

Supplementary table 1. Studies included in analysis of asthma prevalence:

Author	Country	Subregion	Study design	Proportion Male	Male (N)	COVID-19 patients total	COVID-19 patients with Asthma	Mean age
Abayomi, A ⁽⁶¹⁾ et al	Nigeria	Sub-Saharan	Retrospective cohort	0.66	1379	2075	42	*
Alberca, Ricardo ⁽⁸⁾ et al	Brazil	S Amer	Retrospective cohort	*	*	215	5	*
Arslan, Yakup ⁽⁹⁾ et al	Turkey	W Asia	Retrospective cohort	0.49	374	767	58	51.99
Aveyard ⁽⁶²⁾ et al 2021	UK	N Euro	Population cohort	0.56	8037	14479	2266	69.9
Bergman J ⁽¹¹⁾ et al 2021	Sweden	N Euro	Retrospective registry-based	0.59	9433	16083	1419	64
Barroso, B., M. ⁽¹⁰⁾ et al	Spain	S Euro	Retrospective Cohort study	0.58	109	189	11	67.52
Beurnier, Antoine ⁽¹²⁾ , et al	France	W Euro	Retrospective Cohort study	*	*	768	37	*
Bloom, Chloe I. ⁽¹³⁾ et al	UK	N Euro	retrospective cohort study	0.56	41781	74603	7785	71.29
Calmes, Doriane ⁽¹⁵⁾ et al	Belgium	W Euro	Retrospective Cohort study	0.49	294	596	57	58.8
Caminati M ⁽¹⁶⁾ et al	Italy	S Euro	retrospective	*	*	2000	42	*
Castilla, Jesus ⁽¹⁷⁾ et al	Spain	S Euro	Retrospective Cohort study	0.52	1080	2080	147	*
Chudasama ⁽¹⁸⁾ et al 2021	UK	N Euro	Observational	0.58	981	1706	226	71
Clark, Chantal C. ⁽¹⁹⁾ et al	Netherlands	W Euro	Retrospective Cohort study	0.57	45	79	10	67
Duanmu, Youyou ⁽²²⁾ et al	US	N Amer	Cross-sectional study	0.54	13	24	3	64

Forsblom, E. ⁽¹⁾ et al	Finland	N Euro	Retrospective Cohort study	0.54	316	585	95	57
Gabrielli, Maurizio ⁽²⁴⁾ et al	Italy	S Euro	Retrospective Cohort study	*	*	579	6	*
Guan, Wei-jie ⁽²⁷⁾ et al	China	E Asia	Retrospective Cohort study	0.50	19670	39420	244	55.7
Gude-Sampedro, F. ⁽²⁸⁾ et al	Spain	S Euro	Retrospective Cohort study	0.53	1324	2492	103	70.19
Ho, K. S. ⁽³²⁾ et al	US	N Amer	Retrospective Cohort study	0.56	2738	4902	233	64.99
Ko, Jean Y. ⁽³⁷⁾ et al	US	N Amer	surveillance/Retrospective Cohort	0.53	2847	5416	738	55
Lemus Calderon ⁽³⁸⁾ et al	Spain	S Euro	Retrospective Cohort study	*	*	2164	131	*
Martos-Benítez, F. D. ⁽⁴⁰⁾ et al	Mexico	C Amer	Retrospective Cohort study	*	*	15305	367	44
Newton S ⁽⁴³⁾ et al 2020	US	N Amer	Retrospective series	*	*	443	67	62.66
Nystad, Wenche ⁽⁴⁴⁾ et al	Norway	N Euro	Retrospective Cohort study	*	*	1025	127	*
Pandita et al ⁽¹⁾ 2021	US	N Amer	retrospective cohort study	0.53	138	259	30	62
Rosenthal, J. A. ⁽⁴⁵⁾ et al	US	N Amer	Retrospective Cohort study	*	*	403	60	*
Shin, Eun Kyong ⁽⁴⁹⁾ et al	Korea	E Asia	Retrospective Cohort study	0.41	2304	5571	128	*
Silver, Victoria ⁽⁵⁰⁾ et al	US	N Amer	Retrospective Cohort study	0.44	110	249	49	59.6
Terada, M. ⁽⁵²⁾ et al	Japan	E Asia	Retrospective Cohort study	0.61	2063	3376	166	*
Valverde-Monge, M ⁽⁵⁴⁾ et al	Spain	S Euro	Retrospective Cohort study	0.50	1275	2539	113	62.66

