

【Treatment 1】

Fig.1 Initial treatment regimen of newly notified tuberculosis patients by age group, 2013

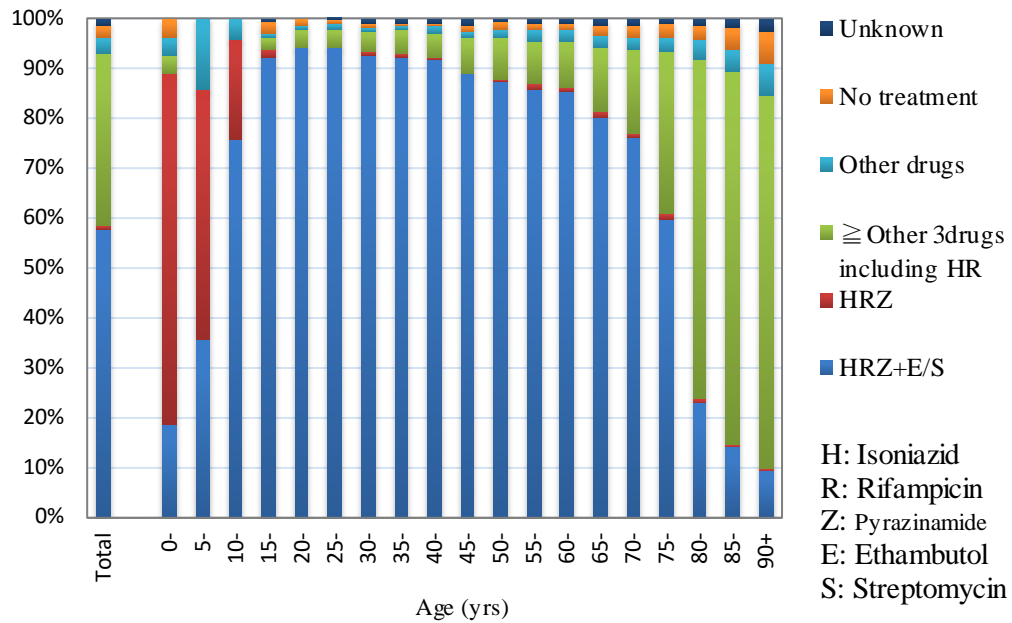


Table 1 Number of tuberculosis patients by treatment history and age group, 2013

Age group	Newly notified tuberculosis patients	Treatment history				Proportion of re-treatment tuberculosis patients (%)
		New	Re-treatment		Unknown	
			Re-treatment, all	Re-treatment, with past history of LTBI treatment (re-count)		
総数 Total	20,495	18,944	1,262	94	289	6.2
0-4	27	25	2	1	0	7.4
5-9	14	14	0	0	0	0.0
10-14	25	22	3	3	0	12.0
15-19	165	151	14	8	0	8.5
20-24	536	509	27	8	0	5.0
25-29	660	643	17	7	0	2.6
30-34	641	610	26	6	5	4.1
35-39	676	630	41	10	5	6.1
40-44	791	755	34	2	2	4.3
45-49	705	661	40	10	4	5.7
50-54	779	712	62	9	5	8.0
55-59	886	806	76	7	4	8.6
60-64	1,363	1,251	103	11	9	7.6
65-69	1,470	1,346	101	2	23	7.0
70-74	1,852	1,715	118	3	19	6.4
75-79	2,507	2,309	154	3	44	6.3
80-84	3,082	2,833	198	2	51	6.5
85-89	2,774	2,536	164	1	74	6.1
90+	1,542	1,416	82	1	44	5.5

Proportion of re-treatment tuberculosis patients: those of unknown treatment history excluded  
LTBI: Latent Tuberculosis Infection

Table 2 Number of re-treatment tuberculosis patients by previous treatment year and age group, 2013

