

Supplementary Table 1. Characteristics of study in the endpoint.

	Total (n=410,208)	DM (n=136,736)	Non-DM (n=273,472)	p-value
NTM				<0.01*
Without	409,813 (99.90)	136,571 (99.88)	273,242 (99.92)	
With	395 (0.10)	165 (0.12)	230 (0.08)	
NTM subgroup				<0.01*
Without	409,813 (99.90)	136,571 (99.88)	273,242 (99.92)	
Pulmonary	189 (0.05)	70 (0.05)	119 (0.044)	
Cutaneous	8 (0.00)	3 (0.002)	5 (0.002)	
Disseminated	17 (0.00)	5 (0.004)	12 (0.004)	
Other specified	17 (0.00)	12 (0.009)	5 (0.002)	
Unspecified	164 (0.04)	75 (0.055)	89 (0.033)	
Gender				1.00
Male	202,764 (49.43)	67,588 (49.43)	135,176 (49.43)	
Female	207,444 (50.57)	69,148 (50.57)	138,296 (50.57)	
Age (yrs)	69.37 ± 13.38	68.43 ± 15.54	69.83 ± 12.07	<0.01*
Age groups (yrs)				<0.01*
18-44	25,826 (6.30)	5,522 (4.04)	20,304 (7.42)	
45-64	113,002 (27.55)	35,899 (26.25)	77,103 (28.19)	
≥ 65	271,380 (66.16)	95,315 (69.71)	176,065 (64.38)	
Insured premium (NT\$)				<0.01*
<18,000	405,604 (98.88)	135,620 (99.18)	269,984 (98.72)	
18,000-34,999	3,843 (0.94)	991 (0.72)	2,852 (1.04)	
≥ 35,000	761 (0.19)	125 (0.09)	636 (0.23)	
CCI_R	1.77 ± 2.95	1.81 ± 3.40	1.74 ± 2.72	<0.01*
Season				<0.01*
Spring	101,739 (24.80)	33,714 (24.66)	68,025 (24.87)	
Summer	99,980 (24.37)	32,578 (23.83)	67,402 (24.65)	
Autumn	103,450 (25.22)	34,306 (25.09)	69,144 (25.28)	
Winter	105,039 (25.61)	36,138 (26.43)	68,901 (25.19)	
Location				<0.01*
Northern Taiwan	158,960 (38.75)	51,424 (37.61)	107,536 (39.32)	
Middle Taiwan	113,733 (27.73)	37,181 (27.19)	76,552 (27.99)	
Southern Taiwan	110,076 (26.83)	39,452 (28.85)	70,624 (25.82)	
Eastern Taiwan	25,608 (6.24)	8,066 (5.90)	17,542 (6.41)	
Outlets islands	1,831 (0.45)	613 (0.45)	1,218 (0.45)	
Urbanization level				<0.01*
1 (The highest)	132,436 (32.29)	44,538 (32.57)	87,898 (32.14)	

2	182,926 (44.59)	61,104 (44.69)	121,822 (44.55)	
3	27,673 (6.75)	9,064 (6.63)	18,609 (6.80)	
4 (The lowest)	67,173 (16.38)	22,030 (16.11)	45,143 (16.51)	
Level of care				<0.01*
Hospital center	141,757 (34.56)	45,826 (33.51)	95,931 (35.08)	
Regional hospital	162,287 (39.56)	56,043 (40.99)	106,244 (38.85)	
Local hospital	106,164 (25.88)	34,867 (25.50)	71,297 (26.07)	

DM, diabetes mellitus; NTM, nontuberculous mycobacterium; CCI_R, Charlson comorbidity index revised (CCI removed DM); SD, standard derivation. **P: Chi-square / Fisher exact test on category variables and t-test on continue variables.** * $p < 0.05$

Supplementary Table 2. Multivariate Cox-regression analysis of DM subtype associated with infection of NTM.

