

**Supplementary table 1: Sites of tuberculosis in two study cohorts**

Characteristic	Total patients (4652)	Derivation cohort (N=3155)	Validation cohort (N=1497)	P value
DILI No. (%)	255 (5.5)	170 (5.4)	85(5.7)	0.56
Culture confirmed No.(%)	2053 (44.1)	1469 (46.6)	584 (39.0)	<0.001
Site of tuberculosis No.(%)				
Pulmonary No.(%)	3451(74.2)	2355 (74.6)	1096(73.2)	0.06
Both No.(%)	714 (15.3)	544 (17.2)	170 (11.4)	<0.001
Extrapulmonary TB No.(%)	1201(25.8)	800 (25.4)	401 (26.8)	<0.001
Pleurisy TB No.(%)	832(17.9)	536 (17.0)	296 (19.8)	0.02
Lymphoid TB No.(%)	156(3.4)	107 (3.4)	49 (3.3)	0.83
Digestive TB No. (%)	86(1.8)	55 (1.7)	31 (2.1)	0.44
Genitourinary TB No. (%)	48(1.0)	34 (1.1)	14 (0.9)	0.65
CNS TB No. (%)	37(0.8)	26 (0.8)	11 (0.7)	0.75
Bone TB No. (%)	51(1.1)	39 (1.2)	12 (0.8)	0.18
Pharynx and larynx TB No. (%)	39(0.8)	27 (0.9)	12 (0.8)	0.85
Other No. (%)	8(0.2)	7 (0.2)	1 (0.1)	0.23

**NOTE.** Data are expressed as number (percent). Statistical analysis among groups was performed using a Chi-squared test.

**Supplementary table 2. Symptoms associated with DILI in the derivation**

**cohort**

<b>symptoms of DILI</b>	<b>DILI patients (N=170)</b>
Nausea	32(18.8)
Vomiting	10(5.9)
Loss of appetite	45(26.5)
Fever	13(7.6)
Rash	6(3.5)
Abdominal pain	11(6.5)
Jaundice	19(11.1)
Any of above symptoms	64(37.6)

**Supplementary table 3. Comparison of baseline characteristics of patients with  $\geq 3$  times ULN of ALT patients without further progression and those with DILI**

<b>Characteristic</b>	<b>ALT (3 -5 ULN) (N=193)</b>	<b>DILI (N=170)</b>	<b>P value</b>
Age (years)	40(28.5)	44(25.3)	0.11
Male (%)	126(65.3)	113(66.5)	0.81
BMI (Kg/m <sup>2</sup> )	19.6(3.9)	20.1(3.9)	0.05
DM (%)	15(7.8)	19(11.2)	0.27
Hypertension (%)	12(6.2)	14(8.2)	0.49
Alcohol use (%)	17(8.8)	15(8.8)	1.00
HBsAg positive (%)	20(10.4)	27(15.9)	0.12
HIV positive (%)	0	1(0.6)	0.29
HCV positive (%)	1(0.5)	0	0.35
Previous TB treatment (%)	11 (5.7)	9(5.3)	0.87
<b>Lab test</b>			
ALT (U/L)	14.0(13.0)	16(15)	0.08
AST (U/L)	19.0(10.0)	20.5(10)	0.28
Albumin (g/dL)	38.5(6.9)	38.8(7.5)	0.48
Total Bilirubin (umol/l)	10.7(7.0)	10.7(10.1)	0.27
ALP (umol/l)	74.0(31.0)	75.5 (29.5)	0.25
GGT (umol/l)	20.0(15.0)	25(22.3)	0.004
WBC(10 <sup>9</sup> /L)	6.3(2.1)	6.3(2.4)	0.73
RBC(10 <sup>12</sup> /L)	4.4(0.7)	4.5(0.78)	0.43
Hemoglobin(g/L)	130.0(22.5)	132(27)	0.35
Platelet(10 <sup>9</sup> /L)	221.0(91.5)	225(93)	0.74
Creatinine (umol/l)	62.8(17.3)	62.4(20.1)	0.84
Triglyceride	0.9(0.5)	0.93(0.63)	0.53
Cholesterol	3.9(1.0)	3.89(1.24)	0.70

**NOTE.** Data are expressed as mean  $\pm$  standard deviation (SD), median (interquartile range) or number (percent). BMI: body mass index; DM: diabetes mellitus; ALT: alanine aminotransferase; AST: aspartate Aminotransferase; GGT: glutamyl transpeptidase; ALP: alkaline phosphatase; WBC: white blood cell; RBC:red blood cell count; DILI: drug induced liver injury; Statistical analysis among groups was performed using Student's t-test, the Mann–Whitney U-test, or a Chi-squared test.