Year	Total	Age group (yrs)								(Re-count)*
		0-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	
Total	1,262	19	44	67	74	138	204	272	444	349
~1949	106	0	0	0	0	0	0	7	99	78
1950-59	177	0	0	0	0	0	8	64	105	90
1960-69	76	0	0	0	0	1	15	30	30	46
1970-79	56	0	0	0	1	5	24	13	13	34
1980-89	38	0	0	2	2	8	13	8	5	20
1990-99	66	0	2	4	7	9	13	13	18	29
2000-09	277	4	17	19	24	39	58	54	62	36
2010-13	466	15	25	42	40	76	73	83	112	16
(Re-count) 2000-2013										
2000	11	0	1	1	2	2	2	1	2	3
2001	8	0	0	0	0	2	2	2	2	2
2002	20	0	3	1	2	1	6	4	3	4
2003	22	0	0	2	1	0	7	7	5	7
2004	20	0	1	0	4	1	4	4	6	1
2005	32	1	1	2	3	7	7	5	6	0
2006	34	2	2	0	2	5	8	6	9	7
2007	30	0	3	3	1	6	5	6	6	2
2008	48	1	5	8	4	2	5	9	14	7
2009	52	0	1	2	5	13	12	10	9	3
2010	90	1	4	14	8	13	13	16	21	6
2011	152	5	7	8	11	27	24	25	45	4
2012	171	4	11	11	15	24	28	36	42	5
2013	53	5	3	9	6	12	8	6	4	1

\*(Re-count) Unknown of previous treatment regimen

Table 3 Treatment with PZA in initial phase among newly notified tuberculosis patients in 2012 and completed standard treatment

	Total	Completed (%)
Total	12,660	10,303
2 months	8,012	7,601 (87.3)
≥1 month and <2 months	723	590 (6.8)
<1 month	679	517 (5.9)
Unknown	3,246	1,595 (-)

(%) :Proportions: cases with unknown PZA use status excluded.

PZA: Pyrazinamide

Previous table Number of retreatment tuberculosis patients by previous tuberculosis treatment regimen and age group, 2013

Age group	Retreatment	Previous treatment regimen				
		Regimen with HRZ	Other regimen with HR	Other regimen	LTBI treatment	Unknown
Total	1,262	404	229	186	94	349
0-4	2	1	0	0	1	0
5-9	0	0	0	0	0	0
10-14	3	0	0	0	3	0
15-19	14	3	2	0	8	1
20-24	27	12	2	2	8	3
25-29	17	8	0	1	7	1
30-34	26	13	4	1	6	2
35-39	41	18	6	0	10	7
40-44	34	21	2	1	2	8
45-49	40	19	5	0	10	6
50-54	62	39	5	1	9	8
55-59	76	44	13	1	7	11
60-64	103	47	15	8	11	22
65-69	101	38	19	15	2	27
70-74	118	43	16	17	3	39
75-79	154	43	30	40	3	38
80-84	198	31	44	45	2	76
85-89	164	21	39	42	1	61
90+	82	3	27	12	1	39

H : Isoniazid, R : Rifampicin, Z : Pyrazinamide

LTBI : Latent Tuberculosis Infection

【Treatment2】

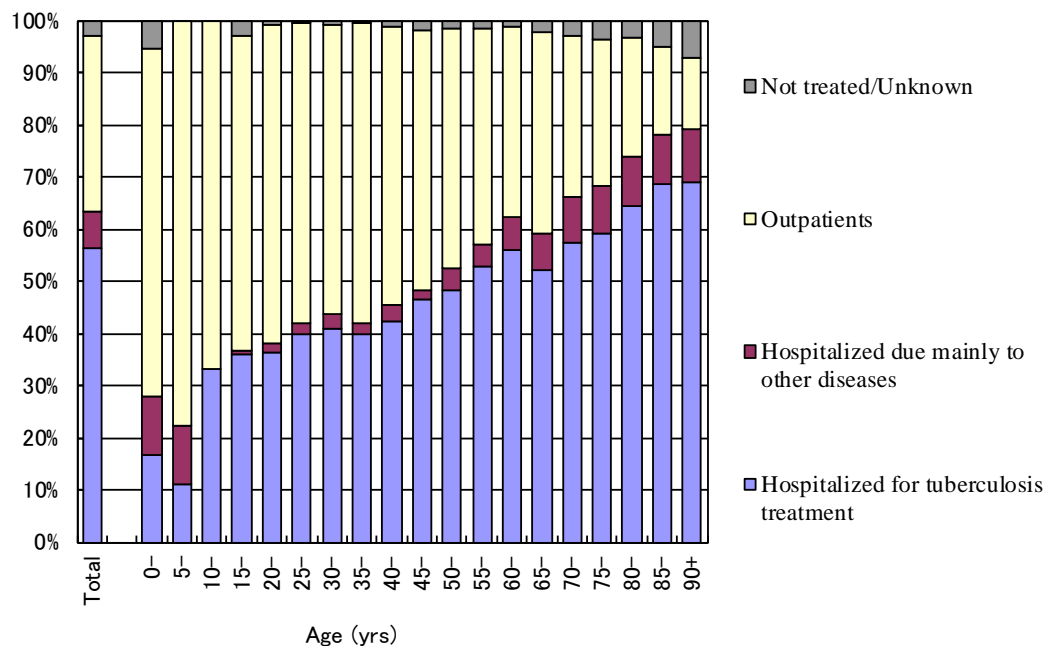


Fig.2 Proportion of initial treatment status among newly notified pulmonary tuberculosis patients by age group, 2013

