

ONLINE SUPPLEMENTARY CONTENT

Table S1 - Newcastle - Ottawa Quality Assessment Scale: cohort studies. Outcome prevalence of ABO group among Covid-19 infected and uninfected subjects

Cohort studies	Study reference						
	Boudin ²⁴	Gallian ²⁸	Latz ³⁰	Levi ³⁷	Ray ³⁸	Zietz ³⁹	Barnkob ⁴²
SELECTION							
1) Representativeness of the exposed cohort (patients who developed covid-19 infection)							
a) truly representative of covid-19 pts in the community*		x		x	x	x	x
b) somewhat representative of covid-19 pts in the community*	x		x				
c) selected group of subjects							
d) no description of the derivation of the cohort							
2) Selection of the non exposed cohort (patients who did not develop covid-19 infection)							
a) drawn from the same community as the exposed cohort*	x	x	x	x	x	x	x
b) drawn from a different source							
c) no description of the derivation of the non exposed cohort							
3) Ascertainment of exposure							
a)) secure record*	x	x	x	x	x	x	x
b) structured interview*							
c) written self report							
d) no description							
4) Demonstration that outcome of interest was not present at start of study							
a) yes*	x	x	x	x	x	x	x
b) no							
COMPARABILITY							
1) Comparability of cohorts on the basis of the design or analysis							
a) study controls for ABO groups determination*	x	x	x	x	x	x	x
b) study controls for additional confounding (e.g.,using multivariate analysis or logistic regression)*	x	x	x		x	x	
OUTCOME							
1) Assessment of outcome							
a)independent blind assessment*							
b) record linkage*	x	x	x	x	x	x	x
c) self report							
d) no description							
2) Was follow-up long enough for outcomes to occur							
a) yes*	x	x	x	x	x	x	x
b) no							
3. Adequacy of follow up of cohorts							
a) complete follow up - all subjects accounted for*		x	x	x	x	x	x
b) subjects lost to follow up unlikely to introduce bias - small number lost - follow up, or description provided of those lost*	x						
c) low follow up rate and no description of those lost							
d) no statement							
TOTAL STARS	9	8	7	8	8	9	8

Table SII - Newcastle - Ottawa Quality Assessment Scale: outcomes prevalence ABO group among Covid-19 infected and uninfected patients

Case control studies	Study reference										
	Ellinghaus ²²	Abdollahi ²³	Dzik ²⁵	Fan ¹⁶	Franchini ²⁷	Goker ²⁹	Leaf ³¹	Li ³²	Wu ³³	Zhao ³⁶	Mufiz-Diaz ¹
SELECTION											
1) Is the case definition adequate?											
a) yes, with independent validation*	x	x	x			x	x	x	x	x	x
b) yes, eg record linkage or based on self report				x	x						
2) Representativeness of the cases											
a) consecutive or obviously representative series of cases*	x		x				x				
b) potential for selection biases or not stated		x		x	x	x		x	x	x	x
3) Selection of controls											
a) drawn from the same population as exposed cohort*	x		x		x	x				x	x
b) drawn from different source		x		x			x	x	x		
c) no description											
4) Definition of controls											
a) no history of disease (endpoint)*	x	x	x	x	x	x	x	x	x	x	x
b) no description of source											
COMPARABILITY											
1) Comparability of cases and controls on the basis of the design or analysis											
a) study controls for covid-19 development*	x	x	x	x	x	x	x	x	x	x	x
b) study controls for any additional confounding factor (eg., with multivariate analysis or logistic regression)*	x	x									
EXPOSURE											
1) Ascertainment of exposure											
a) secure record*	x	x	x	x	x	x	x	x	x	x	x
b) structured interview where blind to case/control status*											
c) interview not blinded to case/control status											
d) written self report or medical record only											
e) no description											
2) Same methods of ascertainment for cases and controls											
a) yes*	x							x	x		
b) no		x	x	x	x	x	x			x	x
3) Non-response rate											
a) same rate for all groups*	x	x	x	x	x	x	x	x	x	x	x
b) non respondents described											
c) rate different and no designation											
TOTAL STARS	9	6	7	5	6	6	5	6	6	7	6

Table SIII - Newcastle-Ottawa Quality Assessment Scale: cohort studies evaluating severity of Covid-19 infections according to ABO group

