

Supplement 2

Characteristics of the selected studies

N	Author	Year	WHO Region	Country	ST	S	Male (%)	Age*	TB Type	SM (%)	FEV1 (%)	FVC (%)	FEV/FVC* (%)	FEV1 (L)	FVC (L)	OB (%)	R (%)	MIX (%)	NS (%)	NOR (%)	NOS*
1	Akkara	2013	South-East Asia	India	PS	257	74.0	35	TB	0	NA	NA	NA	NA	NA	86.8	NA	NA	NA	13.2	M
2	Allwood	2020	Africa	South Africa	PS	43	37.2	26	DS	72.1	79	81	87.6	2.5	3	NA	NA	NA	NA	NA	M
3	Bález-Saldaña	2013	Americas	Mexico	PS	127	43	48	TB	0	83.3	90.8	79	2.1	2.8	24	17	NA	NA	59	G
4	Baig	2010	South-East Asia	Pakistan	PS	47	76.5	53.5	TB	0	NA	NA	NA	NA	NA	55.3	29.9	14.8	NA	0	M
5	Banu Rekha	2009	South-East Asia	India	PS	148	66	NA	DS	33	NA	NA	NA	NA	NA	5	45	16	NA	35	M
6	Bemba	2017	Africa	The Republic of the Congo	PS	150	61.3	34	TB	21.3	NA	NA	NA	2.2	2.8	6.7	51.3	10.7	NA	3.3	G
7	Chin	2019	Africa	Zimbabwe	PS	138	59	39	MDR	53	85	89	96	NA	NA	17	18	NA	NA	65	M
8	Chung	2011	Western Pacific	Taiwan	PS	106	75.5	59.3	TB	48.1	77.3	87.9	70.4	1.9	2.7	48.6	9.3	9.3	NA	32.9	G
9	Chushkin	2017	Europe	Russia	PS	214	62	51.1	TB	64.5	87.1	99.7	70.3	NA	NA	34.6	8.4	3.7	0.9	52.4	G
10	Daniels	2019	Africa	South Africa	PS	45	56	39.9	TB	78	91	83.2	93.7	NA	NA	21	25	2	0	52	M
11	de la Mora	2015	Americas	Mexico	PS	70	27	40	DS/MDR	NA	58.4	62.1	NA	NA	NA	NA	NA	NA	NA	NA	M
12	de Valliere	2004	Africa	South Africa	PS	33	76	40.2	MDR	NA	NA	63	NA	NA	NA	12	42	39	NA	6	G
13	Dhipu Mathew	2016	South-East Asia	India	PS	75	68	54.5	TB	NA	51.3	57.4	89.7	NA	NA	13.3	68	18.7	NA	0	G
14	Di Naso (DS)	2011	Americas	Brazil	PS	15	80	32.9	DS	60	66.1	72.1	77.1	NA	NA	33.3	20	26.7	NA	20	M
	12					50	38.7	MDR	58	33.1	43.6	61.8	NA	NA	25	NA	75	NA	0		
15	Fiogbe	2019	Africa	Benin	PS	189	68	37	TB (DS)	20.1	NA	NA	81	2.4	3.1	32.8	9.5	2.6	NA	55	G

16	Gandhi	2016	South-East Asia	India	PS	146	65.8	34.5	TB	28.1	66.9	74.6	76.3	NA	NA	8.2	43.8	13	8.9	26	M
17	Godoy	2012	Americas	Brazil	PS	18	67	43.7	MDR	67	76.8	87.2	73.4	NA	NA	39	22	17	NA	22	G
18	Gupte	2019	South-East Asia	India	PS	172	52	32	DS	20	70	73	NA	NA	NA	24	52	NA	23	NA	G
19	Hwang	2014	Western Pacific	South Korea	PB	167	64.1	51	TB	37.2	90	95	73.8	2.8	3.8	26.3	NA	NA	NA	NA	M
20	Jones	2017	Africa	Uganda	PS	29	48	45	TB	34.5	58.1	72	67	1.4	2.1	48.2	34.4	NA	NA	17.2	G
21	Khosa	2020	Africa	Mozambique	PS	62	67.7	29.5	DS	35.5	74.8	75.5	79.4	2.4	3	1.6	50	12.9	0	35.5	G
22	Kim	2017	Western Pacific	South Korea	PB	148 2	60.2	57.4	TB	56.5	85.3	89.3	73	2.6	3.5	29.6	14	0	0	56.4	G
23	Ko	2015	Western Pacific	South Korea	PS	41	78	62	DS/MDR	56	72.8	85.8	66	1.9	2.9	NA	NA	NA	NA	NA	G
24	Lam	2010	Western Pacific	China	PB	218 6	38.7	64.5	TB	31.7	89	NA	NA	NA	NA	8.6	NA	NA	NA	NA	G
25	Lee	2011	Western Pacific	South Korea	PB	294	62.6	53.3	TB	53.1	89.5	94.9	74.3	2.8	3.8	30.3	NA	NA	NA	NA	G
26	Long	1998	Americas	Canada	PS	25	76	36	DS	64	97	98	75	NA	NA	NA	NA	NA	NA	NA	M
27	Maguire	2009	South-East Asia	Indonesia	PS	69	66.7	29.1	DS/MDR	59.4	78.6	85.3	NA	NA	NA	NA	NA	NA	NA	NA	M
28	Mancuzo	2020	Americas	Brazil	PS	378	52.1	40	TB	39.4	77.6	83.7	75.5	2.5	3.3	27	18.3	17.7	0	37	L
29	Manji	2016	Africa	Tanzania	PS	501	60.5	35	TB	29.3	NA	NA	63	1.8	3	42	13	19	NA	26	G
30	Mattila	2016	Europe	Finland	PB	119 1	56	NA	TB	52.4	NA	NA	NA	NA	NA	9.7	NA	NA	NA	NA	M
31	Mbatchou Ngahane	2016	Africa	Cameroon	PS	269	54.3	33	DS	10	NA	NA	NA	NA	NA	4.1	36.1	5.2	NA	54.6	G
32	Meghji	2020	Africa	Malawi	PS	405	67.9	35	DS	29.6	NA	NA	NA	NA	NA	17.9	12.8	0	0	69.4	G
33	Menezes	2007	Americas	Brazil, Mexico, Uruguay, Chile, Venezuela	PB	132	39	56.6	TB	57	91.4	96.1	91.8	2.3	3.1	30.7	NA	NA	NA	NA	G