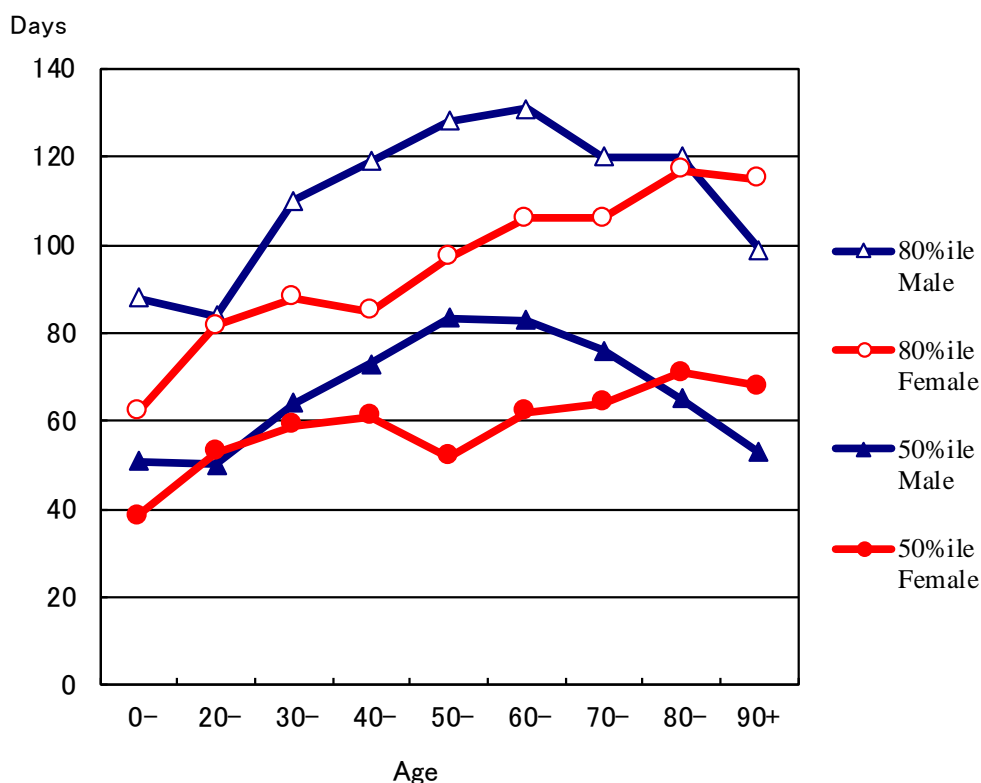


Fig.3 Median (50%ile) and 80%ile of duration of hospitalization among those hospitalized with tuberculosis and with known discharged day, new sputum-smear positive pulmonary tuberculosis patients in 2012 by sex and age group

Table 4 Duration of hospitalization among newly notified tuberculosis patients receiving initial treatment at hospital in 2012 by patient classification

	Newly notified tuberculosis patients							
	Total	Pulmonary tuberculosis patients				Other bacteriologically positive	Bacteriologically negative and others	Extra-pulmonary tuberculosis patients
		Total	Sputum-smear positive					
		New	Re-treatment					
Total	21,221	16,411	7,694	579	5,656	2,482	4,810	
Hospitalized with tuberculosis	10,508	9,140	6,950	520	1,388	282	1,368	
Known date of discharge	8,369	7,452	5,842	424	1,017	169	917	
Duration of hospitalization among those hospitalized with tuberculosis and with known date of discharge								
Median (days)	64	66	69	68	45	44	43	
80%ile (days)	113	114	117	116	93	99	100	

\*: Irrespective of the reason for discharge from hospital

Table 5 Treatment status and duration of treatment at the end of the following years (2012/2013) among those newly notified and started tuberculosis treatment in the previous years (2011/2012) by patient classification

