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Supplementary file 1

Table S1. Demographic, genotyping, and drug-resistance information regarding patients with PTB and EPTB.

ID	Genus	City	Year	HIV $^{+}$	Specimen	Nationality	MIRU-VNTR- typing	MDR-TB	Pre-XDR-TB	INH	RIF	EMB	OFX	KAN	CAP	AMK
1	Female	Isfahan	2015	-	Sputum	Afghan	NEW-1	+	+	R	R	S	S	R	R	S
2	Male	Arak	2015	-	Sputum	Iranian	NEW-1	-	-	S	R	S	S	R	R	S
3	Male	Arak	2016	-	Sputum	Iranian	H37Rv-like	-	-	S	R	S	S	R	R	S
4	Male	Tehran	2014	-	Sputum	Iranian	Delhi/CAS	+	+	R	R	S	S	R	R	R
5	Male	Arak	2014	-	Sputum	Iranian	Delhi/CAS	-	-	S	R	S	S	R	R	S
6	Female	Isfahan	2014	-	Sputum	Iranian	H37Rv-like	-	-	S	R	S	S	R	R	S
7	Female	Isfahan	2014	-	Sputum	Afghan	NEW-1	+	+	R	R	S	S	R	R	R
8	Male	Isfahan	2015	-	Sputum	Iranian	NEW-1	-	-	S	R	S	S	R	R	R
9	Female	Qom	2014	-	Sputum	Iranian	Delhi/CAS	+	+	R	R	S	S	R	R	R
10	Male	Yazd	2014	-	Sputum	Iranian	Delhi/CAS	+	+	R	R	R	S	R	R	S
11	Male	Isfahan	2016	-	Sputum	Iranian	NEW-1	-	-	S	R	S	S	R	R	R
12	Male	Isfahan	2016	-	Sputum	Iranian	NEW-1	-	-	S	R	S	R	R	R	S
13	Male	Isfahan	2014	-	Sputum	Iranian	Delhi/CAS	+	+	R	R	S	S	R	R	S
14	Male	Isfahan	2017	-	Sputum	Iranian	NEW-1	-	-	R	S	S	-	-	-	-
15	Male	Kashan	2015	-	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
16	Male	Arak	2016	+	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
17	Male	Isfahan	2014	-	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
18	Male	Isfahan	2016	-	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
19	Female	Isfahan	2016	-	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
20	Female	Isfahan	2016	-	Sputum	Iranian	NEW-1	-	-	R	S	S	-	-	-	-
21	Male	Tehran	2014	-	Sputum	Iranian	NEW-1	-	-	R	S	S	-	-	-	-
22	Female	Tehran	2014	-	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
23	Female	Isfahan	2014	-	Sputum	Iranian	NEW-1	-	-	S	S	R	-	-	-	-
24	Male	Isfahan	2014	-	Sputum	Iranian	URAL	-	-	S	S	R	-	-	-	-
25	Male	Tehran	2014	-	Sputum	Iranian	NEW-1	-	-	R	S	S	-	-	-	-
26	Male	Arak	2015	+	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
27	Male	Isfahan	2015	+	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
28	Male	Arak	2016	+	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
29	Male	Isfahan	2016	+	Sputum	Iranian	LAM	-	-	R	S	S	-	-	-	-
30	Male	Isfahan	2017	-	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-

