

Supplementary Table S1. Demographics in rheumatoid arthritis patients newly treated with JAK inhibitor or bDMARD for the unmatched cohort

Variables	JAK inhibitors (n = 3,352)	bDMARD (n = 22,154)	p-value
Age, mean \pm SD	55.38 \pm 12.17	50.58 \pm 14.85	<.0001
20 \leq age <40, n (%)	356 (10.6)	5,610 (25.3)	<.0001
40 \leq age <65, n (%)	2,212 (66.0)	12,376 (55.9)	
65 \leq age, n (%)	784 (23.4)	4,168 (18.8)	
Sex, female, n (%)	2,733 (81.5)	13,654 (61.6)	<.0001
Insurance, n (%)			
Health insurance	3,172 (94.6)	20,901 (94.3)	0.5029
Medicaid	180 (5.4)	1253 (5.7)	
LTBI, n (%) ^a			
No	2,723 (81.2)	17,634 (79.6)	0.0277
Yes	629 (18.8)	4,520 (20.4)	
Comorbidities, n (%) ^b			
Myocardial infarction	45 (1.3)	261 (1.2)	0.4153
Congestive heart failure	177 (5.3)	1094 (4.9)	0.3960
Peripheral vascular disease	563 (16.8)	3,394 (15.3)	0.0278
Dementia	59 (1.8)	275 (1.2)	0.0138
Cerebrovascular disease	257 (7.7)	1677 (7.6)	0.8427
Chronic lung disease	1406 (41.9)	9,638 (43.5)	0.0895
Peptic ulcer	1538 (45.9)	10,753 (48.5)	0.0042
Liver disease	1416 (42.2)	9,665 (43.6)	0.1322
Diabetes mellitus	978 (29.2)	5,714 (25.8)	<.0001
Moderate or severe kidney disease	90 (2.7)	567 (2.6)	0.6688
Malignant tumor	199 (5.9)	1953 (8.8)	<.0001
csDMARDs, n (%) ^b			
Methotrexate	3,107 (92.7)	15,409 (69.6)	<.0001
Hydroxychloroquine	1,880 (56.1)	9,353 (42.2)	<.0001
Leflunomide	1,849 (55.2)	7,343 (33.1)	<.0001
Sulfasalazine	1,349 (40.2)	13,008 (58.7)	<.0001
Corticosteroids ^b			
Cumulative dose (prednisolone equivalent dose in mg), mean \pm SD	383.64 \pm 462.54	444.92 \pm 593.79	<.0001
Prednisolone, n (%)	2,382 (71.1)	15,763 (71.2)	0.9148
Methylprednisolone, n (%)	2,156 (64.3)	13,428 (60.6)	<.0001
Triamcinolone, n (%)	2,475 (73.8)	14,361 (64.8)	<.0001
Dexamethasone, n (%)	1,614 (48.2)	11,187 (50.5)	0.0113
Hydrocortisone, n (%)	440 (13.1)	3,148 (14.2)	0.0928
Betamethasone, n (%)	262 (7.8)	2,165 (9.8)	0.0003
Deflazacort, n (%)	308 (9.2)	1,741 (7.9)	0.0083
bDMARD on the index date, n (%)			
Infliximab	NA	2,815 (12.7)	NA
Etanercept	NA	4,235 (19.1)	NA
Adalimumab	NA	7,125 (32.2)	NA
Golimumab	NA	2,888 (13.0)	NA

Rituximab	NA	1,236	(5.6)	NA
Abatacept	NA	1,651	(7.5)	NA
Tocilizumab	NA	2,205	(10)	NA
JAK inhibitor on index date, n (%)				
Tofacitinib	1,407	(42.0)	NA	NA
Baricitinib	1,500	(44.7)	NA	NA
Upadacitinib	446	(13.3)	NA	NA