	Newly notified tuberculosis patients							
	Total	Pulmonary tuberculosis patients						(Not included in the total) LTBI
		Total	Sputum-smear positive		Other bacteriologically positive	Bacteriologically negative and others	Extra-pulmonary tuberculosis patients	
			New	Re-treatment				
New cases in 2011*	22,508	17,449	7,736	747	6,049	2,917	5,059	10,096
Known treatment status	21,984 (100%)	17,001 (100%)	7,587 (100%)	734 (100%)	5,825 (100%)	2,855 (100%)	4,983 (100%)	10,015 (100%)
Stopped treatment	18,525 (84.3)	14,318 (84.2)	6,126 (80.7)	574 (78.2)	5,058 (86.8)	2,560 (89.7)	4,207 (84.4)	9,318 (93.0)
Completed	16,099 (73.2)	12,493 (73.5)	5,118 (67.5)	461 (62.8)	4,570 (78.5)	2,344 (82.1)	3,606 (72.4)	8,232 (82.2)
Others	1,398 (6.4)	1,009 (5.9)	546 (7.2)	62 (8.4)	271 (4.7)	130 (4.6)	389 (7.8)	899 (9.0)
Defaulted	178 (0.8)	147 (0.9)	60 (0.8)	8 (1.1)	49 (0.8)	30 (1.1)	31 (0.6)	170 (1.7)
Missing / Moved out of Japan / Dead	838 (3.8)	658 (3.9)	399 (5.3)	42 (5.7)	166 (2.8)	51 (1.8)	180 (3.6)	11 (0.1)
Unknown	12 (0.1)	11 (0.1)	3 (0.0)	1 (0.1)	2 (0.0)	5 (0.2)	1 (0.0)	6 (0.1)
Median of duration of treatment among those completed treatment and still receiving treatment								
Subjects#	16,742	12,930	5,299	491	4,718	2,422	3,812	8,609
Median (days)	273	272	276	288	269	196	274	184
New cases in 2012**	21,221	16,411	7,694	579	5,656	2,482	4,810	8,768
Known treatment status	20,725 (100%)	16,008 (100%)	7,587 (100%)	571 (100%)	5,435 (100%)	2,415 (100%)	4,717 (100%)	8,643 (100%)
Stopped treatment	17,938 (86.6)	13,847 (86.5)	6,358 (83.8)	475 (83.2)	4,824 (88.8)	2,190 (90.7)	4,091 (86.7)	8,104 (93.8)
Completed	14,769 (71.3)	11,428 (71.4)	4,889 (64.4)	374 (65.5)	4,180 (76.9)	1,985 (82.2)	3,341 (70.8)	7,212 (83.4)
Others	491 (2.4)	314 (2.0)	96 (1.3)	19 (3.3)	112 (2.1)	87 (3.6)	177 (3.8)	730 (8.4)
Defaulted	95 (0.5)	72 (0.4)	18 (0.2)	6 (1.1)	27 (0.5)	21 (0.9)	23 (0.5)	126 (1.5)
Missing / Moved out of Japan / Dead	2,581 (12.5)	2,033 (12.7)	1,355 (17.9)	76 (13.3)	505 (9.3)	97 (4.0)	548 (11.6)	36 (0.4)
Unknown	2 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.0)	0 (0.0)
Median of duration of treatment among those completed treatment and still receiving treatment								
Subjects#	15,558	11,958	5,154	403	4,347	2,054	3,600	7,478
Median (days)	273	271	276	285	257	192	274	184

\*: Based on the annual report database in 2012

\*\*: Based on the annual report database in 2013

#: Subjects: Those who completed tuberculosis treatment or those who were still receiving treatment at the end of years (2012/2013).

LTBI: Latent Tuberculosis Infection

Previous table Proportion (%) hospitalized among newly notified tuberculosis patients in 2013 by age group and patient classification

Age	Pulmonary TB									
	Total		Sputum smear positive		Other bacillary positive		Bacillary negative /unknown		Extra-pulmonary	
	Ht	Ho	Ht	Ho	Ht	Ho	Ht	Ho	Ht	Ho
Total	56.2	7.0	89.6	2.4	25.7	12.2	12.3	10.7	29.5	20.1
0-19	32.6	2.1	87.8	2.0	22.6	1.9	7.1	2.4	31.8	13.6
20-29	38.4	1.9	89.6	0.0	16.0	3.9	7.1	1.8	24.5	6.0
30-39	40.3	2.5	90.0	0.2	14.8	4.3	4.8	3.1	19.6	11.9
40-49	44.3	2.5	87.2	1.0	14.2	3.5	7.1	3.9	17.0	11.5
50-59	50.6	4.2	89.1	1.1	19.0	7.1	5.8	7.0	23.6	13.9
60-69	54.0	6.8	89.6	1.8	20.6	11.5	13.4	12.6	20.7	18.5
70-79	58.4	9.0	90.4	3.0	26.2	13.5	16.1	20.8	28.5	19.4
80-89	66.4	9.4	89.9	3.2	34.7	17.8	24.7	19.6	36.7	25.3
90+	68.9	10.4	88.8	3.3	40.8	21.2	26.9	20.9	41.2	28.3

