

S1 Appendix:

S1 Table: Medline search strategy.

Database: Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations and Daily

Search Strategy:

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- 1 Coronavirus Infections/
 - 2 Coronavirus/
 - 3 COVID-19.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
 - 4 SARS-CoV-2/
 - 5 1 or 2 or 3 or 4
 - 6 Pulmonary Disease, Chronic Obstructive/
 - 7 (obstructive adj3 (lung or pulmonary or respiratory or bronchopulmonary)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
 - 8 (COAD or COBD or COAD or COBD or COPD).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
 - 9 Emphysema/
 - 10 Patient Admission/
 - 11 Hospitalization/
 - 12 exacerbation*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
 - 13 exacerbate*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
 - 14 6 or 7 or 8 or 9
 - 15 10 or 11 or 12 or 13
 - 16 14 and 15
 - 17 5 and 16
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S2 Table. Quality assessment:

Details of the quality of Cohort studies

First author	Population representative	Sample size adequate	Confounders	Statistical analysis	Missing data	Methodology of the outcome	Objective assessment	OVERALL (0-3, higher score = lower risk of bias)
Baeza-Martínez et al. 2020	1	0	0	0	2	0	0	0.4
Berghaus et al. 2020	2	1	1	2	1	3	2	1.7
Chan et al. 2020	3	1	1	3	1	3	2	2
Faria et al. 2021	3	1	2	3	2	3	3	2.4
González et al. 2021	3	2	1	3	1	2	3	2.1
Helgeland et al. 2021	2	0	1	3	1	3	3	1.8
Hu et al. 2020	2	2	1	3	1	3	1	1.8
Huh et al. 2021	2	1	1	2	1	2	2	1.5
Kyriakopoulos et al. 2021	2	1	2	3	2	2	3	2.1
McAuley et al. 2020	3	2	1	3	3	3	3	2.5
Stohr et al. 2020	2	3	1	3	1	2	3	2.1
Sykes et al. 2020	2	1	0	3	1	3	2	1.7
Tan et al. 2020	2	1	1	2	1	2	3	1.7

0 = definitely no (high risk of bias); 1 = mostly no; 2 = Mostly yes; 3 = definitely yes (low risk of bias)