

Table S1. Studies reporting on prevalence and outcomes of comorbid asthma and chronic obstructive pulmonary disease (COPD) among COVID-19 patients.

Author, reference	Location	Country status	Country prevalence, %		Asthma prevalence, % (95% CI)	Relative risk for hospitalization/severe disease among asthma patients (95% CI)	Relative risk for mortality among asthma patients (95% CI)	COPD prevalence, % (95% CI)	Relative risk for hospitalization/severe disease among COPD patients (95% CI)	Relative risk for mortality among COPD patients (95% CI)
			Asthma	COPD						
Aalinezhad M [1]	Iran	Developing	3.13	1.85	1.85 (0.60-4.27)		3.33 (1.54-6.23)			
Abayomi A [2]	Nigeria	Developing	3.59	0.74	2.02 (1.46-2.73)					
Adrish M [3]	USA	Developed	10.35	6.14	13.90 (11.97-16.01)		9.63 (8.01-11.47)			
Adrish M [4]	USA	Developed	10.35	6.14	22.49 (18.33-27.10)		15.72 (12.16-19.84)			
Agarwal P [5]	USA	Developed	10.35	6.14	6.19 (4.04-9.00)		14.36 (11.09-18.16)			
Aghaaliakbari F [6]	Iran	Developing	3.13	1.85			4.21 (2.77-6.11)			
Akchurin O [7]	USA	Developed	10.35	6.14	19.48 (18.32-20.69)		6.33 (5.62-7.09)			
Alberca RW [8]	Brazil	Developed	4.39	2.87			1.89 (0.70-4.06)			
Alizadehsani R [9]	Iran	Developing	3.13	1.85	0.63 (0.08-2.25)					
Alkundi A [10]	UK	Developed	9.61	7.03	2.59 (0.95-5.54)		7.33 (4.33-11.47)			
Almazeedi S [11]	Kuwait	Developed	3.93	0.88	3.92 (2.85-5.25)		6.53 (2.26-18.85)	0.46 (0.15-1.06)	12.12 (1.98-74.21)	
Alsofayan YM [12]	Saudi Arabia	Developed	2.39	1.22	3.55 (2.68-4.61)					
Aly MM [13]	Egypt	Developing	3.38	1.90			7.86 (5.65-10.59)	1.49 (1.31-1.69)		
Argenziano MG [14]	USA	Developed	10.35	6.14	11.30 (9.40-13.43)	0.91 (0.82-1.00)	6.60 (5.14-8.32)	1.00 (0.90-1.11)		
Argyropoulos KV [15]	USA	Developed	10.35	6.14	14.36 (9.60-20.34)		3.31 (1.23-7.08)			
Arshad S [16]	USA	Developed	10.35	6.14	9.88 (8.74-11.10)		12.79 (11.52-14.15)			
Arslan Y [17]	Turkey	Developed	5.02	3.55	8.13 (6.23-10.39)		1.52 (0.72-3.19)	6.03 (4.40-8.04)	3.98 (2.29-6.92)	
Artero A [18]	Spain	Developed	4.86	6.31			12.21 (11.58-12.86)		2.21 (2.04-2.40)	
Asghar MS [19]	Pakistan	Developing	1.42	1.36	2.00 (0.24-7.04)		3.00 (0.62-8.52)			
Ashinyo ME [20]	Ghana	Developing	2.12	1.12	1.95 (0.72-4.21)					
Atkins JL [21]	UK	Developed	9.61	7.03	17.75 (14.52-21.36)		12.23 (9.51-15.40)			
Attaway AA [22]	USA	Developed	10.35	6.14			6.49 (5.56-7.52)	1.82 (1.53-2.16)		
Azar KMJ [23]	USA	Developed	10.35	6.14	11.31 (9.46-13.38)		1.91 (0.98-3.72)	3.52 (2.49-4.82)	5.88 (3.10-11.16)	
Azoulay E [24]	France	Developed	6.96	3.84	6.12 (3.92-9.04)		5.32 (3.28-8.10)			
Bag Soytaş R [25]	Turkey	Developed	5.02	3.55			19.27 (14.25-25.14)		1.54 (0.93-2.58)	
Baicry F [26]	France	Developed	6.96	3.84	6.06 (3.17-10.35)		2.02 (0.55-5.09)			

Bajaj JS [27]	USA	Developed	10.35	6.14	8.33 (3.88-15.23)		10.19 (5.20-17.49)		
Baqui P [28]	Brazil	Developed	4.39	2.87	3.79 (3.36-4.25)	0.78 (0.66-0.91)			
Barillari MR [29]	Italy	Developed	4.25	5.39	6.12 (3.67-9.50)				
Barman HA [30]	Turkey	Developed	5.02	3.55			12.03 (9.55-14.88)	1.99 (1.33-2.97)	
Barroso B [31]	Spain	Developed	4.86	6.31	5.82 (2.94-10.17)				
Beken B [32]	Turkey	Developed	5.02	3.55	14.02 (8.06-22.07)	1.06 (0.68-1.67)			
Bello-Chavolla OY [33]	Mexico	Developed	2.68	2.08	1.06 (0.73-1.50)	0.32 (0.08-1.24)	1.03 (0.70-1.46)	1.70 (1.01-2.85)	
Bello-Chavolla OY [34]	Mexico	Developed	2.68	2.08	2.89 (2.79-3.00)		1.97 (1.88-2.05)		
Bello-Chavolla OY [35]	Mexico	Developed	2.68	2.08	3.10 (2.95-3.26)		2.19 (2.07-2.32)		
Beltramo G [36]	France	Developed	6.96	3.84	3.66 (3.53-3.78)		5.44 (5.29-5.59)	1.60 (1.52-1.68)	
Berenguer J [37]	Spain	Developed	4.86	6.31	7.48 (6.68-8.33)		0.82 (0.66-1.01)		
Bergman J [38]	Sweden	Developed	8.06	6.43	6.98 (6.81-7.16)	1.29 (1.23-1.35)	4.62 (4.48-4.77)	2.51 (2.42-2.61)	
Beurnier A [39]	France	Developed	6.96	3.84			0.55 (0.16-1.86)		
Bloom CI [40]	UK	Developed	9.61	7.03	10.41 (10.20-10.63)				
Boari GEM [41]	Italy	Developed	4.25	5.39			13.57 (9.63-18.36)	1.91 (1.21-3.01)	
Boixeda R [42]	Spain	Developed	4.86	6.31			5.13 (3.35-7.49)		
Borobia AM [43]	Spain	Developed	4.86	6.31	5.17 (4.28-6.17)		0.70 (0.45-1.10)	6.87 (5.86-8.00)	2.23 (1.82-2.74)
Boytsov SA [44]	Russia	Developed	2.39	2.67	3.23 (1.73-5.47)			6.97 (4.68-9.91)	
Bramante CT [45]	USA	Developed	10.35	6.14	4.19 (3.71-4.71)			15.87 (14.98-16.80)	
Bravi F [46]	Italy	Developed	4.25	5.39				5.99 (4.88-7.26)	1.88 (1.63-2.16)
Brendish NJ [47]	UK	Developed	9.61	7.03	15.06 (11.49-19.23)			13.35 (9.98-17.36)	
Broadhurst R [48]	USA	Developed	10.35	6.14	12.16 (9.24-15.60)				
Brojakowska A [49]	USA	Developed	10.35	6.14	4.16 (3.70-4.66)			2.63 (2.26-3.03)	1.99 (1.62-2.40)
Buckner F [50]	USA	Developed	10.35	6.14	9.52 (4.66-16.82)	0.59 (0.23-1.56)		10.48 (5.35-17.97)	1.36 (0.83-2.23)
Cai Q [51]	China	Developed	1.74	3.18				8.23 (5.69-11.41)	1.86 (1.17-2.95)
Caliskan T [52]	Turkey	Developed	5.02	3.55	3.72 (2.32-5.63)			6.55 (4.65-8.91)	
Calmes D [53]	Belgium	Developed	4.75	7.47	9.56 (7.32-12.21)		0.46 (0.17-1.20)	7.72 (5.71-10.16)	2.69 (1.72-4.23)
Caminati M [54]	Italy	Developed	4.25	5.39	2.10 (1.52-2.83)				
Canevelli M [55]	Italy	Developed	4.25	5.39				16.19 (14.82-17.64)	
Cao L [56]	USA	Developed	10.35	6.14	19.30 (15.42-23.68)				
Capone S [57]	USA	Developed	10.35	6.14	11.76 (6.23-19.65)				