34	Nihues Sde	2015	Americas	Brazil	PB	100	52.5	40	TB	51.5	86	87.5	87.5	NA	NA	20	2	19	NA	59	M
35	Nuwagira	2020	Africa	Uganda	PS	95	60	39	MDR	25	74.9	81.9	78	2.1	2.9	31	NA	NA	NA	NA	G
36	Ojuawo	2020	Africa	Nigeria	PS	308	55.8	39.3	TB	NA	NA	NA	NA	NA	NA	5.8	42.2	24	NA	28	G
37	Osman	2016	Africa	Sudan	PS	136	73	44	TB	NA	76.3	69	92	2.7	3	8.8	5	NA	NA	NA	G
38	Pasipanodya	2007	Americas	USA	PS	107	69	47	TB	57	77.8	82.8	76.1	NA	NA	15	31	13	NA	41	G
39	Pasipanodya	2012	Americas	USA	PS	317	70.2	47	TB	55	81	82.3	81.2	NA	NA	10.7	73.3	16	NA	NA	M
40	Patil	2018	South-East Asia	India	PS	1000	60	45	DS	0	NA	NA	NA	NA	NA	37	9	16	NA	38	G
41	Pefura-Yone	2014	Africa	Cameroon	PS	177	57.1	32	DS	19.8	76.3	74.8	86	NA	NA	NA	NA	NA	NA	NA	G
42	Plit	1998	Africa	South Africa	PS	74	70.3	35	DS	58	76.4	87.9	77	2.3	3	28	24	NA	NA	47	M
43	Powers	2020	Americas	USA	PB	344	44.3	60.8	TB	70.9	88.5	91.1	75.6	NA	NA	9.6	8.7	NA	NA	NA	G
44	Ralph	2013	South-East Asia	Indonesia	PS	112	65.5	28	DS/MDR	55	71	NA	NA	2	NA	NA	NA	NA	NA	NA	M
45	Ramos	2006	Americas	Brazil	PS	50	40	30	TB	46	NA	NA	NA	NA	NA	24	18	34	NA	24	M
46	Rhee	2013	Western Pacific	South Korea	PS	595	60.5	65.6	TB	43.1	49	61.3	58	1.2	2	76.8	NA	NA	NA	NA	G
47	Santra	2017	South-East Asia	India	PS	138	84	53.4	TB	43.5	50.5	69.7	NA	1.1	NA	27.5	NA	72.5	NA	NA	M
48	Singla	2009	South-East Asia	India	PS	47	55.6	33.5	MDR	32	53.3	68.1	66.2	1.7	2.6	11	19	66	NA	4	M
49	Singla	2018	South-East Asia	India	PS	46	54	26.7	MDR	9	56.1	NA	NA	NA	NA	10	24	64	NA	2	G
50	Snider	1971	Americas	USA	PS	1403	68	44.7	TB	83.5	72.8	83.1	71	NA	NA	23.2	24.4	18.6	NA	33.7	G
51	Stek	2020	Africa	South Africa	PS	111	59	38	DS	50	83.9	NA	NA	NA	NA	9.7	38.6	NA	NA	47.4	G
52	Vashakidze	2019	Europe	Georgia	PS	31	57	31	MDR	40	63	81	NA	NA	NA	NA	NA	NA	NA	NA	G
53	Vecino	2011	Americas	USA	PS	123	71	48	DS/MDR	NA	NA	NA	NA	NA	NA	22	16	14	NA	48	M

54	Willcox	1989	Africa	South Africa	PS	71	66	50	TB	NA	NA	NA	NA	NA	NA	48	17	20	NA	15	M
----	---------	------	--------	--------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---

Abbreviations: ST – study type (PS – patient series; PB – population-based); S – sample size; SM – smoking; OB – obstruction; R – restriction; MIX – mixed; NOR- normal; NS – not specified; QUAL – quality (G – good; M - moderate; L - low); RT - retreatment; DS – drug-susceptible tuberculosis; MDR – multidrug- resistant tuberculosis; NA – non-available or not-applicable

Note:* Age (mean or median); FEV1/FVC ratio when reported in absolute numbers was converted to %; NOS: A “star system” was used to place publications in three categories – low, moderate and good. A sum of eight or nine stars indicated a high-quality study, while a sum of six or seven and less than six stars indicated moderate and low study quality, respectively. A study with no stars in one category was always considered of low quality.