**Determinants of non-adherence to anti-tuberculosis treatment in high income,
low incidence, settings: A scoping review**
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Online Supplement

Supplementary material 1

Scoping review search example strategy from MEDLINE

1. Tuberculosis/
2. (TB or tuberculo*).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]
3. 1 or 2
4. Drug Therapy/
5. (medication* or medicine* or treatment* or therap*).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]
6. 4 or 5
7. 3 and 6
8. Antitubercular Agents/
9. 7 or 8
10. Medication Adherence/ or "Treatment Adherence and Compliance"/
11. (adheren* or complian* or non-adheren* or non-complian* or nonadheren* or concordan* or non-concordan*).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]
12. (LTFU or "los* to follow-up" or "los* to follow up" or LFU or default).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. Lost to Follow-Up/
14. 10 or 11 or 12 or 13
15. 9 and 14
16. limit 15 to (english language and humans)

Supplementary material 2. Bibliometric data from included studies (n=25).

Year(s) of study	N	Country	Study population	Study design	Categories of determinants assessed	Adherence measure	Non-adherence definition	% Non-adherent	Citation information
<i>Prospective designs</i>									
Not given	90	Ireland	Patients being treated for pulmonary TB and discharged from a Dublin hospital.	Prospective cohort	Demographic Clinical	Urine sample, self-report or physician's impression from interview	Non-compliance: based on interview evidence and ≥ 1 negative urine sample(s).	23.3	Corcoran ³⁹
Not given	113	UK	Patients being treated at Leeds Chest Clinic receiving a rifampicin-containing regimen.	Prospective cohort	Demographic Clinical	Urine sample	Non-compliance: negative urine sample.	7.0	Wardman et al. ⁴³
1988-1989	224	USA	Patients being treated in Harlem Hospital Center, New York.	Prospective cohort	Demographic Clinical	State TB registry data and hospital records	Noncompliance: no follow-up treatment or LTFU.	89.0	Brudney & Dobkin ⁴⁴
1995-1996	62	USA	Patients being treated and residing within Georgia.	Prospective cohort	Psychosocial	Tuberculosis General Adherence Scale (TBGAS)	Lower scores on TBGAS scale	Not given (mean TBGAS score= 92.6%)	McDonnell et al. ^{36*}
1999-2000	1515	Spain	Patients being treated by a member of the Tuberculosis and Respiratory Infections Group of the Sociedad Española de Neumología y Cirugía Torácica (SEPAR).	Prospective cohort	Demographic Clinical Health systems	Epidemiological questionnaire completed by staff, including assessments of "appointment attendance, physician estimation, and patient confirmation" (data source not specified)	Default: no treatment received for >1 month or missed appointments.	4.0	Cayla et al. ⁵⁰

Year(s) of study	N	Country	Study population	Study design	Categories of determinants assessed	Adherence measure	Non-adherence definition	% Non-adherent	Citation information
1998–2003	119	Japan	Homeless patients or those in fragile living situations who received treatment in a Tokyo hospital (excluded patients with HIV/TB co-infection).	Prospective cohort	Demographic Clinical Health systems Psychosocial	Medical notes	Treatment interruption during outpatient care: no treatment for ≥2 consecutive months.	Not given (19.33 worked out from results)	Kizuki et al. ⁶⁰
2000–2003	575	UK	Patients being treated in the East of England.	Prospective cohort	Demographic Clinical	Patient notes (extracted by TB staff)	LTFU	7.8	Anyama et al. ³⁸
2003	1941	UK	Patients in Greater London who were or should have been on treatment.	Prospective cohort	Demographic Clinical Psychosocial	Self-report, pill counts, urine tests, medical records, case-manager “knowledge” of patient	Poor adherence: self-reported, inconsistent pill counts, negative urine test, or patients switched to DOT or hospitalised for poor adherence. LTFU: being out of contact with services for at ≥2 months without medication during first 6 months of treatment.	Poor adherence: 46.0 LTFU: 15.0	Story et al. ⁴²
2006–2007	1490	Spain	Patients being treated by a member of the Tuberculosis and Respiratory Infections Group of the Sociedad Española de Neumología y Cirugía Torácica (SEPAR) (excluded patients with known drug resistance or those not initiating standard treatment).	Prospective cohort	Demographic Clinical Health systems	Electronic diary completed by staff (no details regarding from where data obtained)	Poor adherence: including default (treatment interruption for >2 months, non-completion by 9-months on standard regimen, or <80% prescribed doses taken) and LTFU.	6.2	Cayla et al. ⁵¹