Ht: Hospitalized for tuberculosis treatment

Ho: Hospitalized mainly due to other diseases

**【Treatment Outcomes】**

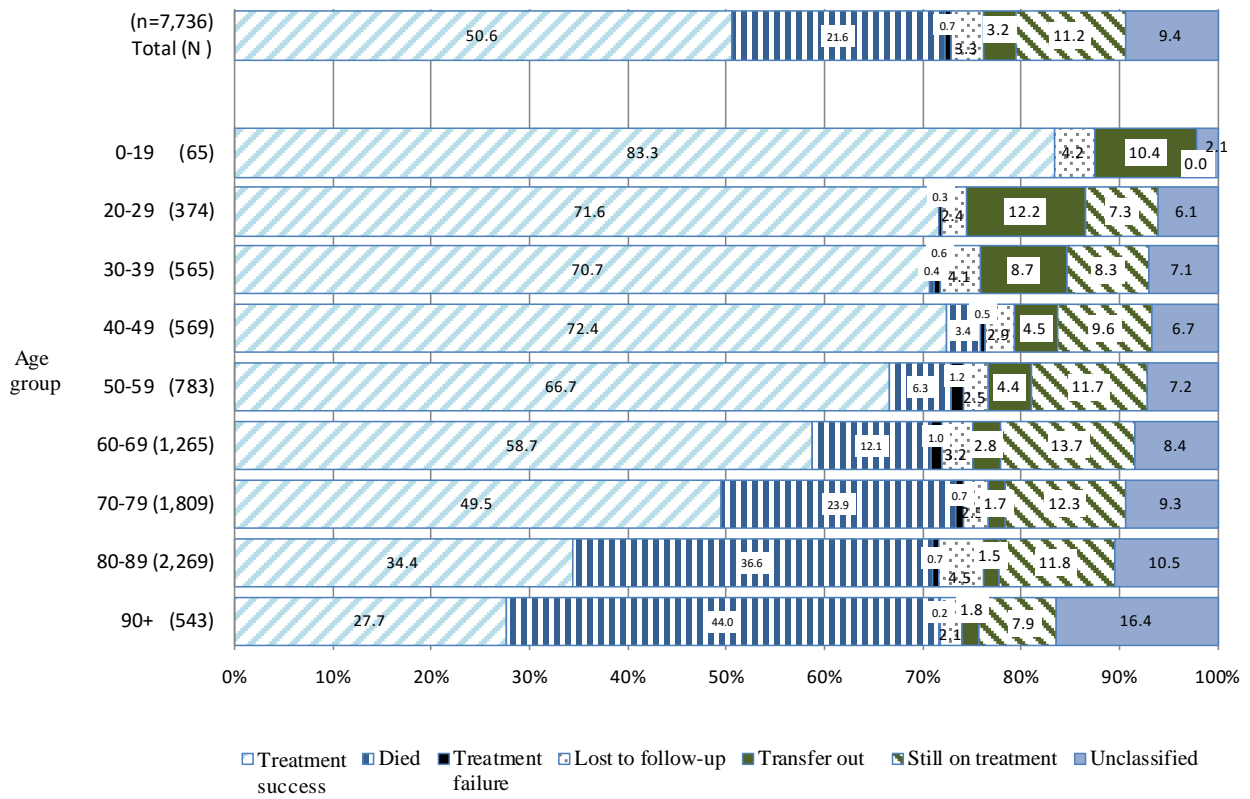


Fig. 4 Treatment outcomes of newly notified sputum-smear positive pulmonary tuberculosis patients by age group, 2011 year cohort (%)

