

Supplementary material

Supplementary Table S1. List of variables identified in the Danish National Patient registry and the National Prescription Drug Registry

	Hospital contacts Danish National Patient registry (DNPR), ICD10 codes (main or contributory diagnoses)	Prescriptions National Prescription Drug Registry (NPDR), ATC codes
HEPATOBIILIARY DISEASE*		
Hepatobiliary comorbidity	B15-19, C22-25, C78.8, D01.5, D13.9, D37.6, E80.21, K70-K77, K80-87, Q26.6, R17, R74, R93.2, R94.5	-
Hepatobiliary events	B15-19, C22-25, C78.8, D01.5, D13.9, D37.6, E80.21, K70-K77, K80-87, R17, R74, R93.2, R94.5	-
OTHER COMORBIDITIES**		
Hypertension	I10-I15	C03, C08, C09AA, C09CA
Diabetes	E10-E14, O24	A10
Dyslipidemia	E78	C10AA
Coronary artery disease	I20-I24	-
Hypo-thyreodism	E02-E03	H03A, H01AB
Alcohol abuse	F10, Z71.4, Z72.1, K29.2, G72.1	-
USE OF PRESCRIPTION MEDICATION***		
Paracetamol/acetaminophen	-	M01A
NSAIDs	-	N02BE
Glucocorticoids	-	H02
<p>* For definition of exposure time, see main text and footnote Table 1, hospitalization or out-patient care ** Hospitalizations in DNPR 0-5 years previously and/or prescriptions in NPDR 0-1 year previously. Thus, a patient characterized as having hypertension had >1 hospitalization within the preceding 0-5 years and/or >1 medication prescription 0-1 year previously according to the codes given ***Prescriptions in NPDR 0-1 years previously Abbreviations: NSAID: non-steroid anti-inflammatory drugs</p>		

Supplementary Table S2

Frequency of hepatobiliary event codes (ICD10-codes) per sub-cohort

	ETN				SB4					
	Bio-naïve (n=1,124)		Switch from other bDMARD (n=1,600)		Bio-naïve (n=567)		Non-medical switch from ETN (n=1,537)		Switch from other bDMARD (n=880)	
	ICD10	Patient number, n	ICD10	Patient number, n	ICD10	Patient number, n	ICD10	Patient number, n	ICD10	Patient number, n
All events*	B182	2	K743	3	R740B	2	B169A	1	K703	1
	K802	2	K802	2	K802	1	K802	1	K738	1
	K769	1	K859	2	K805K	1	K805K	1	K740	1
	K800	1	B169A	1	K824	1	K869	1	K760A	1
	K859	1	K720	1	K861	1			K769	1
	R740B	1	K746G	1					K802	1
	R749	1	K750	1					K805	1
			K760	1					K861	1
			K760A	1					R179	1
			K769	1					R740B	1
		K801C	1					R748B	1	
		K805K	1							
		R740	1							
	Total	9	Total	17	Total	6	Total	4	Total	11
Hospitalized events**	K800	1	K802	2	K738	1	K802	1	K703	1
	K859	1	B169A	1	K802	1	K803A	1	K861	1
	R740B	1	K720	1	K805K	1			R179	1
			K743	1	K861	1				
			K746G	1						
			K750	1						
			K801C	1						
			K859	1						
	Total	3	Total	9	Total	4	Total	2	Total	3

*Out-patient or hospitalized

** Subgroup of all hepatobiliary events that were hospitalized

The most frequent events were: DK80: gallbladder-stone related disease (cholelithiasis), DR74: elevated liver-enzymes/transaminases, DK74: liverfibrosis/cirrosis, DK85+DK86.1: pancreatitis. For details, see <http://apps.who.int/classifications/icd10/browse/2016/en>