Year(s) of study	N	Country	Study population	Study design	Categories of determinants assessed	Adherence measure	Non-adherence definition	% Non-adherent	Citation information
2006–2009	1490	Spain	Patients being treated with culture-positive or smear-positive disease, extrapulmonary TB with caseating granuloma, identification by histology, or clinical, radiological, epidemiological or laboratory suspicion of TB (excluded patients with known drug-resistance or those with a contraindication to start standard treatment).	Prospective cohort	Demographic Clinical Health systems	Not specified	LFTU: treatment interruption (any reason) for ≥ 2 months, non-completion of treatment within 9 months for standard therapy, or taking $< 80\%$ of prescribed dose.	6.48	Rodrigo et al. ⁵²
Retrospective designs									
1988–1992	103	Switzerland	Patients with bacteriologically confirmed pulmonary TB being treated in Vaud County.	Retrospective cohort	Demographic Clinical Psychosocial	Questionnaire completed by practitioners (using medical records)	Not adherent: not specified (adherence considered satisfactory if patient attended scheduled visits and requested prescriptions).	18.4	Zellweger & Coulon ⁵⁷
1993	2576	USA	Compared patients being treated in California who did and did not move during treatment to another health jurisdiction.	Retrospective cohort	Demographic Clinical Psychosocial	National TB surveillance data	Default: patients who refused treatment or were LTFU.	5.5	Cummings et al. ⁴⁶
1991–1994	184	USA	Patients with a first time, positive-culture being treated in New York City.	Retrospective cohort	Demographic Clinical	Contacting providers for clinic attendance and prescription information	Noncompliance: not attending clinic appointments for ≥ 2 months, or ≥ 3 months during 1 year.	48.0	Pablos-Mendez et al. ⁴⁸
1993–1994	3520	USA	Patients with culture-confirmed, rifampin- susceptible TB, starting a rifampin-containing regimen of at least 60 days, being treated in New York City.	Retrospective case-control	Demographic Clinical Health systems	State TB registry data and hospital records	Inappropriate treatment discontinuation: discontinuing rifampicin without experiencing serious adverse effects related to use.	0.9	Cook et al. ⁴⁵

Year(s) of study	N	Country	Study population	Study design	Categories of determinants assessed	Adherence measure	Non-adherence definition	% Non-adherent	Citation information
1987–1996	1354	Spain	Patients with HIV/TB co-infection, detected by the Active Epidemiological Surveillance System of the Barcelona Tuberculosis Prevention and Control Programme, being treated in Barcelona.	Retrospective cohort	Demographic Clinical	National TB surveillance data	Treatment abandonment: LTFU or failed medical controls and not found by public health surveillance nursing team.	13.1	Galdós Tangüis et al. ⁵³
1993–1997	7529	The Netherlands	Patients being treated in the Netherlands.	Retrospective cohort	Demographic Clinical Health systems	National TB registry data	LTFU (excludes patients reportedly continuing treatment elsewhere)	8	Borgdorff et al. ⁵⁸
1998–2002	328	USA	Patients who were culture-positive being treated in New York City (excluded patients with MDR-TB).	Retrospective case-control	Demographic Clinical Health systems Psychosocial	State TB registry data, patient interview forms, hospital records (including case manager notes)	Default (treatment interrupted for ≥60 days) with return to therapy Default without return to therapy (including LTFU or treatment refusal)	4.2	Driver et al. ⁴⁷
2001–2007	41,120	UK	Patients being treated in England, Wales and Northern Ireland reported to the Enhanced Tuberculosis Surveillance (ETS) system.	Retrospective cohort	Demographic Clinical	National TB surveillance data	LTFU (before treatment completion, including patients who moved overseas)	5.9	Millet et al. ⁴⁰
2000–2011	503	Spain	Compares immigrant and native patients being treated in Catalonia.	Retrospective cohort	Demographic Clinical Psychosocial	Hospital records	Treatment abandonment: treatment interrupted for ≥2 months (without medical advice), or LTFU with no information available.	1.8	Ballesteros et al. ⁴⁹
2009–2012	12,908	UK	Patients being treated in London, England.	Retrospective cohort	Demographic Clinical	National TB surveillance and laboratory data (matched with national outreach data - “find and treat” registry)	Non-adherence (not specified)	5.6	Anderson et al. ³⁷