Cariou B [58]	France	Developed	6.96	3.84				10.41 (8.79-12.21)		
Castilla J [59]	Spain	Developed	4.86	6.31	6.58 (6.33-6.85)	1.08 (0.92-1.27)	0.91 (0.62-1.33)	3.97 (3.77-4.18)	2.50 (2.18-2.87)	4.21 (3.28-5.40)
Cates J [60]	USA	Developed	10.35	6.14	6.59 (5.83-7.40)			22.87 (21.57-24.21)		
Cellai M [61]	USA	Developed	10.35	6.14	13.91 (10.99-17.27)	3.87 (1.83-8.17)				
Cen Y [62]	China	Developed	1.74	3.18				4.57 (3.36-6.05)	2.62 (2.11-3.26)	2.14 (0.80-5.74)
Cetinkal G [63]	Turkey	Developed	5.02	3.55				12.54 (10.16-15.23)		
Chachkhiani D [64]	USA	Developed	10.35	6.14	15.60 (11.33-20.70)					
Chatterjee A [65]	Netherlands	Developed	7.75	7.41	9.81 (8.62-11.09)		0.77 (0.59-1.02)	18.92 (17.34-20.58)		1.30 (1.10-1.53)
Chaudhary S [66]	USA	Developed	10.35	6.14	7.03 (3.27-12.93)		0.34 (0.10-1.16)	17.19 (11.10-24.86)		0.85 (0.57-1.28)
Chen L [67]	China	Developed	1.74	3.18				3.28 (2.52-4.20)		1.80 (1.07-3.05)
Chen Q [68]	China	Developed	1.74	3.18				4.14 (1.53-8.79)		
Chen R [69]	China	Developed	1.74	3.18	0.36 (0.04-1.31)	1.35 (0.34-5.43)	2.68 (0.66-10.82)	1.28 (0.52-2.61)	1.95 (1.21-3.16)	3.94 (2.39-6.51)
Chhiba KD [70]	USA	Developed	10.35	6.14	14.42 (12.69-16.28)	0.93 (0.81-1.06)	0.74 (0.36-1.53)			
Choi HG [71]	South Korea	Developed	3.81	4.43	2.37 (1.92-2.88)		2.80 (1.41-5.56)			
Choi JC [72]	South Korea	Developed	3.81	4.43	1.68 (1.39-2.00)			9.24 (8.58-9.92)		
Choi YJ [73]	South Korea	Developed	3.81	4.43	2.96 (2.58-3.37)		2.89 (1.79-4.66)			
Ciardullo S [74]	Italy	Developed	4.25	5.39				10.46 (7.54-14.02)		1.74 (1.31-2.32)
Ciceri F [75]	Italy	Developed	4.25	5.39				5.37 (3.39-8.01)		3.57 (2.59-4.93)
Corsini Campioli C [76]	USA	Developed	10.35	6.14	18.33 (13.74-23.68)	1.07 (0.62-1.84)		8.76 (5.57-12.97)	2.25 (1.39-3.64)	
Cosio BG [77]	Spain	Developed	4.86	6.31				4.33 (3.25-5.64)		
Cui N [78]	China	Developed	1.74	3.18				5.74 (4.26-7.54)		2.17 (1.41-3.34)
Cummings M [79]	USA	Developed	10.35	6.14	8.17 (5.13-12.22)					
Dai CL [80]	USA	Developed	10.35	6.14	5.30 (5.11-5.49)	1.29 (1.19-1.39)		2.61 (2.47-2.74)	3.40 (3.22-3.60)	
Daubin C [81]	France	Developed	6.96	3.84				5.61 (3.55-8.37)		
Daynes E [82]	UK	Developed	9.61	7.03	15.27 (9.58-22.59)			9.92 (5.39-16.37)		
De Lorenzo R [83]	Italy	Developed	4.25	5.39				4.78 (2.49-8.20)		
de Souza FSH [84]	Brazil	Developed	4.39	2.87	4.80 (4.60-5.00)		0.71 (0.67-0.75)			
DeBiasi RL [85]	USA	Developed	10.35	6.14	19.77 (14.18-26.41)	0.77 (0.37-1.57)				
Di Bella S [86]	Italy	Developed	4.25	5.39				7.58 (3.69-13.49)		
Docherty AB [87]	UK	Developed	9.61	7.03	14.49 (13.97-15.01)					
Duanmu Y [88]	USA	Developed	10.35	6.14	10.00 (4.90-17.62)	1.29 (0.46-3.56)		1.00 (0.03-5.45)	4.30 (3.01-6.16)	

Ebell MH [89]	USA	Developed	10.35	6.14	11.23 (9.65-12.98)		1.09 (0.73-1.64)	15.53 (13.70-17.51)	1.65 (1.22-2.24)
Eggert LE [90]	USA	Developed	10.35	6.14	10.69 (9.89-11.53)	1.66 (1.36-2.02)			
Elghoudi A [91]	UAE	Developed	6.65	2.07	12.85 (9.21-17.27)				
Emami A [92]	Iran	Developing	3.13	1.85	2.02 (1.31-2.96)				
Enzmann MO [93]	USA	Developed	10.35	6.14	18.00 (12.21-25.10)			10.67 (6.22-16.74)	
Estiri H [94]	USA	Developed	10.35	6.14				5.45 (5.11-5.80)	4.77 (4.10-5.55)
Fagard K [95]	Belgium	Developed	4.75	7.47				9.52 (4.66-16.82)	1.58 (0.41-6.09)
Fan Y [96]	China	Developed	1.74	3.18				1.82 (1.29-2.47)	
Feng Y [97]	China	Developed	1.74	3.18				4.62 (2.92-6.91)	2.63 (1.84-3.75)
Feng Z [98]	China	Developed	1.74	3.18				2.84 (1.63-4.57)	5.14 (3.14-8.42)
Ferastraoaru D [99]	USA	Developed	10.35	6.14	2.00 (1.61-2.45)				
Floyd GC [100]	USA	Developed	10.35	6.14	20.94 (18.43-23.63)	0.38 (0.21-0.69)			
Fond G [101]	France	Developed	6.96	3.84	6.50 (5.11-8.13)				
Fong WCG [102]	UK	Developed	9.61	7.03	16.53 (13.69-19.70)				
Forsblom E [103]	Finland	Developed	6.91	4.40	16.24 (13.34-19.48)			2.56 (1.44-4.19)	
Fox T [104]	USA	Developed	10.35	6.14	6.94 (4.62-9.94)			11.57 (8.56-15.17)	
Galvan-Roman JM [105]	Spain	Developed	4.86	6.31				6.16 (2.86-11.38)	
Gao C [106]	China	Developed	1.74	3.18	0.76 (0.48-1.16)			1.08 (0.73-1.53)	
Garcia-Menaya JM [107]	Spain	Developed	4.86	6.31	6.19 (2.53-12.35)				
Garcia-Pachon E [108]	Spain	Developed	4.86	6.31	2.57 (2.03-3.20)				
Garcia-Pachon E [109]	Spain	Developed	4.86	6.31	2.66 (1.28-4.84)				
Garg S [110]	USA	Developed	10.35	6.14	16.98 (11.50-23.74)			10.69 (6.35-16.57)	
Garibaldi BT [111]	USA	Developed	10.35	6.14	8.39 (7.29-9.60)			15.92 (14.45-17.48)	
Garibaldi BT [112]	USA	Developed	10.35	6.14	9.50 (7.59-11.69)		0.62 (0.32-1.22)	18.15 (15.59-20.94)	1.12 (0.75-1.65)
Gavin W [113]	USA	Developed	10.35	6.14	10.71 (6.12-17.06)		0.49 (0.07-3.43)		
Gayam V [114]	USA	Developed	10.35	6.14	10.83 (7.95-14.31)		1.28 (0.87-1.87)	12.92 (9.86-16.52)	1.18 (0.81-1.73)
Georges JL [115]	France	Developed	6.96	3.84	8.55 (6.09-11.59)	0.32 (0.13-0.83)		5.54 (3.58-8.14)	0.79 (0.39-1.60)
Giorgi Rossi P [116]	Italy	Developed	4.25	5.39				4.82 (4.04-5.71)	1.82 (1.62-2.06)
Girardin JL [117]	USA	Developed	10.35	6.14	11.71 (10.75-12.72)		0.85 (0.70-1.02)	7.81 (7.02-8.67)	1.48 (1.25-1.75)
Gold JAW [118]	USA	Developed	10.35	6.14	10.49 (7.29-14.49)			5.25 (3.03-8.38)	
Gomez Antunez M [119]	Spain	Developed	4.86	6.31				7.16 (6.67-7.67)	2.00 (1.81-2.21)