Villamañán, E ⁽¹⁾ et al	Spain	S Euro	Cross-sectional study	0.57	186	327	13	64.4
Yoshida, Yilin ⁽⁵⁶⁾ et al	US	N Amer	Prospective cohort study	0.47	367	776	83	60.5
Zhao ⁽⁶⁰⁾ et al	China	E Asia	Cross-sectional study	0.47	466	1000	12	61
Corradini E ⁽²⁰⁾ et al 2021	Italy	S Euro	Retrospective Cohort study	0.64	1961	3044	116	67
Gimeno-Miguel A ⁽²⁵⁾ et al	Spain	S Euro	Retrospective Cohort study	0.53	3107	5885	335	71.6
Gupta R ⁽³⁰⁾ et al 2021	US	N Amer	Retrospective cohort study	0.54	286	529	30	70
Huang BZ ⁽³⁴⁾ et al 2021	US	N Amer	Retrospective cohort study	*	*	4082	484	*
Ludwig M ⁽³⁹⁾ et al 2021	Germany	W Euro	Retrospective Cohort study	0.54	1265	2343	290	62
Moschovis PP ⁽⁴²⁾ et al 2021	US	N Amer	Retrospective Cohort study	0.57	795	1391	182	59
Puebla Neira DA ⁽⁴⁶⁾ et al 2021	US	N Amer	Retrospective Cohort study	0.53	16823	31526	3651	72
Hernandez-Galdamez, D ⁽³¹⁾ et al	Mexico	C Amer	Retrospective cohort study	*	*	23084	1501	*
Soria ME ⁽⁵¹⁾ et al 2021	Spain	S Euro	Retrospective Cohort study	0.51	171	338	24	75.26

Note on table: superscripts in author column give the reference for the study specified. Asterisks indicate that data could not be extracted from the study for the parameter tabulated.

Supplementary table 2: Studies included in analysis of COPD prevalence:

Author	Country	UN Sub-region	Study design	Proportion Male	Male (N)	COVID-19 patients total	COVID-19 patients with COPD	Mean Age
Bergman J ⁽¹¹⁾ et al 2021	Sweden	N Euro	Retrospective registry-based	*	*	16083	1747	64
Bloom, CI ⁽¹³⁾ Drake, TM et al	UK	N Euro	Prospective cohort study	*	*	74603	10 266	77.8
Boari, GE ⁽¹⁴⁾ Chiarini, G et al	Italy	S Euro	Retrospective cohort	0.67	173	258	35	71
Newton,S ⁽⁴³⁾ et al	US	N Amer	Cohort study	0.49	219	443	46	62.66
Nystad, W ⁽⁴⁴⁾ Hjellvik, V et al	Norway	N Euro	Cohort study	*	*	1025	67	
Pandita ⁽⁴⁴⁾ et al	US	N Amer	Retrospective cohort	0.53	138	259	25	62
Aveyard, P ⁽⁶²⁾ et al	UK	N Euro	Population cohort study	0.56	8038	14479	1555	69.9
Calmes, D ⁽¹⁵⁾ ; Graff, S et al	Belgium	W Euro	Electronic medical record	0.49	294	596	46	58.8
Castilla, J ⁽¹⁷⁾ et al	Spain	S Euro	prospective population-based cohort	0.52	1080	2080	195	
Chudasama, YV ⁽¹⁸⁾ et al	UK	N Euro	Observational study	0.58	981	1706	14	71
Corradini, E ⁽²⁰⁾ et al	Italy	S Euro	Electronic medical records	0.64	1961	3044	314	67