31	Female	Isfahan	2017	-	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
32	Male	Arak	2016	-	Sputum	Iranian	Delhi/CAS	-	-	R	S	S	-	-	-	-
33	Female	Isfahan	2017	-	Sputum	Afghan	Delhi/CAS	-	-	S	S	S				
34	Female	Isfahan	2017	-	Sputum	Iranian	NEW-1	-	-	S	S	S				
35	Male	Isfahan	2017	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S				
36	Female	Isfahan	2017	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S				
37	Male	Isfahan	2017	-	Sputum	Iranian	URAL	-	-	S	S	S				
38	Female	Isfahan	2017	-	Sputum	Iranian	H37Rv-like	-	-	S	S	S				
39	Female	Isfahan	2017	-	Sputum	Afghan	Delhi/CAS	-	-	S	S	S				
40	Male	Isfahan	2017	-	Sputum	Iranian	NEW-1	-	-	S	S	S				
41	Male	Isfahan	2016	-	Sputum	Iranian	LAM	-	-	S	S	S				
42	Male	Isfahan	2017	-	Sputum	Afghan	Beijing	-	-	S	S	S				
43	Male	Isfahan	2017	-	Sputum	Afghan	Delhi/CAS	-	-	S	S	S				
44	Female	Isfahan	2017	-	Sputum	Iranian	UgandaI	-	-	S	S	S				
45	Male	Isfahan	2017	-	Sputum	Afghan	Beijing	-	-	S	S	S				
46	Male	Isfahan	2018	-	Sputum	Afghan	Delhi/CAS	-	-	S	S	S				
47	Male	Shahrekord	2017	-	Sputum	Iranian	NEW-1	-	-	S	S	S				
48	Male	Isfahan	2018	-	Sputum	Iranian	LAM	-	-	S	S	S				
49	Male	Isfahan	2017	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S				
50	Female	Isfahan	2016	-	Sputum	Iranian	LAM	-	-	S	S	S				
51	Female	Isfahan	2014	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S	-	-	-	-
52	Male	Isfahan	2015	+	Sputum	Iranian	Beijing	-	-	S	S	S	-	-	-	-
53	Male	Isfahan	2015	+	Sputum	Iranian	H37Rv-like	-	-	S	S	S	-	-	-	-
54	Male	Arak	2016	+	Sputum	Iranian	NEW-1	-	-	S	S	S	-	-	-	-
55	Female	Isfahan	2016	-	Trachea	Iranian	NEW-1	-	-	S	S	S				
56	Male	Isfahan	2017	-	Trachea	Iranian	NEW-1	-	-	S	S	S				
57	Female	Isfahan	2016	-	Sputum	Iranian	LAM	-	-	S	S	S				
58	Male	Isfahan	2018	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S				
59	Female	Isfahan	2016	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S				
60	Male	Isfahan	2016	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S				
61	Male	Isfahan	2016	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S				
62	Female	Isfahan	2016	-	Sputum	Afghan	Delhi/CAS	-	-	S	S	S				
63	Female	Isfahan	2016	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S				
64	Female	Isfahan	2016	-	Sputum	Iranian	NEW-1	-	-	S	S	S				
65	Male	Isfahan	2017	-	Sputum	Iranian	NEW-1	-	-	S	S	S				
66	Male	Isfahan	2017	-	Sputum	Iranian	Delhi/CAS	-	-	S	S	S				
67	Female	Isfahan	2016	-	Sputum	Afghan	NEW-1	-	-	S	S	S				
68	Male	Isfahan	2017	-	Sputum	Iranian	NEW-1	-	-	S	S	S				
69	Female	Isfahan	2017	-	Sputum	Afghan	LAM	-	-	S	S	S				
70	Female	Isfahan	2017	-	Sputum	Iranian	NEW-1	-	-	S	S	S				
71	Male	Isfahan	2017	-	Sputum	Iranian	NEW-1	-	-	S	S	S				

72	Male	Isfahan	2016	-	gastric lavage	Iranian	*Mycobacterium bovis*	-	-	S	S	S				
73	Female	Isfahan	2017	-	CSF	Iranian	Delhi/CAS	-	-	S	S	S				
74	Female	Isfahan	2016	-	Abscess	Iranian	NEW-1	-	-	S	S	S				
75	Male	Isfahan	2015	-	Urine	Iranian	NEW-1	-	-	S	S	S				
76	Male	Isfahan	2015	-	Abscess	Iranian	Delhi/CAS	-	-	S	S	S				
77	Female	Isfahan	2016	-	Abscess	Iranian	Delhi/CAS	-	-	S	S	S				
78	Male	Isfahan	2015	-	Pleural aspiration	Iranian	LAM	-	-	S	S	S				
79	Female	Isfahan	2016	-	gastric lavage	Iranian	LAM	-	-	S	S	S				
80	Male	Isfahan	2017	-	gastric lavage	Iranian	*Mycobacterium bovis*	-	-	S	S	S				
81	Male	Isfahan	2017	-	gastric lavage	Iranian	*Mycobacterium bovis*	-	-	S	S	S				

1-81: Mycobacterium tuberculosis complex isolates
1-71: PTB patients' specimens; 72-81: EPTB patients' specimens
1-32: Resistant isolates to the first-line drugs 1-13: Resistant isolates to the second-line drugs
33 – 81: Susceptible isolates to the first-line drugs
DST for first-line drugs (rifampin, isoniazid, and ethambutol) performed on numbers 1-81
DST for second-line drugs (KAN, ofloxacin, capreomycin, and amikacin) on the numbers 1-13.

Table S2. Primers used for 24-locus MIRU-VNTR genotyping

Alias(es)	**Locus**	**Repeat unit length (bp)**	**Primers**
MIRU2	154	53	TGGACTTGCAGCAATGGACCAACT
			TACTCGGACGCCGGCTCAAAAT
MIRU20	2059	77	TCGGAGAGATGCCCTTCGAGTTAG
			GGAGACCGCGACCAGGTACTTGTA
MIRU23	2531	53	CTGTCGATGGCCGCAACAAAACG
			AGCTCAACGGGTTCGCCCTTTTGTC
MIRU24	2687	54	CGACCAAGATGTGCAGGAATACAT
			GGGCGAGTTGAGCTCACAGAA
MIRU27	3007	53	TCGAAAGCCTCTGCGTGCCAGTAA
			GCGATGTGAGCGTGCCACTCAA
MIRU39	4348	53	CGCATCGACAAACTGGAGCCAAAC