Goodacre S [120]	UK	Developed	9.61	7.03	13.35 (12.48-14.25)					
Gottlieb M [121]	USA	Developed	10.35	6.14	8.49 (7.91-9.09)	1.58 (1.39-1.81)		1.35 (1.12-1.61)	4.39 (3.88-4.97)	
Goyal P [122]	USA	Developed	10.35	6.14	12.47 (9.37-16.15)			5.09 (3.14-7.75)		
Goyal P [123]	USA	Developed	10.35	6.14	9.43 (8.07-10.92)			6.11 (5.01-7.36)		
Graff K [124]	USA	Developed	10.35	6.14	12.18 (9.26-15.63)	2.31 (1.42-3.74)				
Grandbastien M [125]	France	Developed	6.96	3.84	21.70 (14.28-30.76)					
Grasselli G [126]	Italy	Developed	4.25	5.39				3.51 (2.68-4.52)	1.42 (1.23-1.64)	
Graziani D [127]	Spain	Developed	4.86	6.31				5.53 (5.16-5.92)	2.75 (2.17-3.48)	
Green I [128]	Israel	Developed	5.00	2.72	6.75 (5.75-7.86)					
Gu T [129]	China	Developed	1.74	3.18					1.76 (1.06-2.93)	
Guan WJ [130]	China	Developed	1.74	3.18	0.58 (0.51-0.65)			1.51 (1.39-1.63)		
Guan WJ [131]	China	Developed	1.74	3.18				1.51 (0.97-2.24)	4.10 (2.94-5.70)	8.90 (4.20-18.87)
Guan WJ [132]	China	Developed	1.74	3.18				1.09 (0.57-1.90)	3.25 (1.82-5.83)	
Gude-Sampedro F [133]	Spain	Developed	4.86	6.31	2.75 (2.45-3.09)	1.52 (1.30-1.78)	0.86 (0.50-1.48)	1.72 (1.48-1.99)	2.54 (2.23-2.88)	4.53 (3.40-6.03)
Guerra Veloz MF [134]	Spain	Developed	4.86	6.31				3.13 (1.72-5.20)		
Gunal O [135]	Turkey	Developed	5.02	3.55	7.00 (2.86-13.89)			6.00 (2.23-12.60)		
Guner R [136]	Turkey	Developed	5.02	3.55				5.41 (2.82-9.25)	2.39 (1.28-4.45)	
Gupta R [137]	USA	Developed	10.35	6.14	6.32 (4.30-8.89)		1.38 (1.08-1.78)	7.48 (5.30-10.21)		1.09 (0.81-1.49)
Gutierrez Gabriel S [138]	Spain	Developed	4.86	6.31	8.82 (4.11-16.09)		0.69 (0.10-4.63)	3.92 (1.08-9.74)		3.50 (1.17-10.45)
Haaw NJL [139]	Philippines	Developing	4.65	1.72	3.20 (2.83-3.61)		0.89 (0.59-1.34)	0.44 (0.31-0.61)		3.60 (2.26-5.75)
Halalau A [140]	USA	Developed	10.35	6.14	11.21 (9.13-13.57)	1.28 (0.73-2.27)		9.01 (7.14-11.18)	6.60 (4.60-9.46)	
Hansen ESH [141]	Denmark	Developed	4.87	8.20	6.94 (6.25-7.67)			8.46 (7.71-9.26)		
Hashmi MD [142]	USA	Developed	10.35	6.14	15.10 (10.86-20.21)			4.90 (2.56-8.40)		
Hasseli R [143]	Germany	Developed	4.25	7.22	8.76 (6.36-11.70)	0.83 (0.47-1.44)		5.34 (3.49-7.78)	2.70 (2.02-3.61)	
He J [144]	China	Developed	1.74	3.18				6.91 (4.33-10.37)		
He Y [145]	China	Developed	1.74	3.18				8.33 (5.61-11.82)		2.18 (1.71-2.78)
Hernandez-Galdamez DR [146]	Mexico	Developed	2.68	2.08	2.77 (2.70-2.85)	0.82 (0.79-0.86)	0.74 (0.68-0.80)	1.76 (1.71-1.82)	2.08 (2.03-2.13)	2.69 (2.57-2.81)
Ho KS [147]	USA	Developed	10.35	6.14	4.45 (4.06-4.86)		0.80 (0.63-1.01)			
Hsu HE [148]	USA	Developed	10.35	6.14	13.19 (11.94-14.52)	1.21 (1.08-1.35)	1.19 (0.69-2.04)	5.35 (4.54-6.26)	1.83 (1.65-2.02)	3.45 (2.07-5.74)
Hu L [149]	China	Developed	1.74	3.18				1.86 (0.68-4.00)	1.91 (1.72-2.12)	
Hu X [150]	China	Developed	1.74	3.18				1.88 (0.51-4.74)	2.90 (1.04-8.08)	