Year(s) of study	N	Country	Study population	Study design	Categories of determinants assessed	Adherence measure	Non-adherence definition	% Non-adherent	Citation information
2000–2013	27,894	Portugal	Patients with pulmonary TB being treated in continental Portugal, as identified through the national TB surveillance database (SVIG-TB).	Retrospective cohort	Demographic Clinical	National TB surveillance data	Default: treatment interrupted for >8 weeks after completing ≥1 month of treatment)	4.9	Nunes et al. ⁵⁵
1995–2014	68	Norway	Patients with MDR-TB being treated in Norway.	Retrospective cohort	Demographic Clinical	Hospital and laboratory records, TB registry data	LTFU: WHO 2013 definition (no treatment initiation, or treatment interrupted for ≥2 consecutive months).	17.6	Jensenius et al. ⁵⁹
2006–2015	73,591	Japan	Patients with pulmonary TB being treated in Japan.	Retrospective cohort	Demographic Clinical Health systems	National TB surveillance data	LTFU: definition from Japanese TB surveillance system (treatment interrupted for ≥2 consecutive months, or treatment duration <6 months).	7.8	Kawatsu et al. ⁵⁴
1997–2017	190	France	Patients diagnosed at Dron Hospital in Tourcoing (excluding those with MDR-TB or XDR-TB).	Retrospective cohort	Demographic Clinical	Not specified (appears to be medical and laboratory records)	LTFU: no treatment initiation or treatment interrupted for ≥2 consecutive months.	15.0	Tetart et al. ⁵⁶
Mixed designs									
1978–1987	1009	UK	Patients being treated in Blackburn, England.	Retrospective and prospective cohort	Demographic	Physician assessment, monthly health visitor reports (including pill counts) and clinic attendance	Poor compliance: ≥3 missed appointments or unfavourable assessments.	3.0	Ormerod & Prescott ⁴¹

Note. *determinants not extracted for this study. TB= Tuberculosis; LTFU= Loss to follow-up; MDR-TB= Multidrug-resistant tuberculosis; WHO = World Health Organization; XDR-TB= Extensively drug-resistant tuberculosis.

Supplementary material 3. Frequency of determinants assessed by included studies.

Determinant category	Determinant grouping variable	Studies assessing determinant grouping variable:
Demographic	Age	n= 14 37 38 40 41 42 46 47 49 50 51 53 58 59 55
	Sex	n= 14 38 40 42 43 44 48 50 51 53 57 58 59 54 55
	Ethnicity	n= 5 40 42 45 46 48
	Nationality/origin	n= 7 37 38 43 48 58 59 54
	Residency/Immigration status	n= 9 40 49 50 51 52 56 57 58 55
	Place of residence (e.g. homelessness, history of living in an institution or prison)	n= 16 37 42 44 46 47 48 49 50 51 52 53 57 58 54 55 60
	Employment status	n= 4 51 56 54 60
	Occupation	n= 2 46 54

Determinant category	Determinant grouping variable	Studies assessing determinant grouping variable:
	SES indices (e.g. primary education only, living in low SES neighbourhood)	n= 5 38 39 43 53 54
	Other (e.g. relationship status, receiving leave for appointments, place of residency, travelling behaviour, moved health jurisdiction during treatment)	n= 4 39 40 46 59
Clinical	Disease site/presentation	n= 6 37 38 40 48 56 54
	Smear & sputum culture result	n= 6 38 47 48 57 58 54
	Treatment resistance	n= 3 46 48 60
	TB history	n= 9 37 38 40 43 45 52 53 56 60
	HIV status	n= 9 44 46 48 49 50 51 53 56 55
	Substance use/issues	n= 17 37 39 42 44 45 46 47 48 50 51 52 53 56 57 59 55 60
	Other (e.g. relapse (unspecified, diabetes co-morbidity)	n= 2 57 60

Determinant category	Determinant grouping variable	Studies assessing determinant grouping variable:
Health systems	Route to care	n= 3 51 58 60
	Treatment provider (e.g. treated at referral hospital, treated by private health provider)	n= 2 45 54
	HCP perceptions of patient knowledge	n=3 47 51 52
	Other (e.g. hospitalisation, health insurance status, time from culture confirmation to presentation)	n= 3 47 50 54
Psychosocial factors	Mental health problems	n= 3 42 47 57
	Having close relationships	n= 1 60