^a Assessed during six-month history period

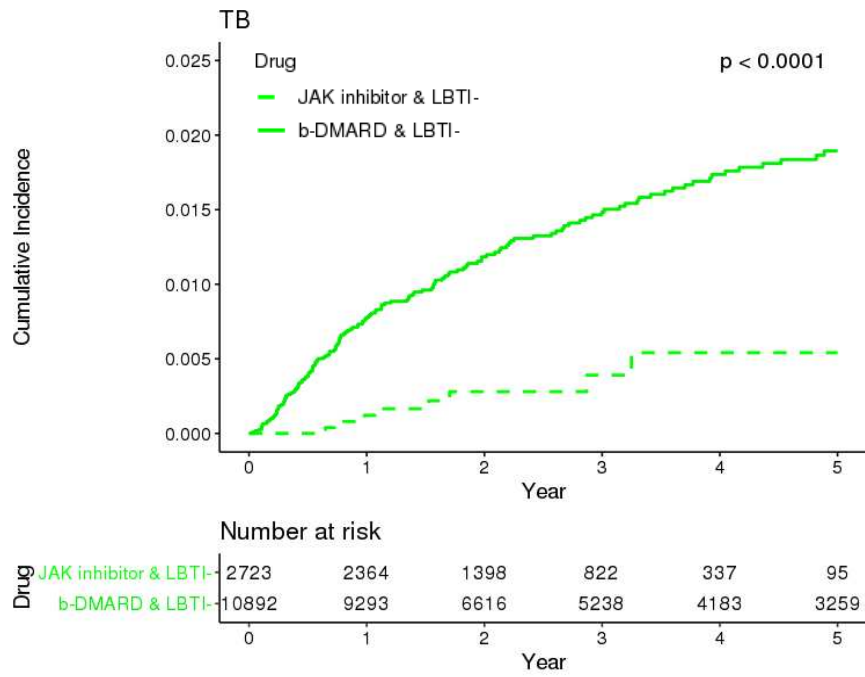
^b Assessed during two-year history period

Supplementary Table S2. Cox regression analysis for factors associated with TB infection for up to five years in Korean patients with RA treated with bDMARD or JAK inhibitor for the unmatched cohort

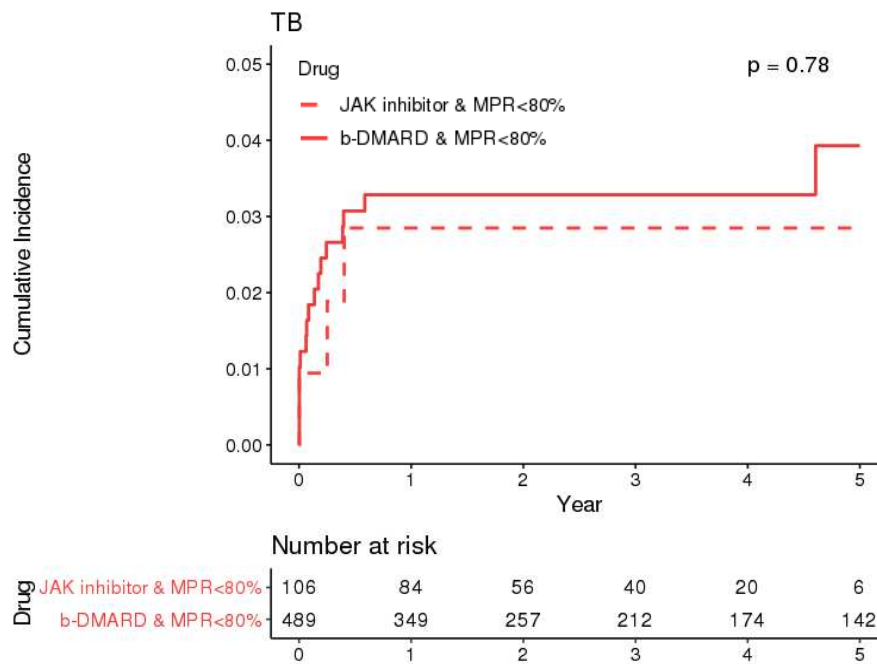
Variables	Unadjusted		Adjusted	
	HR (95% CI)	p-value	HR (95% CI)	p-value
DMARDs				
bDMARD	Reference		Reference	
JAK inhibitor	0.37 (0.22-0.63)	0.0002	0.36 (0.21-0.6)	0.0001
LTBI				
No	Reference		Reference	
Yes	1.24 (0.96, 1.6)	0.1007		
MPR <80%	3.26 (2.3-4.61)	<.0001	2.96 (2.09-4.2)	<.0001
MPR ≥80%	0.79 (0.57-1.11)	0.1747	0.73 (0.52-1.02)	0.0648
Age				
20≤ age <40	Reference		Reference	
40≤ age <65	1.6 (1.14-2.26)	0.0074	1.61 (1.12-2.32)	0.0102
65≤ age	3.87 (2.71-5.53)	<.0001	3.75 (2.5-5.62)	<.0001
Sex				
Female	Reference		Reference	
Male	1.26 (1.004-1.58)	0.0458	1.37 (1.07-1.75)	0.0123
Insurance				
Health insurance	Reference		Reference	
Medicaid	1.73 (1.18-2.54)	0.0048	1.44 (0.98-2.12)	0.0657
Comorbidities				
Myocardial infarction	1.48 (0.61-3.59)	0.3833	0.85 (0.34-2.08)	0.7135
Congestive heart failure	2 (1.35-2.98)	0.0006	1.28 (0.84-1.94)	0.2455
Peripheral vascular disease	1.39 (1.05-1.84)	0.0231	0.97 (0.72-1.3)	0.8311
Dementia	1.1 (0.41-2.95)	0.8516	0.65 (0.24-1.76)	0.3944
Cerebrovascular disease	1.35 (0.92-1.98)	0.1262	0.8 (0.54-1.2)	0.2817
Chronic lung disease	1.71 (1.37-2.14)	<.0001	1.37 (1.08-1.73)	0.0093
Peptic ulcer	1.28 (1.02-1.6)	0.031	1.03 (0.82-1.29)	0.8205
Liver disease	1.18 (0.94-1.47)	0.1516	0.99 (0.79-1.25)	0.9583
Diabetes mellitus	1.51 (1.19-1.91)	0.0006	1.04 (0.8-1.34)	0.7847
Moderate or severe kidney disease	1.99 (1.17-3.41)	0.0115	1.34 (0.78-2.33)	0.292
Malignant tumor	0.97 (0.63-1.49)	0.8805	0.67 (0.43-1.04)	0.0754
csDMARDs				
Methotrexate	0.91 (0.71-1.16)	0.4429	0.8 (0.61-1.06)	0.1254