Huang D [151]	China	Developed	1.74	3.18	1.49 (0.48-3.44)			2.68 (1.23-5.02)	
Huang QM [152]	China	Developed	1.74	3.18	17.70 (14.96-20.70)			19.80 (16.94-22.92)	
Hurst JH [153]	USA	Developed	10.35	6.14	6.57 (4.00-10.08)				
Hussein MH [154]	USA	Developed	10.35	6.14	14.34 (11.39-17.72)		0.72 (0.34-1.52)		
Iaccarino G [155]	Italy	Developed	4.25	5.39				7.73 (6.47-9.15)	2.09 (1.46-2.98)
Ierardi AM [156]	Italy	Developed	4.25	5.39	4.37 (2.11-7.88)			7.86 (4.72-12.14)	
Imam Z [157]	USA	Developed	10.35	6.14	8.81 (7.33-10.48)			8.20 (6.77-9.82)	
Ioannou GN [158]	USA	Developed	10.35	6.14	7.35 (6.85-7.88)	0.99 (0.89-1.09)	0.71 (0.55-0.91)	18.78 (18.03-19.56)	1.50 (1.42-1.59)
Islam MZ [159]	Bangladesh	Developing	1.30	2.46				8.37 (6.74-10.24)	7.30 (3.39-15.75)
Israel A [160]	Israel	Developed	5.00	2.72		0.96 (0.90-1.02)			1.34 (1.26-1.43)
Israelsen SB [161]	Denmark	Developed	4.87	8.20	11.43 (7.12-17.10)			6.29 (3.18-10.97)	
Itelman E [162]	Israel	Developed	5.00	2.72				1.23 (0.15-4.39)	1.16 (0.29-4.69)
Jalili M [163]	Iran	Developing	3.13	1.85	1.98 (1.82-2.14)		1.26 (1.09-1.46)	2.36 (2.19-2.54)	1.49 (1.32-1.68)
Janbabaei G [164]	Iran	Developing	3.13	1.85	1.90 (1.71-2.11)				
Jarkovsky J [165]	Czech Republic	Developed	3.07	4.60				9.99 (9.32-10.70)	2.53 (2.06-3.11)
Jarrett SA [166]	USA	Developed	10.35	6.14	10.56 (8.26-13.24)			14.56 (11.89-17.57)	
Javanian M [167]	Iran	Developing	3.13	1.85				12.00 (6.36-20.02)	2.62 (1.15-5.97)
Je D [168]	Australia	Developed	8.33	5.23	11.17 (7.13-16.42)			2.03 (0.56-5.12)	
Jehi L [169]	USA	Developed	10.35	6.14	14.35 (13.34-15.41)	1.30 (1.14-1.48)		5.75 (5.09-6.47)	2.92 (2.58-3.31)
Jiang M [170]	China	Developed	1.74	3.18				5.47 (4.45-6.66)	2.68 (1.89-3.79)
Jiang Y [171]	China	Developed	1.74	3.18				13.52 (9.75-18.09)	2.28 (1.80-2.90)
Jimenez E [172]	Spain	Developed	4.86	6.31	7.90 (6.60-9.36)		0.71 (0.45-1.12)	13.69 (12.01-15.51)	1.84 (1.46-2.32)
Jimeno S [173]	Spain	Developed	4.86	6.31				15.65 (9.55-23.60)	2.06 (1.39-3.06)
Jin M [174]	China	Developed	1.74	3.18		1.19 (0.64-2.20)	2.38 (0.23-25.06)		
Jongbloed M [175]	Netherlands	Developed	7.75	7.41	9.90 (6.78-13.83)			14.52 (10.75-19.00)	
Joseph A [176]	France	Developed	6.96	3.84	8.00 (3.52-15.16)			2.00 (0.24-7.04)	
Kalyanaraman Marcello R [177]	USA	Developed	10.35	6.14	5.28 (4.91-5.67)	1.32 (1.24-1.40)		2.11 (1.88-2.37)	1.79 (1.69-1.90)
Kammar-Garcia A [178]	Mexico	Developed	2.68	2.08	3.53 (3.22-3.85)			2.59 (2.34-2.87)	
Kang MK [179]	South Korea	Developed	3.81	4.43				7.63 (3.55-13.99)	
Kara AA [180]	Turkey	Developed	5.02	3.55	4.11 (2.14-7.07)	2.47 (1.70-3.58)			
Kara O [181]	Turkey	Developed	5.02	3.55	10.90 (7.67-14.89)	1.08 (0.84-1.39)		2.88 (1.33-5.41)	1.24 (0.87-1.78)

Karbuz A [182]	Turkey	Developed	5.02	3.55	4.07 (3.00-5.37)				
Keller MJ [183]	USA	Developed	10.35	6.14	19.05 (17.26-20.94)			12.85 (11.34-14.48)	
Keswani A [184]	USA	Developed	10.35	6.14	25.41 (22.79-28.16)				
Khalil K [185]	UK	Developed	9.61	7.03	10.31 (6.65-15.07)		0.47 (0.16-1.40)	8.97 (5.56-13.51)	1.17 (0.58-2.38)
Khan MS [186]	USA	Developed	10.35	6.14				18.51 (15.10-22.32)	2.84 (1.70-4.74)
Kim DW [187]	South Korea	Developed	3.81	4.43	16.93 (16.17-17.72)			13.76 (13.06-14.49)	
Kim E [188]	South Korea	Developed	3.81	4.43				23.87 (22.92-24.85)	2.18 (1.76-2.70)
Kim L [189]	USA	Developed	10.35	6.14	12.64 (11.36-14.01)			10.71 (9.52-11.99)	
Kim SR [190]	South Korea	Developed	3.81	4.43	2.70 (2.15-3.35)				
Kim SR [191]	South Korea	Developed	3.81	4.43	3.00 (2.33-3.80)			1.36 (0.92-1.94)	2.27 (1.01-5.13)
Knight D [192]	USA	Developed	10.35	6.14	16.04 (9.63-24.43)				
Ko JY [193]	USA	Developed	10.35	6.14	12.96 (12.08-13.89)			6.06 (5.44-6.72)	
Kokturk N [194]	Turkey	Developed	5.02	3.55	7.40 (6.13-8.84)		0.59 (0.19-1.84)	6.00 (4.85-7.32)	4.52 (2.65-7.70)
Kolin D [195]	UK	Developed	9.61	7.03	13.22 (11.15-15.52)	0.98 (0.88-1.09)		4.13 (2.97-5.58)	1.05 (0.90-1.23)
Kompaniyets L [196]	USA	Developed	10.35	6.14	10.16 (9.88-10.45)	1.23 (1.13-1.34)			
Kragholm K [197]	Denmark	Developed	4.87	8.20				4.03 (3.49-4.62)	
Krishnamoorthy G [198]	USA	Developed	10.35	6.14				13.71 (11.32-16.39)	
Kurt E [199]	Turkey	Developed	5.02	3.55				37.50 (33.08-42.08)	
Lanini S [200]	Italy	Developed	4.25	5.39				12.93 (9.72-16.73)	2.17 (1.14-4.15)
Lee HY [201]	South Korea	Developed	3.81	4.43				14.23 (13.57-14.92)	4.08 (3.15-5.28)
Lee JY [202]	South Korea	Developed	3.81	4.43	2.02 (1.11-3.36)	0.36 (0.05-2.38)		0.58 (0.16-1.47)	2.56 (0.95-6.89)
Lee SC [203]	South Korea	Developed	3.81	4.43				3.06 (2.58-3.60)	1.02 (0.98-1.06)
Lee SC [204]	South Korea	Developed	3.81	4.43	9.43 (8.77-10.13)	1.96 (1.52-2.55)	2.31 (1.68-3.18)		
Lee SC [205]	South Korea	Developed	3.81	4.43	0.33 (0.01-1.83)				
Lemus Calderon JA [206]	Spain	Developed	4.86	6.31	9.14 (8.44-9.88)		0.91 (0.59-1.41)		
Lendorf ME [207]	Denmark	Developed	4.87	8.20	10.81 (5.71-18.12)			7.21 (3.16-13.71)	
Lenti MV [208]	Italy	Developed	4.25	5.39	6.00 (2.23-12.60)			7.00 (2.86-13.89)	
Li K [209]	China	Developed	1.74	3.18				1.96 (0.24-6.90)	3.57 (0.82-15.51)
Li P [210]	China	Developed	1.74	3.18				10.29 (6.49-15.30)	
Li X [211]	China	Developed	1.74	3.18	0.91 (0.30-2.12)	1.22 (0.60-2.52)		3.10 (1.82-4.92)	1.59 (1.20-2.09)
Lian J [212]	China	Developed	1.74	3.18	1.72 (0.47-4.36)	2.11 (1.17-3.82)		3.88 (1.79-7.24)	2.36 (1.77-3.14)