Note. HCP= health care professional, SES= socioeconomic status, TB= tuberculosis

Supplementary material 4

Strength of evidence for demographic, clinical, health-systems and psychosocial factors associated with adherence to TB treatment

Grouping variable	Potential risk factor	Strength of evidence				Potential protective factor	Strength of evidence			
		1	2	3	4		1	2	3	4
		OR/RR≥ 1.5, P≤ 0.05	OR/RR≥ 1.5, P> 0.05, n< 154	OR/RR> 1.0 to <1.5, P≤ 0.05	OR/RR< 1.5, P> 0.05		OR/RR≤ 0.5, P≤ 0.05	OR/RR≤ 0.5, P> 0.05, n< 154	OR/RR> 0.5 to <1.0, P≤ 0.05	OR/RR> 0.5, P> 0.05
Demographic Factors										
Age	Under 30 y/o	37			42§,					
		<u>[16-24]</u>			<u>[30-59]</u>					
		51*								
		<u>[>50]</u>								
		59								
	25-34 y/o	<u>[≥40]</u>								
		41*								
		<u>[30-44, 45-59, >60]</u>								
					38*					
					<u>[0-24]</u>					
	30-65 y/o			58¶	51*	30-65 y/o			40	37
				[<25]	<u>[>50]</u>				<u>[15-44]</u>	<u>[16-24]</u>
					53*				55	38*
					<u>[15-29]</u>				<u>[15-34]</u>	<u>[0-24]</u>
					58***					
	Over or equal 65 y/o				<u>[<25]</u>	Over or equal 65 y/o	37		40	38*
					42§,		<u>[16-24]</u>		<u>[15-44]</u>	<u>[0-24]</u>
					<u>[30-59]</u>		50*		55	
							<u>[≤17]</u>		<u>[15-34]</u>	
									47¶	38*
	Other (e.g. unspecified, broad range)	59		50*	53*	Other (e.g. unspecified, broad range)			[NS]	<u>[0-24]</u>
		<u>[≥40]</u>		[≤17]	<u>[15-29]</u>					47***
		49			58					
		<u>[<40]</u>								

Grouping variable	Potential risk factor	Strength of evidence				Potential protective factor	Strength of evidence			
		1	2	3	4		1	2	3	4
		OR/RR≥ 1.5, P≤ 0.05	OR/RR≥ 1.5, P> 0.05, n< 154	OR/RR> 1.0 to <1.5, P≤ 0.05	OR/RR< 1.5, P> 0.05		OR/RR≤ 0.5, P≤ 0.05	OR/RR≤ 0.5, P> 0.05, n< 154	OR/RR> 0.5 to <1.0, P≤ 0.05	OR/RR> 0.5, P> 0.05
		46††,††			[<25]					[NS]
		[>45]								
		58§§								
		[<25]								
Sex	Male [Female]	50*	59*	40	44	Male [Female]				44
		51*		58	48*					43*
		55*			53*					54
		42§,			38*					
		57*								
Ethnicity	Hispanic	45*			48* [White]					
		[non-Hispanic Black]								
		46††,††								
	Asian [White]	[Asian]								
		40*,†††		40*,†††	48*	Asian [White]				40*,§§§
					42					42§
	Black African/ Caribbean/Black British/non-Hispanic black	46††,††			42§, [White]					
		[Asian]								
		48* [White]								
	Non-Hispanic White	40* [White]								
		45*								
		[non-Hispanic Black]								
	Ethnicity category non- specific (e.g. White, Asian, or Hispanic) [NS]	45								
	Other [White]	40*			42	Other [White]				42§
						Black Caribbean [White]				42
Nationality/ origin‡	Europe	37		37¶¶¶¶	37****					
		[South Asia]		[South Asia]	[South Asia]					
		58								
		[Dutch]								

