Supplementary Material*

Supplement. **Supplemental Appendices**

Appendix A: Search Strategy

Search for primary literature	
MEDLINE [Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946	
#	**Search Statement**
1	Middle East Respiratory Syndrome Coronavirus/ or SARS Virus/
2	(Severe Acute Respiratory Syndrome Coronavirus 2 or COVID-19 or COVID19 or novel coronavirus or coronavirus or corona virus or SARS-CoV or SARS-CoV-2 or SARS2 or 2019-nCoV or Middle East Respiratory Syndrome or MERS or MERS virus or MERS viruses or MERS-CoV or Severe Acute Respiratory Syndrome or SARS or SARS-CoV or SARS coronavirus).ti,ab,kf.
3	1 or 2
4	Angiotensin-Converting Enzyme Inhibitors/ or exp Angiotensin Receptor Antagonists/
5	(angtiotensin?converting enzyme inhibitor$1 or angiotensin receptor antagonist$1 angiotensin receptor blocker$1 or ACE?I or ARB$1).ti,ab,kf
6	4 or 5
7	Thiazides/
8	(thiazide$1).ti,ab,kf
9	7 or 8
10	6 or 9
11	3 and 10
12	limit 11 to years 2003-current
Cochrane Library	
#	**Search Statement**
1	MeSH descriptor: [Middle East Respiratory Syndrome Coronavirus] this term only
2	MeSH descriptor: [SARS Virus] this term only
3	(Severe Acute Respiratory Syndrome Coronavirus 2 or COVID-19 or COVID19 or novel coronavirus or coronavirus or corona virus or SARS-CoV or SARS-CoV-2 or SARS2 or Middle East Respiratory Syndrome or MERS or MERS virus or MERS viruses or MERS-CoV or Severe Acute Respiratory Syndrome or SARS or SARS-CoV or SARS coronavirus):ti,ab,kw
4	#1 OR #2 OR #3
5	MeSH descriptor: [Angiotensin-Converting Enzyme Inhibitors] this term only
6	MeSH descriptor: [Angiotensin Receptor Antagonists] explode all trees
7	(angtiotensin?converting enzyme inhibitor? or angiotensin receptor antagonist? angiotensin receptor blocker? or ACE?I or ARB?):ti,ab,kw
8	#5 OR #6 OR #7
9	MeSH descriptor: [Thiazides] this term only
10	(thiazide?):ti,ab,kw
11	#9 OR #10
12	#8 OR #11
13	#4 AND #12
ClinicalTrials.gov	
#	**Search Statement**
1	Condition or disease: Severe Acute Respiratory Syndrome OR Middle East Respiratory Syndrome OR COVID-19 OR SARS OR MERS OR CoV OR coronavirus
2	Other terms: angiotensin-converting enzyme inhibitors OR angiotensin receptor antagonists OR ACE-I OR ARBs OR angiotensin receptor blocker OR thiazides
3	#1 AND #2

WHO database of publications on coronavirus disease (COVID-19)	
#	**Search Statement**
1	angiotensin-converting enzyme inhibitors
2	angiotensin receptor antagonists
3	thiazides
medRxiv.org	
#	**Search Statement**
1	angiotensin-converting enzyme inhibitors
2	angiotensin receptor antagonists

Appendix B: Quality Assessment of Cohort Studies using the Newcastle-Ottawa Quality Assessment Scale (26)

Author (all year 2020)	Selection				Comparability	Outcome		
	Representativeness of the exposed cohort*	Selection of the non-exposed cohort*	Ascertainment of exposure*	Demonstration that outcome of interest was not present at start of study, OR baseline assessment*	Comparability of cohorts on the basis of the design or analysis*	Assessment of outcome*	Was follow-up long enough for outcomes to occur?*	Adequacy of follow up of cohorts*
Bean (29)	1	1	1	1	1	1	1	1
Feng (30)	1	1	0	1	0	1	0	1
Li (31)	1	1	0	1	1	1	0	1
Liu (32)	1	1	0	1	1	1	0	1
Mehra (34)	1	1	1	1	1	1	1	1
Meng (35)	1	1	0	1	0	1	0	1
Rentsch (36)	1	1	1	1	1	1	0	1
Reynolds (37)	1	1	1	1	1	1	0	1
Rossi (38)	1	1	0	1	1	1	1	1
Yang (39)	1	1	0	1	1	1	1	1
Peng (40)	1	1	0	1	0	1	0	1
Zeng (41)	1	1	0	1	0	1	1	1
Zhang (42)	1	1	0	1	1	1	1	1

*Key: Newcastle-Ottawa QA scale for Cohort studies

Representativeness of the exposed cohort
Enter 0 or 1:
1 = truly representative of the average __ in the community

1 = somewhat representative of the average __ in the community

0 = selected group of users, e.g., nurses, volunteers

0 = no description of the derivation of the cohort

Selection of the non-exposed cohort

Enter 0 or 1:

1 = drawn from the same community as the exposed cohort

0 = drawn from a different source

0 = no description of the derivation of the non-exposed cohort

Ascertainment of exposure

Enter 0 or 1:

1 = secure record

1 = structured interview

0 = written self-report

0 = no description

Demonstration that outcome of interest was not present at start of study, OR baseline assessment

Enter 0 or 1:

1= yes

0 = no

Comparability of cohorts on the basis of the design or analysis

Enter 0 or 1:

1 = study accounts/controls for most important factors(s), e.g., age

0 = no adjustment for potential confounders

Assessment of outcome

Enter 0 or 1:

1 = independent blind assessment

1 = record linkage

0 = self-report

0 = no description

Was follow-up long enough for outcomes to occur?

Enter 0 or 1:

1 = yes

0 = no or unclear

Adequacy of follow up of cohorts

Enter 0 or 1:

1 = complete follow up; all subjects accounted for.

1 = subjects lost to follow up unlikely to introduce bias; small number (less than 20%) lost, or description was provided of those lost

0 = follow up rate < 80% and no description of those lost
0 = no description

Appendix C: Quality Assessment of Case-control Studies using the Newcastle-Ottawa Quality Assessment Scale (26)

Study	Is the case definition adequate? *Enter 0 or 1:* 1 = yes, with independent validation 1 = yes, eg record linkage or based on self reports 0 = no description	Representativeness of the cases *Enter 0 or 1:* 1 = consecutive or obviously representative series of cases 0 = potential for selection biases or not stated	Selection of Controls *Enter 0 or 1:* 1 = community controls 0 = hospital controls 0 = no description	Definition of Controls *Enter 0 or 1:* 1 = no history of disease (endpoint) 0 = no description of source	Comparability of cases and controls on the basis of the design or analysis *Add points:* *Minimum 0, Maximum 2* 1 = study controls for age, demographic factors 1 = study controls for cardiovascular comorbidities 0 = neither of the above	Ascertainment of exposure *Enter 0 or 1:* 1 = secure record (eg surgical records) 1 = structured interview where blind to case/control status 0 = interview not blinded to case/control status 0 = written self report or medical record only 0 = no description	Same method of ascertainment for cases and controls *Enter 0 or 1:* 1 = yes 0 = no	Non-Response rate *Enter 0 or 1:* 1 = same rate for both groups 0 = non respondents described 0 = rate different and no designation
Mancia (33)	1	1	1	1	2	1	1	1