Lian J [213]	China	Developed	1.74	3.18				0.38 (0.08-1.11)	
Lieberman-Cribbin W [214]	USA	Developed	10.35	6.14	4.36 (3.86-4.89)		0.91 (0.69-1.20)		
Liu D [215]	China	Developed	1.74	3.18				0.88 (0.52-1.39)	1.80 (1.45-2.22)
Liu J [216]	China	Developed	1.74	3.18				6.46 (5.45-7.59)	
Liu X [217]	China	Developed	1.74	3.18	11.54 (6.11-19.29)	1.92 (0.99-3.72)			
Liu Y [218]	China	Developed	1.74	3.18				9.75 (8.31-11.34)	1.98 (1.49-2.65)
Lobelo F [219]	USA	Developed	10.35	6.14	10.03 (9.27-10.84)			2.67 (2.27-3.13)	
Lombardi C [220]	Italy	Developed	4.25	5.39	1.92 (1.18-2.95)		0.44 (0.12-1.66)		
Louie T [221]	Australia	Developed	8.33	5.23	9.90 (4.85-17.46)	3.25 (1.48-7.13)		3.96 (1.09-9.83)	2.85 (0.98-8.32)
Lovinsky-Desir S [222]	USA	Developed	10.35	6.14	12.56 (10.80-14.48)		0.62 (0.32-1.20)		
Ludwig M [223]	Germany	Developed	4.25	7.22				13.06 (11.72-14.49)	1.49 (1.27-1.74)
Lund LC [224]	Denmark	Developed	4.87	8.20	6.81 (6.30-7.34)			4.10 (3.71-4.53)	
Luo H [225]	China	Developed	1.74	3.18				1.44 (0.66-2.72)	
Maatman TK [226]	USA	Developed	10.35	6.14	14.68 (8.63-22.74)			16.51 (10.09-24.84)	
Maddaloni E [227]	Italy	Developed	4.25	5.39				12.43 (9.18-16.32)	
Maeda T [228]	USA	Developed	10.35	6.14	10.27 (6.62-15.01)			7.14 (4.14-11.34)	
Maestre-Muniz MM [229]	Spain	Developed	4.86	6.31	6.66 (5.00-8.66)	0.87 (0.66-1.15)		6.92 (5.23-8.95)	1.40 (1.20-1.63)
Maestre-Muniz MM [230]	Spain	Developed	4.86	6.31	6.98 (4.79-9.76)		0.90 (0.51-1.59)	21.85 (18.09-25.98)	1.35 (1.01-1.81)
Magagnoli J [231]	USA	Developed	10.35	6.14	4.96 (3.56-6.69)			21.69 (18.89-24.69)	
Magleby R [232]	USA	Developed	10.35	6.14	9.14 (7.08-11.57)			6.05 (4.37-8.11)	
Maguire D [233]	UK	Developed	9.61	7.03	14.09 (11.17-17.43)		0.22 (0.05-0.87)	17.46 (14.25-21.06)	1.65 (0.96-2.83)
Maguire D [234]	UK	Developed	9.61	7.03	25.84 (19.58-32.93)		0.26 (0.10-0.69)	22.40 (16.58-29.14)	1.48 (0.83-2.65)
Mahavar S [235]	India	Developing	2.47	2.72				3.92 (1.08-9.74)	
Mahdavinia M [236]	USA	Developed	10.35	6.14	25.78 (23.00-28.71)	0.94 (0.75-1.17)	0.36 (0.08-1.55)		
Mancilla-Galindo J [237]	Mexico	Developed	2.68	2.08	2.94 (2.83-3.06)		0.76 (0.67-0.87)	2.02 (1.93-2.12)	2.84 (2.64-3.07)
Mani VR [238]	USA	Developed	10.35	6.14	9.78 (5.90-15.02)		1.71 (0.75-3.88)	9.24 (5.47-14.38)	1.40 (0.56-3.53)
Manohar J [239]	USA	Developed	10.35	6.14	9.47 (8.95-10.01)	0.94 (0.87-1.02)	0.69 (0.57-0.83)	4.49 (4.13-4.88)	1.51 (1.40-1.62)
Mao B [240]	China	Developed	1.74	3.18	1.06 (0.13-3.79)			2.13 (0.58-5.36)	
Margolis RHF [241]	USA	Developed	10.35	6.14	29.76 (25.37-34.44)				
Marin-Sanchez A [242]	Colombia	Developed	3.25	2.76				16.00 (9.43-24.68)	
Marron RM [243]	USA	Developed	10.35	6.14				17.85 (14.81-21.22)	1.53 (0.85-2.77)

Martinez-Del Rio J [244]	Spain	Developed	4.86	6.31	4.23 (3.03-5.74)			7.38 (5.78-9.27)		
Martos-Benitez FD [245]	Mexico	Developed	2.68	2.08	3.13 (2.95-3.30)			2.34 (2.19-2.49)		
Mash RJ [246]	South Africa	Developed	3.99	1.88	4.87 (3.79-6.14)			3.63 (2.71-4.76)		
Mashaqi S [247]	USA	Developed	10.35	6.14				11.33 (9.88-12.92)		
Mather JF [248]	USA	Developed	10.35	6.14	4.56 (3.68-5.59)		0.48 (0.23-1.00)	2.08 (1.49-2.82)		
McCarthy CP [249]	USA	Developed	10.35	6.14	11.74 (8.01-16.43)			8.91 (5.67-13.17)		
Mendy A [250]	USA	Developed	10.35	6.14	14.98 (12.95-17.20)			9.49 (7.84-11.35)		
Mendy A [251]	USA	Developed	10.35	6.14	10.16 (8.01-12.66)	2.99 (2.00-4.48)	1.15 (0.36-3.74)	8.85 (6.84-11.23)	3.48 (2.35-5.16)	2.45 (0.96-6.27)
Merzon E [252]	Israel	Developed	5.00	2.72				8.16 (6.19-10.51)	1.74 (1.09-2.78)	1.88 (0.23-15.30)
Metbulut AP [253]	Turkey	Developed	5.02	3.55	0.87 (0.65-1.13)	2.00 (1.10-3.65)				
Meyer CN [254]	Denmark	Developed	4.87	8.20	14.85 (8.56-23.31)		0.64 (0.22-1.84)	12.87 (7.04-21.00)		2.46 (1.40-4.32)
Mikami T [255]	USA	Developed	10.35	6.14	4.17 (3.70-4.69)	1.12 (1.02-1.23)	0.92 (0.66-1.29)	2.71 (2.33-3.14)	1.51 (1.42-1.62)	2.17 (1.68-2.81)
Mo P [256]	China	Developed	1.74	3.18				3.23 (1.06-7.37)		
Mohamed NE [257]	USA	Developed	10.35	6.14	4.39 (3.94-4.88)		0.87 (0.63-1.21)	2.60 (2.25-2.98)		2.18 (1.68-2.82)
Moll M [258]	USA	Developed	10.35	6.14	16.67 (11.89-22.41)			8.10 (4.79-12.64)		
Momeni-Boroujeni A [259]	USA	Developed	10.35	6.14	4.34 (2.80-6.39)			4.52 (2.95-6.60)		
Monteiro AC [260]	USA	Developed	10.35	6.14	11.61 (6.33-19.03)			5.36 (1.99-11.30)		
Monterrubio-Flores E [261]	Mexico	Developed	2.68	2.08				1.63 (1.59-1.67)		3.06 (2.95-3.17)
Mughal MS [262]	USA	Developed	10.35	6.14	2.33 (0.48-6.65)			6.98 (3.24-12.83)		
Munoz X [263]	Spain	Developed	4.86	6.31	3.19 (2.50-4.01)					
Murillo-Zamora E [264]	Mexico	Developed	2.68	2.08	2.19 (2.08-2.30)		0.90 (0.85-0.96)	3.96 (3.81-4.11)		1.32 (1.28-1.36)
Nagase H [265]	Japan	Developed	4.00	3.75	3.39 (2.52-4.46)		0.65 (0.17-2.58)	4.78 (3.74-6.01)		2.24 (1.18-4.27)
Nakeshbandi M [266]	USA	Developed	10.35	6.14	8.13 (5.90-10.87)			8.13 (5.90-10.87)		
Nanda S [267]	USA	Developed	10.35	6.14	7.53 (6.08-9.19)			6.59 (5.23-8.16)		
Newton S [268]	USA	Developed	10.35	6.14	13.48 (11.42-15.76)	0.97 (0.79-1.20)		5.73 (4.37-7.37)	1.90 (1.64-2.21)	
Ng JH [269]	USA	Developed	10.35	6.14	8.20 (7.68-8.74)		0.74 (0.64-0.85)	6.33 (5.87-6.81)		1.51 (1.36-1.68)
Nogueira PJ [270]	Portugal	Developed	10.37	5.92	1.37 (1.21-1.53)		0.43 (0.14-1.34)			
Nowak B [271]	Poland	Developed	5.76	3.72				13.02 (8.34-19.04)		1.63 (0.92-2.89)
Nystad W [272]	Norway	Developed	6.96	6.47	6.75 (6.20-7.33)			2.11 (1.80-2.46)		
Oduro-Mensah E [273]	Ghana	Developing	2.12	1.12	5.19 (2.86-8.55)					
O'Keefe JB [274]	USA	Developed	10.35	6.14	14.72 (11.72-18.15)	1.20 (0.52-2.79)		1.01 (0.33-2.34)	2.89 (0.49-17.17)	