Grouping variable	Potential risk factor	Strength of evidence				Potential protective factor	Strength of evidence			
		1	2	3	4		1	2	3	4
		OR/RR≥ 1.5, P≤ 0.05	OR/RR≥ 1.5, P> 0.05, n< 154	OR/RR> 1.0 to <1.5, P≤ 0.05	OR/RR< 1.5, P> 0.05		OR/RR≤ 0.5, P≤ 0.05	OR/RR≤ 0.5, P> 0.05, n< 154	OR/RR> 0.5 to <1.0, P≤ 0.05	OR/RR> 0.5, P> 0.05
	Asia		43* [British]		37 [South Asia] 58 [Dutch]					
	North America and Oceania [Abroad]				48*	North America and Oceania [South Asia]				37
	Africa	58†††† [Dutch]	59 [NS]		37 [South Asia] 58†††† [Dutch]					
	East Mediterranean [Dutch]	58				East Mediterranean [South Asia]				37
	Foreign-born [UK born]	38*				Foreign-born [Japan born]				54
	Other/country of birth unknown [Dutch]	58				Other/Country of birth unknown [Japan born]		54		
	Latin, South, Central America or Caribbean				37 [South Asia] 58 [Dutch]					
Residency/ immigration status	Immigrant or migrant [native]	49				North Africa [South Asia]				37
		50				Immigrant or migrant [native]				56*
		51								
		55								
		52								
		57*								
	Recent migrant (under 4 years)	40*			58 [UK born] [other]					
	Migrant 5+ years [UK born]				40*					
	Illegal immigrant [not in category]	58								
	Asylum seeker [not in category]				58					
	Time in resident country unknown [UK born]	40*								

Grouping variable	Potential risk factor	Strength of evidence				Potential protective factor	Strength of evidence			
		1	2	3	4		1	2	3	4
		OR/RR≥ 1.5, P≤ 0.05	OR/RR≥ 1.5, P> 0.05, n< 154	OR/RR> 1.0 to <1.5, P≤ 0.05	OR/RR< 1.5, P> 0.05		OR/RR≤ 0.5, P≤ 0.05	OR/RR≤ 0.5, P> 0.05, n< 154	OR/RR> 0.5 to <1.0, P≤ 0.05	OR/RR> 0.5, P> 0.05
Place of residence	Living alone	51								
		<u>[with family]</u> 52								
		<u>[NS]</u>								
	Homelessness/no fixed abode <i>[has fixed abode]</i>	37	60		58	Homelessness/no fixed abode <i>[has fixed abode]</i>			55	54
		44	57*		49					
		50*								
		46††,††								
		47†††,***								
		60§§§§								
		48								
		53								
		42§,								
History/living in institution or prison	History/living in institution or prison	52		53*	50*					
		<u>[NS]</u> 58		<i>[no history]</i>	<u>[NS]</u> 46††					
		<u>[no history]</u> 55*			<i>[not in category]</i>					
		<u>[no history]</u> 47†††								
		<u>[not incarcerated]</u> 42§								
		<u>[no imprisonment during current treatment]</u> 37								
		<u>[NS]</u> 51								
		<u>[with family]</u>								

[illegible]

Grouping variable	Potential risk factor	Strength of evidence				Potential protective factor	Strength of evidence			
		1	2	3	4		1	2	3	4
		OR/RR $\geq$ 1.5, P $\leq$ 0.05	OR/RR $\geq$ 1.5, P> 0.05, n< 154	OR/RR> 1.0 to <1.5, P $\leq$ 0.05	OR/RR< 1.5, P> 0.05		OR/RR $\leq$ 0.5, P $\leq$ 0.05	OR/RR $\leq$ 0.5, P> 0.05, n< 154	OR/RR> 0.5 to <1.0, P $\leq$ 0.05	OR/RR> 0.5, P> 0.05
	Primary education only [2nd/3rd level education only]	39*								
	SES Level 4/5 (high deprivation) [SES Level 1,2, or 3]	43*								
	Having medical card [no medical card]	39*								
						Townsend score between low and high deprivation [Townsend score least deprivation]				38*
Other	Living outside of London [living in London]			40*						
	Living in Oslo [NS]		59							
	Single/separated or widowed [married]	39*								
	Moved health jurisdiction within state during Tx [not moving during Tx]	46*								
Clinical Factors										
Disease site/ presentation	Pulmonary [extra-pulmonary]	37		40		Pulmonary [extra-pulmonary]				38*
	Extra-pulmonary [not in category]	56*			48*					
						With cavity			54 [no cavity]	48* [no cavitory disease]
Smear & sputum culture	Smear +ve and/or culture +ve				38* [-ve]	Smear +ve and/or culture +ve	47*** [not +ve in first 30 days of initial sputum collection]		54 [-ve]	