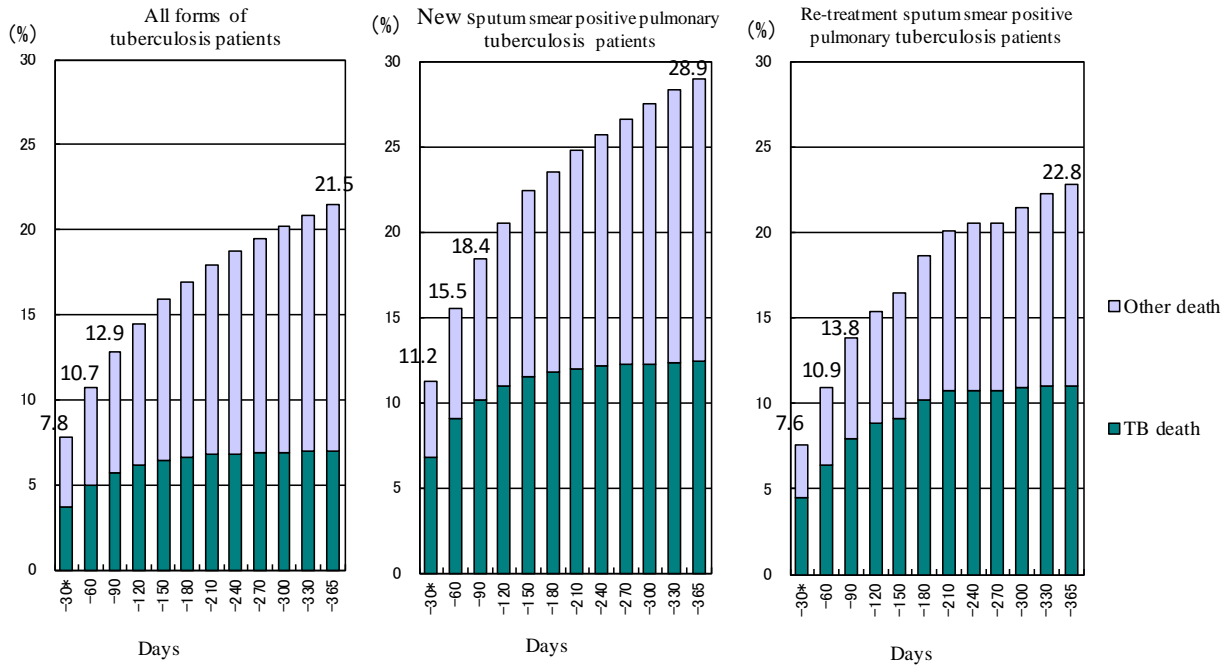


Fig. 5 Cumulative proportion of deaths among newly notified tuberculosis patients in 2012 by period from the beginning of treatment and by cause of death through one year

-30\*: Includes patients who died before the commencement of treatment.   
 TB: tuberculosis

Table 6 Treatment outcome of newly notified pulmonary tuberculosis patients by patient classification, 2012 year cohort

	Pulmonary tuberculosis patients									
	Total		Sputum-smear positive				Other bacteriologically positive		Bacteriologically negative and others	
			New		Retreatment					
New pulmonary tuberculosis patients	16,411	(100%)	7,694	(100%)	579	(100%)	5,656	(100%)	2,482	(100%)
Treatment outcomes (*)										
1. Treatment Success	8,876	54.1	3,797	49.4	261	45.1	3,278	58.0	1,540	62.0
Cure	2,469	15.0	1,413	18.4	104	18.0	713	12.6	239	9.6
Treatment completed	6,407	39.0	2,384	31.0	157	27.1	2,565	45.4	1,301	52.4
Treatment Completed 1	4,113	25.1	1,607	20.9	110	19.0	1,097	19.4	1,299	52.3
Treatment Completed 2	2,294	14.0	777	10.1	47	8.1	1,468	26.0	2	0.1
2. Died	2,716	16.5	1,742	22.6	107	18.5	719	12.7	148	6.0
3. Treatment failure	81	0.5	53	0.7	5	0.9	21	0.4	2	0.1
4. Lost to follow-up	1,093	6.7	288	3.7	20	3.5	481	8.5	304	12.2
Lost to follow-up 1	283	1.7	110	1.4	10	1.7	111	2.0	52	2.1
Lost to follow-up 2	810	4.9	178	2.3	10	1.7	370	6.5	252	10.2
5. Transfer out	473	2.9	228	3.0	20	3.5	140	2.5	85	3.4
6. Still on treatment	1,437	8.8	810	10.5	87	15.0	417	7.4	123	5.0
Still on treatment 1	275	1.7	150	1.9	19	3.3	87	1.5	19	0.8
Still on treatment 2	187	1.1	107	1.4	9	1.6	52	0.9	19	0.8
Still on treatment 3	525	3.2	309	4.0	40	6.9	130	2.3	46	1.9
Still on treatment 4	450	2.7	244	3.2	19	3.3	148	2.6	39	1.6
7. Unclassified	1,735	10.6	776	10.1	79	13.6	600	10.6	280	11.3
Unclassified 1	456	2.8	184	2.4	6	1.0	211	3.7	55	2.2
Unclassified 2	69	0.4	43	0.6	4	0.7	17	0.3	5	0.2
Unclassified 3	540	3.3	277	3.6	38	6.6	147	2.6	78	3.1
Unclassified 4	83	0.5	30	0.4	5	0.9	37	0.7	11	0.4
Unclassified 5	587	3.6	242	3.1	26	4.5	188	3.3	131	5.3