Okoh AK [275]	USA	Developed	10.35	6.14				9.16 (5.90-13.43)	1.14 (0.69-1.87)
Ortiz-Brizuela E [276]	Mexico	Developed	2.68	2.08	2.91 (1.34-5.46)	0.48 (0.14-1.65)		0.97 (0.20-2.81)	1.48 (0.66-3.32)
Ottenhoff MC [277]	Netherlands	Developed	7.75	7.41	10.37 (9.13-11.71)				
Otto WR [278]	USA	Developed	10.35	6.14	20.52 (16.77-24.68)				
Otuonye NM [279]	Nigeria	Developing	3.59	0.74	2.60 (0.71-6.52)			1.30 (0.16-4.61)	
Ozger HS [280]	Turkey	Developed	5.02	3.55				5.26 (2.83-8.83)	
Palaiodimos L [281]	USA	Developed	10.35	6.14	13.50 (9.09-19.03)			14.00 (9.51-19.59)	
Pan W [282]	China	Developed	1.74	3.18	1.20 (0.62-2.10)			2.31 (1.47-3.44)	
Pandita A [283]	USA	Developed	10.35	6.14	11.58 (7.95-16.12)	0.94 (0.55-1.61)		9.65 (6.34-13.92)	1.51 (1.02-2.21)
Paranjpe I [284]	USA	Developed	10.35	6.14	8.19 (7.07-9.41)		0.90 (0.60-1.34)	5.14 (4.25-6.15)	1.83 (1.31-2.57)
Parra-Bracamonte GM [285]	Mexico	Developed	2.68	2.08	2.71 (2.66-2.77)		0.74 (0.69-0.79)	1.65 (1.60-1.69)	3.01 (2.90-3.13)
Patone M [286]	UK	Developed	9.61	7.03	15.01 (14.86-15.17)			0.94 (0.90-0.99)	
Pellaud C [287]	Switzerland	Developed	6.94	4.87				8.16 (4.74-12.92)	1.55 (0.62-3.86)
Perez-Guzman PN [288]	UK	Developed	9.61	7.03	7.00 (5.11-9.32)			4.56 (3.05-6.52)	
Peterson E [289]	USA	Developed	10.35	6.14	7.61 (5.07-10.87)			12.68 (9.40-16.59)	
Phelps M [290]	Denmark	Developed	4.87	8.20				15.33 (14.24-16.47)	
Poblador-Plou B [291]	Spain	Developed	4.86	6.31	3.24 (2.11-4.75)				
Porto LC [292]	Brazil	Developed	4.39	2.87	6.34 (4.18-9.15)				
Price-Haywood EG [293]	USA	Developed	10.35	6.14	4.08 (3.45-4.79)			2.27 (1.80-2.82)	
Profili F [294]	Italy	Developed	4.25	5.39				5.76 (4.74-6.93)	
Purroy F [295]	Spain	Developed	4.86	6.31				6.85 (5.71-8.14)	
Rabha AC [296]	Brazil	Developed	4.39	2.87	12.24 (9.71-15.17)	0.74 (0.38-1.48)			
Rabha AC [297]	Brazil	Developed	4.39	2.87	13.04 (7.49-20.60)			0.95 (0.63-1.36)	
Ramachandran P [298]	USA	Developed	10.35	6.14	15.86 (10.33-22.84)			8.97 (4.86-14.84)	
Ramakrishnan S [299]	UK	Developed	9.61	7.03	15.11 (9.60-22.16)				
Ramos-Martinez A [300]	Spain	Developed	4.86	6.31	12.49 (11.73-13.28)			5.69 (5.16-6.25)	
Regina J [301]	Switzerland	Developed	6.94	4.87	4.83 (1.96-9.69)			6.90 (3.36-12.32)	
Rhodes NJ [302]	USA	Developed	10.35	6.14	8.52 (5.82-11.94)			9.38 (6.54-12.91)	
Richardson S [303]	USA	Developed	10.35	6.14	8.40 (7.70-9.15)			5.04 (4.48-5.63)	
Riou M [304]	France	Developed	6.96	3.84	15.32 (9.48-22.89)			12.10 (6.93-19.17)	
Robinson LB [305]	USA	Developed	10.35	6.14		1.17 (0.98-1.40)	0.48 (0.22-1.05)		

Robinson LB [306]	USA	Developed	10.35	6.14			0.74 (0.35-1.60)			
Roca E [307]	Italy	Developed	4.25	5.39	1.92 (1.18-2.95)			1.19 (0.95-1.46)		
Rodilla E [308]	Spain	Developed	4.86	6.31				7.00 (6.55-7.47)		
Rosenthal JA [309]	USA	Developed	10.35	6.14	14.44 (11.97-17.21)	0.98 (0.75-1.29)	1.16 (0.61-2.22)			
Rubio-Rivas M [310]	Spain	Developed	4.86	6.31	7.09 (6.71-7.48)			6.75 (6.37-7.13)		
Rubio-Rivas M [311]	Spain	Developed	4.86	6.31	7.20 (6.75-7.68)			6.51 (6.08-6.97)		
Saatci D [312]	UK	Developed	9.61	7.03	11.25 (10.87-11.64)					
Saha A [313]	Bangladesh	Developing	1.30	2.46	8.93 (5.08-14.30)		0.33 (0.12-0.92)			
Salacup G [314]	USA	Developed	10.35	6.14	7.44 (4.47-11.50)			12.40 (8.52-17.22)	1.10 (0.55-2.21)	
Sandoval M [315]	USA	Developed	10.35	6.14	8.96 (7.70-10.35)					
Sapey E [316]	UK	Developed	9.61	7.03	19.80 (18.16-21.52)		0.93 (0.80-1.07)	16.96 (15.42-18.59)	1.43 (1.26-1.63)	
Satici C [317]	Turkey	Developed	5.02	3.55	6.31 (4.61-8.41)		0.27 (0.04-1.94)	4.11 (2.75-5.89)	0.43 (0.06-3.01)	
Schonfeld D [318]	Argentina	Developed	7.17	3.48	6.07 (5.97-6.18)		0.58 (0.53-0.64)	2.13 (2.07-2.19)	5.04 (4.77-5.33)	
Seaton RA [319]	UK	Developed	9.61	7.03	8.85 (6.58-11.60)			13.56 (10.76-16.77)		
Shabrawishi M [320]	Saudi Arabia	Developed	2.39	1.22	2.67 (0.73-6.69)			0.67 (0.02-3.66)		
Shady A [321]	USA	Developed	10.35	6.14	11.35 (8.30-15.03)			5.68 (3.55-8.55)		
Shah P [322]	USA	Developed	10.35	6.14	13.03 (10.26-16.22)		0.91 (0.51-1.61)	9.00 (6.69-11.79)	1.66 (1.00-2.75)	
Shah VA [323]	USA	Developed	10.35	6.14	8.06 (7.59-8.55)			9.55 (9.05-10.08)		
Shahriarirad R [324]	Iran	Developing	3.13	1.85	6.19 (2.53-12.35)	1.51 (0.22-10.21)	1.89 (0.27-13.08)	7.96 (3.71-14.58)	1.16 (0.17-8.04)	1.44 (0.20-10.30)
Shi S [325]	China	Developed	1.74	3.18				3.43 (2.19-5.10)	0.94 (0.24-3.61)	
Shin EK [326]	South Korea	Developed	3.81	4.43	2.30 (1.92-2.73)			0.72 (0.51-0.98)		
Shmueli H [327]	USA	Developed	10.35	6.14				14.99 (12.87-17.31)	1.35 (1.20-1.51)	
Silver V [328]	USA	Developed	10.35	6.14	19.68 (14.93-25.17)					
Singer AJ [329]	USA	Developed	10.35	6.14	6.45 (5.50-7.51)	1.01 (0.79-1.29)		4.73 (3.92-5.66)	1.59 (1.30-1.95)	
Sinha P [330]	USA	Developed	10.35	6.14	11.37 (7.75-15.92)			5.88 (3.33-9.52)		
Siso-Almirall A [331]	Spain	Developed	4.86	6.31	4.04 (2.17-6.80)	0.94 (0.52-1.71)		5.90 (3.59-9.06)	1.80 (1.43-2.26)	
Smith AA [332]	USA	Developed	10.35	6.14	13.58 (10.15-17.65)		0.73 (0.44-1.21)	16.76 (12.98-21.12)	1.79 (1.33-2.41)	
Smith SM [333]	USA	Developed	10.35	6.14	9.78 (5.90-15.02)			6.52 (3.41-11.11)		
Sohrabi MR [334]	Iran	Developing	3.13	1.85	1.33 (1.28-1.38)	1.21 (1.17-1.25)	0.98 (0.88-1.10)			
Somani SS [335]	USA	Developed	10.35	6.14				2.90 (2.30-3.59)		
Somers EC [336]	USA	Developed	10.35	6.14	20.13 (14.11-27.34)					