Grouping variable	Potential risk factor	Strength of evidence				Potential protective factor	Strength of evidence			
		1	2	3	4		1	2	3	4
		OR/RR≥ 1.5, P≤ 0.05	OR/RR≥ 1.5, P> 0.05, n< 154	OR/RR> 1.0 to <1.5, P≤ 0.05	OR/RR< 1.5, P> 0.05		OR/RR≤ 0.5, P≤ 0.05	OR/RR≤ 0.5, P> 0.05, n< 154	OR/RR> 0.5 to <1.0, P≤ 0.05	OR/RR> 0.5, P> 0.05
					47¶¶¶ [not +ve in first 30 days of initial sputum collection] 57*		58 [no bacteriological confirmation]			
	Culture/smear unknown/not done			54††††† [-ve]	48* [+ve] 54§§§§§ [-ve]					
						Smear -ve and/or culture – ve [+ve]				48*
T _x resistance	MDR	46††,†† [NS]			48* [No resistance]					
	Other resistance [no resistance]				48*	Other resistance [no resistance]				60*
TB history	Previous TB	37 [NS]	60* [no history]		40 [no history]	Previous TB [no history]				38*
	Previous TB T _x [no previous T _x]	45 52 53 43*								
	Unknown previous TB status [no history]			40						
	Previous TB T _x default [no previous default]	43*								
HIV status	HIV infection [HIV negative]	50* 51* 55			48*	First episode of TB [NS] HIV infection [HIV negative]	56			49*
	HIV status known/missing [HIV negative]				51* 48*					
	HIV negative [NS]	56								
	AIDS [HIV negative]				48*		44			

Grouping variable	Potential risk factor	Strength of evidence				Potential protective factor	Strength of evidence			
		1	2	3	4		1	2	3	4
		OR/RR≥ 1.5, P≤ 0.05	OR/RR≥ 1.5, P> 0.05, n< 154	OR/RR> 1.0 to <1.5, P≤ 0.05	OR/RR< 1.5, P> 0.05		OR/RR≤ 0.5, P≤ 0.05	OR/RR≤ 0.5, P> 0.05, n< 154	OR/RR> 0.5 to <1.0, P≤ 0.05	OR/RR> 0.5, P> 0.05
						AIDS (or AIDS related complex) <i>[NS]</i>	46††			46††
	HIV infection via IDU transmission <i>[sexual transmission]</i>	53*								
Substance use/misuse	Alcohol use <i>[NS]</i>	37								
	Alcohol misuse/addiction	44	39*		48*					
		<i>[NS]</i>	<i>[0 drinks per week]</i>		<i>[no history of alcoholism]</i>					
		55	57*		53*					
		<i>[not in category]</i>	<i>[NS]</i>		<i>[No alcoholism]</i>					
		56*								
		<i>[NS]</i>								
	Illicit drug use	37	57*		48*					
		<i>[NS]</i>	<i>[NS]</i>		<i>[No cocaine use]</i>					
		42			47¶¶¶					
	<i>[NS]</i>			<i>[NS]</i>						
	59									
	<i>[NS]</i>									
	Illicit drug misuse/addiction	51								
		<i>[No IDU]</i>								
		55								
		<i>[NS]</i>								
		48								
		<i>[no IDU]</i>								
		52								
		<i>[NS]</i>								
		50								
		<i>[not drug addict]</i>								
	Drug use unknown	51								
		<i>[No IDU]</i>								
		52								
		<i>[NS]</i>								

Grouping variable	Potential risk factor	Strength of evidence				Potential protective factor	Strength of evidence			
		1	2	3	4		1	2	3	4
		OR/RR≥ 1.5, P≤ 0.05	OR/RR≥ 1.5, P> 0.05, n< 154	OR/RR> 1.0 to <1.5, P≤ 0.05	OR/RR< 1.5, P> 0.05		OR/RR≤ 0.5, P≤ 0.05	OR/RR≤ 0.5, P> 0.05, n< 154	OR/RR> 0.5 to <1.0, P≤ 0.05	OR/RR> 0.5, P> 0.05
	Any substance misuse (including IDU, non-IDU, and alcohol) <i>[NS]</i>	46††,‡‡								
	Being treated with methadone <i>[NS]</i>	45								
	Alcohol problems in hospital <i>[Not in category]</i>		60*							
Other	Relapse (unspecified) <i>[NS]</i>	57*								
						Diabetes co-morbidity <i>[not in category]</i>				60*
Health-Systems Factors										
Route to care	Source – emergencies <i>[primary care]</i>	51*								
	Source – specialist <i>[primary care]</i>				51*					
	Source – other <i>[primary care]</i>				51*					
	Collapsing on street <i>[other reason]</i>		60*							
	Detection of TB by screening <i>[other detection]</i>				58					
Tx provider	T _x started in OP department <i>[initial hospitalisation]</i>			54						
	Private health provider <i>[provider was DOH]</i>	45*								
	Private health provider with low volume of patients <i>[private health provider with high volume]</i>	45*								
	T _x by low volume provider <i>[NS]</i>	45								
HCP perception of	Had previous T _x comprehension† <i>[no previous Tx comprehension]</i>	51								