			CGGAAACGTCTACGCCCCACACAT
MIRU4	580	77	GCGCGAGAGCCCGAACTGC
			GCGCAGCAGAAACGCCAGC
MIRU26	2996	51	TAGGTCTACCGTCGAAATCTGTGAC
			CATAGGCGACCAGGCGAATAG
MIRU40	802	54	GGGTTGCTGGATGACAACGTGT
			GGGTGATCTCGGCGAAATCAGATA
MIRU10	960	53	GTTCTTGACCAACTGCAGTCGTCC
			GCCACCTTGGTGATCAGCTACCT
MIRU16	1644	53	TCGGTGATCGGGTCCAGTCCAAGTA
			CCCGTCGTGCAGCCCTGGTAC
MIRU31	3192	53	ACTGATTGGCTTCATACGGCTTTA
			GTGCCGACGTGGTCTTGAT
Mtub04	424	51	CTTGGCCGGCATCAAGCGCATTATT
			GGCAGCAGAGCCCGGGATTCTTC
ETRC	577	58	CGAGAGTGGCAGTGGCGGTTATCT
			AATGACTTGAACGCGCAAATTGTGA
ETRA	2165	75	AAATCGGTCCCATCACCTTCTTAT
			CGAAGCCTGGGGTGCCCGCGATTT
Mtub30	2401	58	CTTGAAGCCCCGGTCTCATCTGT
			ACTTGAACCCCCACGCCCATTAGTA
Mtub39	3690	58	CGGTGGAGGCGATGAACGTCTTC
			TAGAGCGGCACGGGGGAAAGCTTAG
Qub-4156	4156	59	TGACCACGGATTGCTCTAGT
			GCCGGCGTCCATGTT
Qub-11b	2163b	69	CGTAAGGGGGATGCGGGAAATAGG

			CGAAGTGAATGGTGGCAT
Mtub21	1995	57	AGATCCCAGTTGTCGTCGTC
			CAACATCGCCTGGTTCTGTA
Qub-26	4052	111	AACGCTCAGCTGTCGGAT
			CGGCCGTGCCGGCCAGGTCCTTCCCGAT
Mtub29	2347	57	GCCAGCCGCCGTGCATAAACCT
			AGCCACCCGGTGTGCCTTGTATGAC
ETR B	2461	57	ATGGCCACCCGATACCGCTTCAGT
			CGACGGGCCATCTTGGATCAGCTAC
Mtub34	3171	54	GGTGCGCACCTGCTCCAGATAA
			GGCTCTCATTGCTGGAGGGTTGTAC

Table S3. Allelic diversity (h), Discriminatory power, and Clustering rate for each locus of MIRU-VNTR genotyping.

MIRU- VNTR locus	Allelic diversity (h)	Discriminatory power	Clustering rate
MIRU02	0.13	Poor	0.9629
Mtub04	0.74	High	0.9259
ETRC	0.57	Moderate	0.9382
MIRU04	0.06	Poor	0.9753
MIRU40	0.52	Moderate	0.9259
MIRU10	0.79	High	0.9259
MIRU16	0.66	High	0.9382
Mtub21	0.78	High	0.9135
MIRU20	0.04	Poor	0.9753
QUB11b	0.36	Moderate	0.925
ETRA	0.67	High	0.9382
Mtub29	0.11	Poor	0.9629

Mtub30	0.36	Moderate	0.9629
ETRB	0.49	Moderate	0.9629
MIRU23	0.31	Moderate	0.9506
MIRU24	0.06	Poor	0.9753
MIRU26	0.71	High	0.9012
MIRU27	0.08	Poor	0.9629
Mtub34	0.53	Moderate	0.9506
MIRU31	0.64	High	0.9506
Mtub39	0.47	Moderate	0.9259
QUB26	0.82	High	0.8888
QUB4156	0.68	High	0.9259
MIRU39	0.5	Moderate	0.9629

Table S4. Different lineages among observed clonal complexes.

	Clusters	**Lineages**	**Sub-lineages**	**Genus**	**City**	**Specimen**	**Year**	**Nationality**	**Drug-resistance**
Clonal complex 1	Cluster 1	Lineage 4	NEW-1	Male Male	Arak Isfahan	Sputum Trachea	2016 2017	Iranian Iranian	Susceptible Susceptible
Clonal complex 1	Cluster 2	Lineage 4	NEW-1	Male Female	Isfahan Isfahan	Sputum Abscess	2017 2016	Iranian Iranian	Susceptible Susceptible
Clonal complex 2	Cluster 3	Lineage 4	LAM	Male Female Female	Isfahan Isfahan Isfahan	Sputum Sputum Sputum	2016 2016 2016	Iranian Iranian Iranian	INH resistant Susceptible Susceptible

Singleton	Cluster 4	Lineage 4	H37Rv-like	Male Male Female	Arak Isfahan Isfahan	Sputum Sputum Sputum	2016 2015 2017	Iranian Iranian Iranian	RIF resistant Susceptible Susceptible
Singleton	Cluster 5	Lineage 3	Delhi/CAS	Male Female	Isfahan Isfahan	Sputum Sputum	2017 2017	Iranian Iranian	INH resistant INH resistant
Singleton	Cluster 6	*M. bovis*	*M. bovis*	Male Male Male	Isfahan Isfahan Isfahan	Gastric lavage Gastric lavage Gastric lavage	2016 2017 2017	Iranian Iranian Iranian	Susceptible Susceptible Susceptible