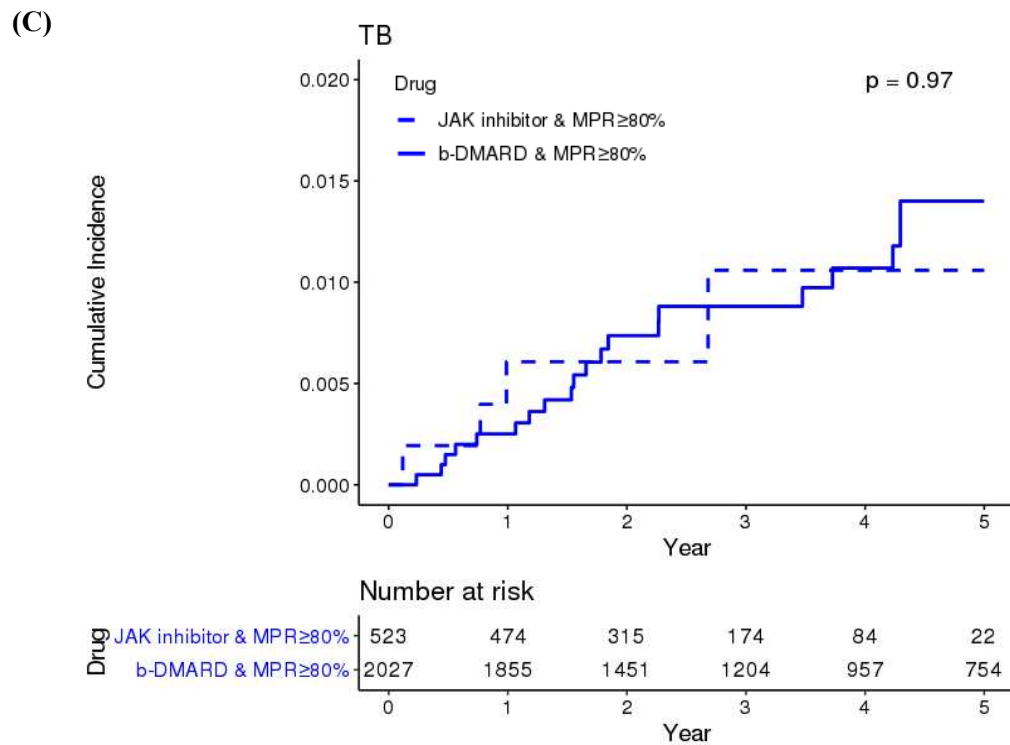
Hydroxychloro-quine	1.08 (0.87-1.35)	0.4931	0.98 (0.77-1.24)	0.8482
Leflunomide	1.25 (0.99-1.57)	0.0509	1.21 (0.94-1.55)	0.1406
Sulfasalazine	0.86 (0.69-1.07)	0.1842	0.87 (0.69-1.11)	0.2628
Prednisolone equivalent cumulative dose during past 2 years				
<532.5 mg ^a	Reference		Reference	
≥532.5 mg	1.78 (1.41-2.24)	<.0001	1.43 (1.13-1.83)	0.0035

(A)



(B)





Supplementary Figure S1. Cumulative incidence of tuberculosis in matched cohort with rheumatoid arthritis prescribed JAK inhibitor (dashed line) or bDMARD (solid line) (A) not on treatment of LTBI, or on treatment of LTBI with (B) low adherence and (C) high adherence. Abbreviations: bDMARD, biologic disease-modifying antirheumatic drug; JAKi, Janus kinase inhibitors; LTBI, latent tuberculosis infection; MPR, medication possession ratios.