Grouping variable	Potential risk factor	Strength of evidence				Potential protective factor	Strength of evidence			
		1	2	3	4		1	2	3	4
		OR/RR≥ 1.5, P≤ 0.05	OR/RR≥ 1.5, P> 0.05, n< 154	OR/RR> 1.0 to <1.5, P≤ 0.05	OR/RR< 1.5, P> 0.05		OR/RR≤ 0.5, P≤ 0.05	OR/RR≤ 0.5, P> 0.05, n< 154	OR/RR> 0.5 to <1.0, P≤ 0.05	OR/RR> 0.5, P> 0.05
patient's knowledge	Had difficulty with previous Tx comprehension† <i>[easy previous Tx comprehension]</i>	51								
	Poor understanding <i>[NS]</i>	52								
	Lack of awareness of TB severity <i>[NS]</i>	47¶¶¶,***								
Other	Hospitalised (includes IP care) <i>[not hospitalised]</i>				50*					
	Months from +ve culture to DOH interview† <i>[NS]</i>			47¶¶¶		Months from +ve culture to DOH interview <i>[NS]</i>				47***
	No health insurance <i>[has health insurance]</i>				54					
Psychosocial Factors										
Mental health issues	Mental health problems <i>[NS]</i>	42§,				Mental health problems <i>[NS]</i>	47***			47¶¶¶ 57*
Having close relationships						Having close relationships <i>[no close relationships]</i>	60*			

Note. Where variable levels are non-binary, baseline comparator is given italicised in square brackets, either next to variable level or individual study reference where this differs between studies. No data was extracted from ³⁶. Some variables could not be extracted from ⁵⁸ (urban residence, previous default from TB Tx, homelessness, alcohol addiction, drug addiction, occupation, travel to endemic areas, disease site, HIV co-infection), ⁵⁷ (age), ⁴³ (age, nationality (other)), ⁶⁰ (sex, age, disease site, cavitory disease, sputum smear result), and ³⁹ (drinking (moderate drinking)). +ve= positive, -ve= negative, DOH= Department of Health, HCP= healthcare professional, IDU= intravenous drug use, IP= inpatient, MDR= multidrug-resistant, NS=not specified, OP= outpatient, SES= socioeconomic status, TB= tuberculosis, Tx= Treatment *=univariate/ bivariate analysis. †=Determinants were not further defined. ‡=nationality: studies ³⁷, ⁴⁸, and ³⁸ comparator is not the study country, for studies ⁵⁸, ⁵⁹, ⁴³ and ⁵⁴, comparator is study country. §=outcome: outcome: non-adherent in first 2 months, ||= outcome: loss to follow-up within 6 months, ¶= age: 35-44, **= age: 55-64, ††= outcome: excludes patients who moved during study, ‡‡= outcome: includes patients who moved during study, §§= age: 75, |||= age: 45-54, ¶¶¶= outcome: default with return to therapy, ***= outcome: default without return to therapy, †††= ethnicity: Indian, ‡‡‡= ethnicity: Pakistani, §§§= ethnicity: Bangladeshi, ||||= nationality/origin: born in Central Europe, ¶¶¶¶= nationality/origin: born in West Europe, ****= nationality/origin: born in East Europe, ††††= nationality/origin: Somalian and other

African, ‡‡‡‡= nationality/origin: Moroccan, §§§§= place of residence: staying in transient hostel after discharge, ||||| = place of residence: homeless prior to admission, ¶¶¶¶= HCP: Nurse, *****= HCP: Physician, †††††= HCP: Other HCP, ‡‡‡‡‡= Smear: culture/smear not done, §§§§§= Smear: culture/smear unknown.