Case control studies	Study reference											
	Ellinghaus ²²	Abdollahi ²³	Boudin ²⁴	Dzik ²⁵	Gallian ²⁸	Latz ³⁰	Leaf ³¹	Yaylaci ³⁴	Ray ³⁸	Zietz ³⁹	May ⁴⁰	Barnkob ⁴²
SELECTION												
1) Representativeness cohort of patients who developed severe Covid-19 infection												
a) truly representative of covid-19 pts in the community*	x	x		x	x		x	x	x	x	x	x
b) somewhat representative of Covid-19 pts in the community*			x			x						
c) selected group of subjects												
d) no description of the derivation of the cohort												
2) Selection of the cohort of patients who did not develop severe Covid-19 infection												
a) drawn from the same community as the exposed cohort*	x	x	x	x	x	x	x	x	x	x	x	x
b) drawn from a different source												
c) no description of the derivation of the non exposed cohort												
3) Ascertainment of exposure												
a)) secure record*	x	x	x	x	x	x	x	x	x	x	x	x
b) structured interview*												
c) written self report												
d) no description												
4) Demonstration that outcome of interest was not present at start of study												
a) yes*	x	x	x	x	x	x	x	x	x	x	x	x
b) no												
COMPARABILITY												
1) Comparability of cohorts on the basis of the design or analysis												
a) study controls for ABO groups determination*	x	x	x	x	x	x	x	x	x	x	x	x
b) study controls for additional confounding (e.g.,using multivariate analysis or logistic regression)*	x	x			x	x		x	x	x		
OUTCOME												
1) Assessment of outcome												
a)independent blind assessment*	x	x										
b) record linkage*			x	x	x	x	x	x	x	x	x	x
c) self report												
d) no description												
2) Was follow-up long enough for outcomes to occur												
a) yes*	x	x	x	x	x	x	x	x	x	x	x	x
b) no												
3) Adequacy of follow up of cohorts												
a) complete follow up - all subjects accounted for*	x	x		x	x	x		x	x	x	x	x
b) subjects lost to follow up unlikely to introduce bias - small number lost - follow up, or description provided of those lost*			x			x						
c) low follow up rate and no description of those lost												
d) no statement												
TOTAL STARS	9	9	9	8	8	7	8	7	8	9	8	8

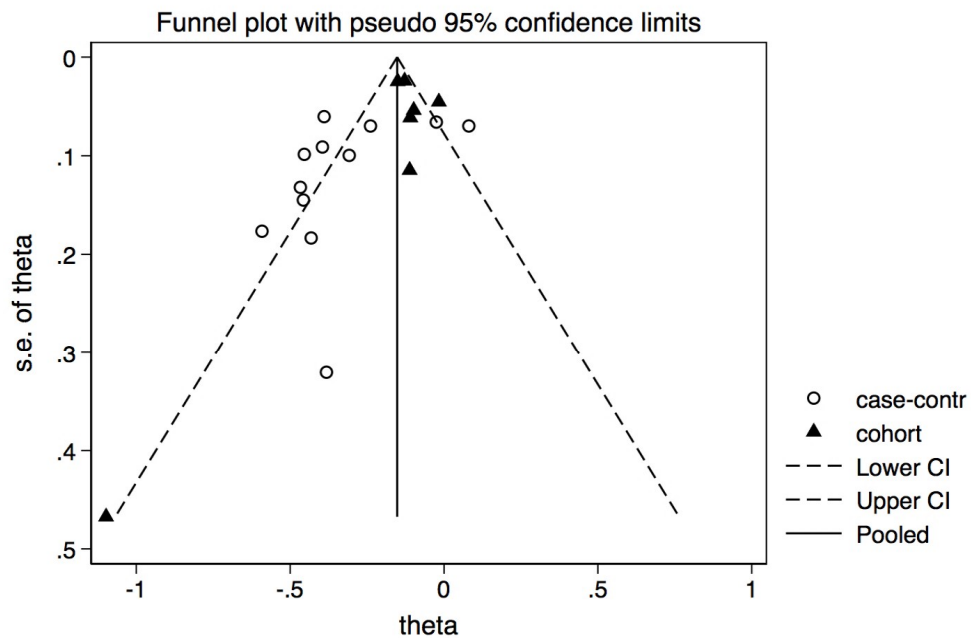
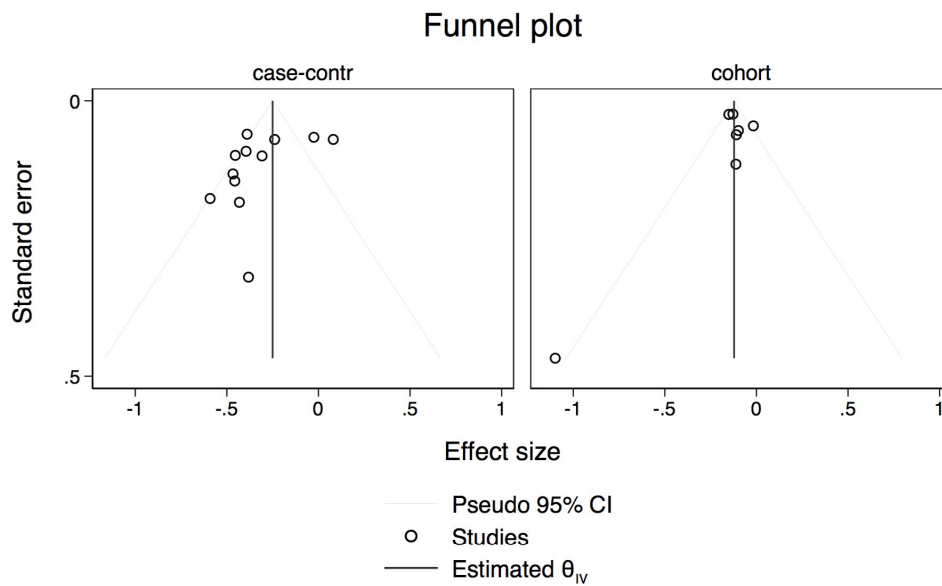


Figure S1 - Funnel plot of comparison. Outcome: prevalence of ABO group in SARS-CoV-2 infected and uninfected individuals



Graphs by design

Figure S2 - Funnel plot of comparison. Outcome: prevalence of ABO group in SARS-CoV-2 infected and uninfected individuals. The funnel plots are presented according to the study design