In addition, 10 patients had ALT between 1-2 ULN before treatment. Another 40 patients had ALT 1-3 ULN during anti-TB therapy with 11 2-3 ULN and 29 1-2 ULN.

**Supplementary table 4. Risk factors associated with moderate to severe DILI by univariate cox regression analysis in DILI patients at baseline.**

Characteristic	Mild DILI (N=143)	moderate to severe DILI (N= 27)	HR	95%CI	P value
Age (years)	41.7±14.3	51.7±20.9	1.041	1.015-1.069	0.002
Male No. (%)	94(65.7)	19(70.4)	0.808	0.354-1.846	0.61
BMI (Kg/m <sup>2</sup> )	20.6±2.7	20.1±3.7	0.932	0.792-1.097	0.40
DM No. (%)	16(11.2)	3(11.1)	0.930	0.280-3.89	0.91
Hypertension No. (%)	9(6.3)	5(18.5)	2.697	1.020-7.126	0.05
Alcohol use No. (%)	10(7.0)	5(18.5)	2.634	0.997-6.958	0.05
Active drink No. (%)	3(2.1)	4(14.8)	5.471	1.888-15.849	0.002
HBsAg positive No. (%)	24(16.8)	3(11.1)	0.668	0.201-2.218	0.51
HIV positive No. (%)	1(0.7)	0	0.049	<0.001-7.953 E7	0.78
HCV positive No. (%)	0	0	-	-	N
Previous TB treatment No. (%)	5(3.5)	4(14.8)	3.744	1.294-10.830	0.02
<b>Lab test at baseline</b>					
ALT (U/L)	16(15)	20(21)	1.018	0.994-1.043	0.14
AST (U/L)	20(8)	26(19)	1.039	1.017-1.062	0.004
Albumin (g/dL)	38.3±5.5	35.9±4.9	0.934	0.878-0.993	0.03
Total Bilirubin (umol/l)	10.3(10)	14.8(12.0)	1.026	0.992-1.061	0.14
ALP (umol/l)	75(29)	82(31)	1.001	0.988-1.015	0.87
GGT (umol/l)	24(20)	26(50)	1.006	1.002-1.011	0.003
Creatinine (umol/l)	62.4(19.6)	62.4(22.8)	0.997	0.974-1.022	0.83
Triglyceride	1.0(0.7)	0.9(0.6)	0.950	0.513-1.759	0.87
Cholesterol	3.6(1.2)	4.0(1.2)	0.655	0.417-1.029	0.07
WBC (10 <sup>9</sup> /L)	6.1(2.3)	6.5(1.9)	1.084	0.917-1.281	0.35
Hemoglobin (g/L)	130.6±18.8	129±20.4	1.000	0.995-1.005	0.54
Platelet (10 <sup>9</sup> /L)	225(87)	225(138)	0.994	0.975-1.013	0.53

**NOTE.** Data are expressed as mean ± standard deviation (SD), median (interquartile range) or number (percent). BMI: body mass index; DM: diabetes mellitus; ALT: alanine aminotransferase; AST: aspartate Aminotransferase; GGT: glutamyl transpeptidase; ALP: alkaline phosphatase; WBC: white blood cell; RBC:red blood cell count; DILI: drug induced liver injury; Statistical analysis among groups was performed using Student's t-test, the Mann–Whitney U-test, or a Chi-squared test.

**Supplement table 5. Long-term follow-up of patients with DILI and ALT elevation 3-5 x ULN.**

<b>Characteristic</b>	<b>ALT (3 -5x ULN) (N=193)</b>	<b>DILI(N=170)</b>
Severe DILI	0	9(5.3%)
Death	0	3(1.8%)
TB cure	175(90.7)	136(80.0)
TB relapse	14(7.3%)	16(9.4%)
Second DILI	0	5(2.9%)
Lost to follow up	4(2.1%)	15(9.2%)

NOTE. Data are expressed as number (percent).