Song J [337]	China	Developed	1.74	3.18	2.29 (1.44-3.45)	0.18 (0.03-1.21)	0.27 (0.04-1.84)	2.19 (1.36-3.32)	2.34 (1.59-3.44)	3.00 (1.87-4.82)
Stidham RA [338]	USA	Developed	10.35	6.14	3.20 (3.05-3.35)					
Suleyman G [339]	USA	Developed	10.35	6.14	15.77 (12.57-19.41)	0.94 (0.81-1.09)		10.58 (7.93-13.75)	1.10 (0.96-1.26)	
Sundaram ME [340]	Canada	Developed	4.52	4.98	15.53 (15.08-15.98)			2.86 (2.65-3.07)		
Sy KTL [341]	Philippines	Developing	4.65	1.72	2.33 (2.08-2.61)			0.30 (0.21-0.41)		
Tambe MP [342]	India	Developing	2.47	2.72				5.08 (2.46-9.14)		2.16 (1.24-3.76)
Tartof S [343]	USA	Developed	10.35	6.14	18.41 (17.50-19.34)		1.20 (0.87-1.67)	12.57 (11.79-13.37)		1.73 (1.24-2.42)
Tenforde MW [344]	USA	Developed	10.35	6.14	15.71 (12.06-19.96)	1.70 (1.11-2.61)		5.14 (3.08-8.01)	3.30 (2.24-4.88)	
Terada M [345]	Japan	Developed	4.00	3.75	4.92 (4.21-5.70)	1.11 (0.91-1.35)				
Tessitore E [346]	Switzerland	Developed	6.94	4.87				5.84 (4.35-7.65)		2.30 (1.57-3.38)
Tezcan ME [347]	Turkey	Developed	5.02	3.55	7.84 (5.43-10.89)			3.19 (1.71-5.39)		
Thiabaud A [348]	Switzerland	Developed	6.94	4.87	8.51 (7.42-9.70)					
Thompson JV [349]	UK	Developed	9.61	7.03	10.00 (7.44-13.08)		0.63 (0.37-1.07)	16.17 (12.96-19.82)		1.26 (0.94-1.68)
Timberlake DT [350]	USA	Developed	10.35	6.14	21.82 (17.08-27.17)					
Toussie D [351]	USA	Developed	10.35	6.14	13.61 (10.14-17.73)					
Trabulus S [352]	Turkey	Developed	5.02	3.55	5.95 (3.67-9.04)		0.38 (0.05-2.59)	5.65 (3.44-8.69)		2.71 (1.31-5.60)
Tramunt B [353]	France	Developed	6.96	3.84				9.79 (8.61-11.07)		
Tsou TP [354]	Taiwan	Developed	3.12	1.64	3.00 (0.62-8.52)					
Turan O [355]	Turkey	Developed	5.02	3.55				4.96 (3.74-6.44)		1.89 (0.91-3.90)
Valenzuela RG [356]	USA	Developed	10.35	6.14	6.72 (5.67-7.89)			5.39 (4.45-6.47)		
Valverde-Monge M [357]	Spain	Developed	4.86	6.31	0.44 (0.36-0.53)			3.51 (2.82-4.30)		
van Gerwen M [358]	USA	Developed	10.35	6.14	11.61 (10.60-12.69)	0.99 (0.90-1.09)	0.84 (0.66-1.07)	4.64 (3.99-5.37)	1.59 (1.48-1.71)	2.22 (1.78-2.75)
Vaughn VM [359]	USA	Developed	10.35	6.14	12.61 (11.07-14.28)			11.73 (10.24-13.35)		
Vera-Zertuche JM [360]	Mexico	Developed	2.68	2.08	3.49 (3.21-3.79)			2.50 (2.26-2.76)		
Vergara P [361]	Italy	Developed	4.25	5.39				15.25 (13.13-17.57)		1.15 (0.92-1.44)
Vetrano DL [362]	Italy	Developed	4.25	5.39				17.38 (16.42-18.36)		
Villamanan E [363]	Spain	Developed	4.86	6.31	3.98 (2.13-6.70)			12.84 (9.42-16.96)		
Violi F [364]	Italy	Developed	4.25	5.39				12.06 (8.94-15.81)		2.14 (1.37-3.32)
Wall GC [365]	USA	Developed	10.35	6.14	3.83 (1.67-7.40)			4.31 (1.99-8.02)		
Wang D [366]	China	Developed	1.74	3.18				2.90 (0.80-7.26)		
Wang J [367]	China	Developed	1.74	3.18	9.04 (6.69-11.87)					

Wang K [368]	China	Developed	1.74	3.18				0.68 (0.08-2.42)		8.17 (1.90-35.04)
Wang L [369]	China	Developed	1.74	3.18				4.69 (2.27-8.46)		
Wang L [370]	China	Developed	1.74	3.18				6.19 (3.88-9.31)		3.08 (1.92-4.96)
Wang W [371]	China	Developed	1.74	3.18	0.81 (0.02-4.45)			9.76 (5.14-16.42)		
Wang Y [372]	China	Developed	1.74	3.18				37.27 (28.24-47.01)	0.60 (0.33-1.11)	
Webb NE [373]	USA	Developed	10.35	6.14	12.27 (7.66-18.31)					
Wei W [374]	USA	Developed	10.35	6.14				4.27 (4.19-4.36)		
Wei Y [375]	China	Developed	1.74	3.18				2.54 (1.03-5.16)	6.40 (1.75-23.39)	
Weizman O [376]	France	Developed	6.96	3.84	6.35 (5.50-7.28)			5.70 (4.88-6.61)		
Wetterslev M [377]	Denmark	Developed	4.87	8.20				9.03 (5.03-14.69)		
Wu F [378]	China	Developed	1.74	3.18				4.77 (3.56-6.24)	2.87 (2.15-3.82)	5.99 (3.36-10.69)
Xiong TY [379]	China	Developed	1.74	3.18				1.27 (0.47-2.75)		
Xu H [380]	China	Developed	1.74	3.18				4.90 (1.61-11.07)		
Xu PP [381]	China	Developed	1.74	3.18				1.85 (0.99-3.14)		7.32 (3.01-17.82)
Yan CH [382]	USA	Developed	10.35	6.14	10.16 (5.52-16.74)	1.15 (0.40-3.32)				
Yang JM [383]	South Korea	Developed	3.81	4.43				4.77 (4.29-5.28)		
Yang MJ [384]	USA	Developed	10.35	6.14				4.04 (3.22-5.00)		
Yang P [385]	China	Developed	1.74	3.18				3.80 (1.84-6.88)		
Yao JS [386]	USA	Developed	10.35	6.14	11.57 (7.83-16.29)			9.09 (5.79-13.44)		
Yao Y [387]	China	Developed	1.74	3.18				12.28 (7.77-18.16)		
Yordanov Y [388]	France	Developed	6.96	3.84	11.12 (10.41-11.86)					
Yoshida Y [389]	USA	Developed	10.35	6.14	10.70 (8.61-13.09)			18.04 (15.40-20.93)		
Yu Y [390]	China	Developed	1.74	3.18	0.70 (0.02-3.86)			2.11 (0.44-6.05)		
Zhang J [391]	China	Developed	1.74	3.18				2.70 (0.56-7.70)	2.12 (0.40-11.12)	
Zhang JJ [393]	China	Developed	1.74	3.18	0.00 (0.00-2.60)			1.43 (0.17-5.07)	2.46 (2.01-3.02)	
Zhang JJ [392]	China	Developed	1.74	3.18	0.35 (0.01-1.91)	2.29 (2.01-2.61)	6.00 (4.63-7.77)	2.08 (0.77-4.46)	1.93 (1.32-2.83)	3.08 (1.32-7.14)
Zhang SY [394]	China	Developed	1.74	3.18				0.38 (0.08-1.11)	10.47 (8.44-12.98)	
Zhou F [395]	China	Developed	1.74	3.18				3.14 (1.16-6.71)		2.47 (1.34-4.55)
Zhou X [396]	China	Developed	1.74	3.18	0.91 (0.02-4.96)			2.73 (0.57-7.76)		
Zuniga-Moya JC [397]	Honduras	Developing	4.12	1.51	3.53 (2.41-4.98)			1.94 (1.13-3.09)		