Gimeno-Miguel, A ⁽²⁵⁾ et al	Spain	S Euro	Retrospective, observational study	0.53	3107	5885	392	71.6
Guan WJ ⁽²⁷⁾ Liang, W et al	China	E Asia	Retrospective Cohort	0.50	19655	39420	636	55.7
Gupta, R ⁽³⁰⁾ Agrawal, R et al	US	N Amer	Retrospective cohort	0.54	286	529	36	70
Gude-Sampedro, F ⁽²⁸⁾ et al	Spain	S Euro	Retrospective Cohort study	0.53	1324	2492	106	70.19
Hu, X ⁽³³⁾ ; Hu C, Yang Y et al	China	E Asia	Retrospective cohort	0.48	102	213	4	44
Huang, BZ ⁽³⁴⁾ Chen, Z et al	US	N Amer	Retrospective study	*	*	4082	194	43.6
Khan, MS ⁽³⁵⁾ Dogra, R et al	US	N Amer	Retrospective observational cohort	0.48	224	470	87	*
Gunster C ⁽²⁹⁾ et al 2021	Germany	W Euro	Observational study	0.53	4641	8679	1188	68.6
Ludwig, M ⁽³⁹⁾ Jacob, J et al	Germany	W Euro	Observational study	0.54	1265	2343	306	62
Martos-Benítez, FD ⁽⁴⁰⁾ et al	Mexico	C Amer	Retrospective analysis	*	*	15305	626	44
Moschovis, PP ⁽⁴²⁾ Lu, M et al	US	N Amer	Retrospective analysis	0.57	795	1391	143	59
Puebla N ⁽⁴⁶⁾ Daniel A et al	US	N Amer	Retrospective cohort	0.53	16823	31526	4758	72

Hernandez-Galdamez, D ⁽³¹⁾ et al	Mexico	C Amer	Cross sectional study	*	*	23084	2358	*
Rossi, PG ⁽²⁶⁾ Marino, M et al	Italy	S Euro	Prospective cohort	0.61	657	1075	91	62.19
Shin, EK ⁽⁴⁹⁾ et al	Korea	E Asia	Retrospective cohort	0.41	2304	5571	40	*
Soria, MG ⁽⁵¹⁾ Corton M et al	Spain	S Euro	Retrospective	*	*	338	12	*
Tessitore, E ⁽⁵³⁾ et al	Switzerland	W Euro	Observational	0.54	453	839	49	67
Vergara, P ⁽⁵⁵⁾ Rossi, L et al	Italy	S Euro	Retrospective observational cohort	0.68	711	1049	102	71
Xiong, T-Y ⁽⁵⁷⁾ Huang, F-Y et al	China	E Asia	Retrospective study	0.53	250	472	6	43
Zhang, JJ ⁽⁵⁹⁾ Dong, X et al	China	E Asia	Electronic medical records	0.51	71	140	2	57
Silver V et al ⁽⁵⁰⁾	US	N Amer	Retrospective Cohort study	0.44	110	249	32	59.6
Valverde-Monge, M ⁽⁵⁴⁾ et al	Spain	S Euro	Retrospective Cohort study	0.50	1275	2539	89	62.66
Villamañán, E. ⁽⁵⁶⁾ et al	Spain	S Euro	Cross-sectional study	0.57	186	327	42	64.4
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Zhao M ⁽⁶⁰⁾ et al	China	E Asia	Cross-sectional study	0.47	466	1000	23	61
Forsblom, E ⁽²³⁾ et al	Finland	N Euro	Retrospective Cohort study	0.54	316	585	15	57

Ko, Jean Y ⁽³⁷⁾ et al	US	N Amer	Surveillance/Retrospective Cohort	0.53	2847	5416	328	55
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