\*Treatment outcomes: See Table 7. It includes those who did not start tuberculosis treatment (mostly caused by early death), those whose initial treatment regimen is unknown, those whose treatment is other than standard treatment, those who stopped INH and/or RFP before treatment completion, and those whose information is insufficient for classifying treatment outcomes.

INH: isoniazid, RFP: rifampicin



Table 7 Treatment outcomes of newly notified sputum smear positive pulmonary tuberculosis patients, 2007–2012 year cohorts (%)

Treatment outcomes	Definition	2007	2008	2009	2010	2011	2012
		n= 9,421	8,999	8,772	8,242	7,736	7,694
1. Cure	A patient who completed treatment within 12 months and whose sputum culture tests were negative at least two times (one of the negative culture results was within three months before the completion of treatment).	16.9	17.6	20.7	20.1	20.0	18.4
2. Treatment completed 1	A patient who completed treatment within 12 months but had only one negative sputum culture result.	24.9	26.8	27.2	27.4	20.7	20.9
3. Treatment completed 2	A patient who completed treatment within 12 months but did not have a negative sputum culture result.	3.8	3.4	3.9	4.5	9.9	10.1
4. Died	A patient who died for any reason during the course of treatment.	18.4	19.1	19.3	20.8	21.6	22.6
5. Treatment failure	A patient whose sputum culture was positive at 5 months or later during the course of treatment.	1.0	1.1	0.9	0.7	0.7	0.7
6. Lost to follow-up 1	A patient whose treatment was interrupted for 60 days (or 2 consecutive months) or more.	0.7	0.6	0.8	0.6	1.1	1.4
7. Lost to follow-up 2	A patient whose physician stopped treatment but the amount of treatment days did not fulfil the standard duration.	4.3	3.2	2.9	2.3	2.2	2.3
8. Transfer out	A patient who has been transferred to another area of the public health center where the patient was registered.	3.2	2.8	3.3	3.0	3.2	3.0
9. Still on treatment 1	A patient who stopped Isoniazid (INH) and/or Rifampicin (RFP) and was still on treatment after 12 months.	1.7	1.4	2.0	1.6	1.8	1.9
10. Still on treatment 2*	A patient who has been on treatment with INH and/or RFP and was still on treatment after 12 months due possibly to treatment interruption.	10.3	10.5	8.8	8.3	1.3	1.4
11. Still on treatment 3	A patient who has been on treatment with INH and/or RFP and was still on treatment after 12 months without treatment interruption.					4.1	4.0
12. Still on treatment 4	A patient who has been on treatment with INH and/or RFP and was still on treatment after 12 months due to unknown reasons.					3.9	3.2
13. Unclassified 1	A patient who did not start tuberculosis treatment (due mostly to early death).	1.9	2.2	2.1	2.1	0.7	2.4
14. Unclassified 2	A patient whose initial treatment regimen was unknown.	4.3	3.9	1.4	1.2	1.0	0.6
15. Unclassified 3	A patient whose treatment regimen was other than the standard.	2.5	2.7	2.5	2.7	4.1	3.6
16. Unclassified 4	A patient who stopped INH and/or RFP but completed treatment within 12 months.	1.1	1.1	1.3	1.1	0.4	0.4
17. Unclassified 5	A patient whose information was insufficient for classifying treatment outcome.	5.1	3.8	2.9	3.5	3.1	3.1

\*There were two categories of "Still on treatment" until 2010 cohorts. Since 2011, the categories have been divided into four kinds as indicated above.