Table S2. Studies reporting on changes in healthcare utilization for asthma and chronic obstructive pulmonary disease (COPD) during the COVID-19 pandemic.

Author, reference	Location	Country Status	Main observations in each study
Abe K [398]	Japan	Developed	Reduction in asthma hospitalizations for both children and adults
Alsallakh MA [399]	UK	Developed	48% reduction in emergency admissions for COPD exacerbation, with no significant change in mortality due to COPD
Alsulaiman JW [400]	Jordan	Developed	Reduction in paediatric asthma exacerbation admissions following the implantation of COVID-19 mitigation measures
Araujo OP [401]	Brazil	Developed	Reduction in asthma admissions to pediatric intensive care unit
Berghaus TM [402]	Germany	Developed	Significantly lower rate of admissions due to COPD exacerbations
Birkmeyer JD [403]	USA	Developed	40% reduction in admissions related to COPD/asthma
Bogh SB [404]	Denmark	Developed	Reduction in unplanned hospital visits due to COPD exacerbation
Bover-Bauza C [405]	Spain	Developed	82% reduction in pediatric Emergency Department visits due to asthma; significant reduction in nebulized medication usage
Bun S [406]	Japan	Developed	Significant reduction in hospital admissions due to moderate/severe asthma; significant reduction in prescription of inhaler solutions and doubling of prescriptions for inhalers
Chan KPF [407]	Hong Kong	Developed	53% reduction in admissions related to asthma exacerbations
Chan KPF [408]	Hong Kong	Developed	Reduction in hospital admissions for acute exacerbation of COPD
Charlton K [409]	UK	Developed	17% and 23% reduction in ambulation activation calls for asthma and COPD respectively
Chavasse R [410]	UK	Developed	90% reduction in Emergency Department visits due to asthma during the lockdown period
Davies GA [411]	UK	Developed	Substantial reduction in hospital admissions for asthma exacerbation, with no significant change in asthma mortality
de Boer G [412]	Netherlands	Developed	Significant reduction in asthma exacerbation frequency
Donath H [413]	Germany	Developed	Reduction in hospital admissions for asthma exacerbations
Fan HF [414]	China	Developed	Reduction in severe asthma exacerbations among urban children
Faria N [415]	Portugal	Developed	73% reduction in severe acute exacerbations of COPD
Farrugia Y [416]	Malta	Developed	Significant reduction on hospital admissions, but higher mortality rate, due to acute exacerbations of COPD; reduction in use of nebulized medications and oxygen therapy
Golan-Tripto I [417]	Israel	Developed	Reduction in Pediatric Emergency Department visits, but higher hospitalization rates, due to asthma
Guijon OL [418]	USA	Developed	78%, 90%, and 68% reductions in hospitalization, Emergency Department visits, and exacerbations, respectively among children with asthma
Helgeland J [419]	Norway	Developed	Reduction in hospital admissions due to COPD
Hu W [420]	China	Developed	Reduction in acute exacerbations and hospitalizations due to COPD
Huh K [421]	South Korea	Developed	58% and 48% reduction in hospital admissions due to COPD and asthma respectively
Hurst JH [422]	USA	Developed	Significant reduction in asthma exacerbations and urgent asthma-related healthcare encounters among children of all races/ethnicities
Jaehn P [423]	Germany	Developed	Reduction in hospital admissions due to COPD
Kyriakopoulos C [424]	Greece	Developed	Reduction in hospital admissions due to both asthma and COPD
Levene R [425]	USA	Developed	Significant reduction in asthma-related pediatric Emergency Department visits

Mansfield KE [426]	UK	Developed	Reduction in primary care contacts for asthma exacerbations
Markham JL [427]	USA	Developed	Reduction in hospital admissions for asthma
McAuley H [428]	UK	Developed	Increase in community-treated acute COPD exacerbation events among patients with severe COPD during the lockdown period
Pelletier JH [429]	USA	Developed	Reduction in hospital admissions for asthma among children
Pepper MP [430]	USA	Developed	Significant reduction in asthma-related pediatric Emergency Department visits
Ramgopal S [431]	USA	Developed	Reduction in asthma-related pediatric Emergency Department utilization to below forecasted rates
Rennert-May E [432]	Canada	Developed	Significant reduction in Emergency Department visits for both asthma and COPD
Saieva P [433]	South Africa	Developed	Significant reduction in Emergency Centre visits for COPD
Saliccioli JD [434]	USA	Developed	Nearly 50% reduction in asthma exacerbations among Black/African-American and Hispanic/Latin individuals with moderately severe asthma
Sevinc C [435]	Turkey	Developed	Reduction in number of asthma and COPD patients treated as inpatients or requiring Emergency Service admissions
Shah SA [436]	UK	Developed	Significant reduction (about 0.2 episodes per person-year) of exacerbation rates among asthma patients across all age groups and both sexes, as recorded in primary care
Sheehan WJ [437]	USA	Developed	Reduction in asthma-related Emergency Department visits, hospitalizations, and Intensive Care Unit admissions among children with asthma
Simoneau T [438]	USA	Developed	Reduction in asthma-related Pediatric Emergency Department visits among children with asthma
So JY [439]	USA	Developed	>50% reduction in season-matched hospital admissions due to COPD
Stohr E [440]	Germany	Developed	28% reduction in discretionary admissions due to COPD exacerbations
Sykes DL [441]	UK	Developed	Significant reduction in all-cause, and exacerbation-related, hospitalisations among patients with both asthma and COPD
Tan JY [442]	Singapore	Developed	Significant and sustained reduction in hospital admissions for all COPD exacerbations, as well as those associated with respiratory viral infections
Taquechel K [443]	USA	Developed	Reduction in outpatient and emergency visits, hospitalizations, and rhinovirus test positivity among children with asthma; reduction in systemic corticosteroid prescriptions
Ullmann N [444]	Italy	Developed	Reduction of respiratory symptoms, medication use for exacerbations, and use of healthcare resources among children with persistent preschool wheeze
Ulrich L [445]	USA	Developed	Reduction in asthma-related Emergency Department utilization among children with asthma
Wee LE [446]	Singapore	Developed	Significant and sustained reduction in asthma admissions
Wilder JL [447]	USA	Developed	Significant reduction in hospitalizations for pediatric asthma
Zee-Chang JE [448]	USA	Developed	Reduction in Pediatric Intensive Care Unit utilization by children with asthma

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