared to European (OR: 2.44, p < 0.001, 12: 0%) populations (Figure 2). The association between CAD and poor short-term prognosis was influenced by age, prevalence of HT, DM and CKD.

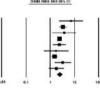
A - Asian cohorts

Study name		Scatlet	ics for a		Weight (Random	
	Cid dis ratio	Lower	Upper	Z-Value	p-Value	Retative weight
Alodas	1,157	0.340	3,633	0,240		3,92
Kesine	0,542	0.020	5,574	-0,736	0,462	1,43
Kocaygt	2,610	1,001		1,960		1,50
U	2,232	1,224		2,019		5.50
11.2	6,530	0.565	50,530	1,530	0,072	7,21
Tues.	0,014	0.002	0,089	-4,551	0,000	2,61
Ma	5.750	1.178	22,783	23.77	0.017	2,58
Pon	10,682	2,000	142,000	2.597	0,000	2.18
Child	9,183	1.161	8,613	2,742	0.026	4.45
O. et	2877	2668	12:150	1.195	0.000	A-11
Rizo-Tellez	0.834	0.182	3,733	-0.252	0,801	3.25
10:	1,285	0.858	1,659	1.113	0.268	4.00
Z300	21,402	1,638	MI.75W	3.92/	0,000	2.21
/381	10.271	3,540	26,195	1.287	0.000	4.31
Kerker	2.240	1.210	4,144	2,568	0,048	5.49
Sec.	1,142	0.735	1.778	0.501	0.566	5.58
Curt .	4,027	1.872	ERM	3,591	0,000	5.101
Yang	4.011	1,008	10,601	3.497	0.000	4.56
7mi 2	1,840	0.845	4,044	1,540	0,124	1,06
Ulling .	6.736	286	16.852	4.354	0.000	1,95
La	7.000	0.345	140,250	1,272	0.203	5.36
On:	2,077	0.648	6,601	1.210	0,219	1,06
Sang	1,325	0.768	2.288	1.010	0.312	1.05
Celekeri	6.139	3.107	11.654	5.394	0.000	6.76
Random effect: 2,644 1.7		1.792	3,901	4,598	5,000	
Lou square: Q value: 101 I square: 77.	.53					



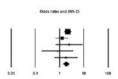
B-European cohorts

toley name		Distint		Vieight (Random)		
	Odds ratio	Lower	Upper limit	Z-Value	p-Value	Relative weight
gr inte	7,273	2,377	22.255	3,477	0,001	4,90
corino	3,290	2,315	4,662	0.017	0.000	17.44
ight	3,780	1.210	11,720	2.302	0.021	4.14
dile	2,109	2,101	2,769	12,638	0.009	21.71
nd Genie	2.407	1,305	4.497	2 874	0,005	10,34
ainecoe	1,745	0,538	5,662	0,927	0.354	3,87
541	1,520	1,153	2,025	2.045	0.003	10.04
Nega	3,285	1,190	170	2305	0.003	130
ndes	1,312	0.384	3,800	1.573	0,118	8,00
miem effect	2,119	1,900	3,140	(,010	0.009	
he: 15.5						



C- American cohorts

Study name		Statist	Weight (Random			
	Odds ratio	Lower Bmit	Upper limit	Z-Value	p-Value	Relative
tions	2,198	1,542	20,000	4,408	agn	84,05
Goyam	1,271	0.700	2,307	0.759	0.430	21.00
King	2,500	0.702	8,902	1,414	0,157	4,77
Rich Teles	0,874	0.102	3723	-0,252	0,801	3,37
Choron	1,820	0,590	5,568	1,000	0.294	6.10
Kandon offe	et:1,980	1,418	2,466	4,418	0.000	
Tan oquare: 0 value: 3,76						
Learner de						



Conclusions: Pre-existing CAD is present in approximately 1 in 10 patients hospitalised for COVID-19 and significantly associated with an increased risk of short-term mortality, which is influenced by age, HT, DM and CKD.