DM Types	Populations	Events	PYs	Rate (per 105 PYs)	aHR (95%CI)	p-value
Non-DM	273,472	230	3,524,118.09	6.53	Ref.	
DM	136,736	165	1,754,087.97	9.41	1.43 (1.17-1.74)	<0.01*
T1DM	2,582	3	33,152.26	9.05	1.37 (1.13-1.67)	<0.01*
T2DM	123,666	150	1,586,397.16	9.46	1.44 (1.18-1.75)	<0.01*
Unknown	10,488	12	134,538.55	8.92	1.35 (1.11-1.65)	<0.01*
Frequency of DM before						
NTM						
3	31,056	33	398,396.11	8.28	1.26 (1.03-1.54)	0.02*
4-12	58,783	72	754,086.91	9.55	1.45 (1.19-1.77)	<0.01*
> 12	46,897	60	601,604.95	9.97	1.51 (1.24-1.85)	<0.01*
From first to last DM						
diagnosis before NTM						
< 1 year	22,450	25	287,995.11	8.68	1.32 (1.07-1.60)	<0.01*
≥ 1 year, < 5 years	78,622	93	1,008,522.43	9.22	1.40 (1.14-1.71)	<0.01*
≥ 5 years	35,664	47	457,570.43	10.27	1.54 (1.28-1.90)	<0.01*

NTM, nontuberculous mycobacterium; DM, diabetes mellitus; PYs, person-years; aHR, Adjusted hazard ratio; CI = confidence interval; T1DM; Type 1 diabetes mellitus; T2DM, Type 2 diabetes mellitus. Adjusted for the variables listed in Table 3. * $p < 0.05$.

Supplementary Table 3. The risk of NTM aged 18 and over stratified by DM.

In the tracking of x year(s)	DM (n= 136,736)	Non-DM (n = 273,472)	Log-rank <i>p</i>-value
1	5	1	0.01*
2	13	9	<0.01*
3	19	15	0.04*
4	24	24	0.02*
5	41	35	0.01*
6	50	54	0.04*
7	62	68	0.03*
8	77	89	0.01*
9	85	103	<0.01*
10	98	118	<0.01*
11	119	142	<0.01*
12	138	159	<0.01*
13	145	183	<0.01*
14	152	201	<0.01*
15	160	222	<0.01*
16	165	230	<0.01*

NTM, nontuberculous mycobacterium; DM, diabetes mellitus.

Supplementary Table 4. Multivariate Cox-regression analysis of patient characteristics associated with DM-related infection of NTM.

Stratified variables	DM vs. Non-DM	
	aHR (95% CI)	<i>p</i> -value
Gender		
Male	1.45 (1.19-1.77)	<0.01*
Female	1.41 (1.15-1.72)	<0.01
Age group (yrs)		
18-44	1.37 (1.12-1.67)	<0.01*
45-64	1.40 (1.15-1.71)	<0.01*
≥ 65	1.44 (1.18-1.75)	<0.01*
Insured premium (NT\$)		
<18,000	1.43 (1.18-1.75)	<0.01*
18,000-34,999	-	-
≥ 35,000	-	-
Season		
Spring	1.54 (1.26-1.88)	<0.01*
Summer	1.52 (1.24-1.85)	<0.01*
Autumn	1.25 (1.03-1.52)	0.02*
Winter	1.41 (1.16-1.72)	<0.01*
Urbanization level		
1 (The highest)	1.47 (1.21-1.80)	<0.01*
2	1.42 (1.16-1.73)	<0.01*
3	1.39 (1.14-1.69)	<0.01*
4 (The lowest)	1.25 (1.03-1.53)	0.02*
Level of care		
Hospital center	1.55 (1.27-1.89)	<0.01*
Regional hospital	1.40 (1.15-1.71)	<0.01*
Local hospital	1.27 (1.05-1.55)	0.01*

NTM, nontuberculous mycobacterium; DM, diabetes mellitus; PYs, person-years; aHR, adjusted hazard ratio; CI, confidence interval. Adjusted for the variables listed in Table 3. * $p < 0.05$