Table 8 Number (proportion) of patients excluded from tuberculosis registration by the end of years (in 2012 and in 2013) among those newly notified tuberculosis patients and LTBI patients in the previous years (in 2011 and in 2012, respectively) by patient classification

	Newly notified tuberculosis patients														LTBI patients (Not included in the total) (%)	
	Total (%)	Pulmonary tuberculosis										Extra-pulmonary (%)				
		Sub-total (Pulmonary tuberculosis) (%)	Sputum-smear positive				Other bacteriologically positive (%)	Bacteriologically negative (%)								
			New (%)	Re-treatment (%)												
<b>* Newly notified tuberculosis cases in 2011*</b>	<b>22,508</b>	<b>(100)</b>	<b>17,449</b>	<b>(100)</b>	<b>7,736</b>	<b>(100)</b>	<b>747</b>	<b>(100)</b>	<b>6,049</b>	<b>(100)</b>	<b>2,917</b>	<b>(100)</b>	<b>5,059</b>	<b>(100)</b>	<b>10,096</b>	<b>(100)</b>
Total number of patients excluded from tuberculosis registration by the end of 2012	6,385	(28.4)	5,045	(28.9)	2,710	(35.0)	279	(37.3)	1,532	(25.3)	524	(18.0)	1,340	(26.5)	1,240	(12.3)
No need for follow-up	136	(0.6)	48	(0.3)	5	(0.1)	1	(0.1)	16	(0.3)	26	(0.9)	88	(1.7)	465	(4.6)
Died	5,050	(22.4)	3,994	(22.9)	2,267	(29.3)	227	(30.4)	1,206	(19.9)	294	(10.1)	1,056	(20.9)	65	(0.6)
Tuberculosis death	1,502	(6.7)	1,258	(7.2)	932	(12.0)	80	(10.7)	184	(3.0)	62	(2.1)	244	(4.8)	0	(0.0)
Other death	3,548	(15.8)	2,736	(15.7)	1,335	(17.3)	147	(19.7)	1,022	(16.9)	232	(8.0)	812	(16.1)	65	(0.6)
Transfer out	983	(4.4)	828	(4.7)	354	(4.6)	47	(6.3)	255	(4.2)	172	(5.9)	155	(3.1)	592	(5.9)
Re-treatment during registration	138	(0.6)	118	(0.7)	65	(0.8)	4	(0.5)	34	(0.6)	15	(0.5)	20	(0.4)	51	(0.5)
Other reason	78	(0.3)	57	(0.3)	19	(0.2)	0	(0.0)	21	(0.3)	17	(0.6)	21	(0.4)	67	(0.7)
<b>Newly notified tuberculosis cases in 2012**</b>	<b>21,221</b>	<b>(100)</b>	<b>16,411</b>	<b>(100)</b>	<b>7,694</b>	<b>(100)</b>	<b>579</b>	<b>(100)</b>	<b>5,656</b>	<b>(100)</b>	<b>2,482</b>	<b>(100)</b>	<b>4,810</b>	<b>(100)</b>	<b>8,768</b>	<b>(100)</b>
Total number of patients excluded from tuberculosis registration by the end of 2013	6,244	(29.4)	4,947	(30.1)	2,822	(36.7)	185	(32.0)	1,466	(25.9)	474	(19.1)	1,297	(27.0)	880	(10.0)
No need for follow-up	84	(0.4)	38	(0.2)	6	(0.1)	1	(0.2)	11	(0.2)	20	(0.8)	46	(1.0)	206	(2.3)
Died	4,989	(23.5)	3,948	(24.1)	2,406	(31.3)	145	(25.0)	1,137	(20.1)	260	(10.5)	1,041	(21.6)	77	(0.9)
Tuberculosis death	1,490	(7.0)	1,265	(7.7)	961	(12.5)	64	(11.1)	194	(3.4)	46	(1.9)	225	(4.7)	1	(0.0)
Other death	3,499	(16.5)	2,683	(16.3)	1,445	(18.8)	81	(14.0)	943	(16.7)	214	(8.6)	816	(17.0)	76	(0.9)
Transfer out	1,001	(4.7)	827	(5.0)	360	(4.7)	27	(4.7)	265	(4.7)	175	(7.1)	174	(3.6)	506	(5.8)
Re-treatment during registration	133	(0.6)	107	(0.7)	45	(0.6)	9	(1.6)	41	(0.7)	12	(0.5)	26	(0.5)	41	(0.5)
Other reason	37	(0.2)	27	(0.2)	5	(0.1)	3	(0.5)	12	(0.2)	7	(0.3)	10	(0.2)	50	(0.6)

\*: Based on the annual report database in 2012.

\*\* : Based on the annual report database in 2013.

LTBI : Latent Tuberculosis Infection