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Table SI. Patient comorbidities by ICD-10 codes and specialties by healthcare specialty codes

Comorbidity	ICD-10 code
Rheumatoid arthritis	M05–6
Psoriatic arthritis	M07
Crohn’s disease	K50
Ulcerative colitis	K51
Crohn’s disease or ulcerative colitis	K50-1
Noninfective enteritis and colitis	K50–2
Osteoarthritis	M15–9
Arthropathic psoriasis	L40.5
Distal interphalangeal psoriatic arthropathy	M07.0
Cancer	C00–99
Essential (primary) hypertension	I10
Myocardial infarction	I21–3
Heart failure	I50 I11.0
Chronic ischemic heart disease Severe	I25
ischemic arrhythmias	I46–9
Hemorrhagic/embolic stroke	I60–4, G45
Atherosclerosis	I70
Any cardiovascular disease	I10, I15, I21–2, I50, I11.0, I25, I46–9, I60–4, G45, I70
Type 2 diabetes mellitus	E11
Hyperglycemia	R73
Hypercholesterolemia	E78
Cirrhosis of liver	K70.3, K74
Kidney diseases	N17–9
Cholelithiasis	K80
Acute pancreatitis	K85–6
Chronic obstructive pulmonary disease	J44
Gout	M10
Asthma	J45
Major depressive disorder	F32–3
Schizophrenia	F20
Any mental disorder	F00–99

Comorbidity	ICD-10 code
Diseases of oral cavity, salivary glands and jaw	K00–14
Acute upper respiratory infections	J00–6
Influenza and pneumonia	J09, J10–8
Other lower respiratory infections	J20–2
Symptoms of the digestive system	R10–9
Pain in throat and chest	R07
Abnormalities of breathing	R06
Soft tissue disorders	M60–9, M70–9
Dermatitis and eczema	L20–9, L30–9
Dorsopathies	M40–9, M50–4
Other joint disorders	M20–5
Specialties: 5 most common selected for the study	Healthcare specialty codes
Skin or allergy	60
Psychiatry	70
Internal medicine	10
Oncology	65
Ophthalmology	50

ICD-10: International Classification of Diseases, Tenth Revision.

Table SII. Definitions of study treatments for psoriasis based on ATC classification codes

Treatment	ATC code
Conventional systemic	
Cyclosporine	L04AD01
Methotrexate	L04AX03
Acitretin	D05BB02
Biologic ^a	
Etanercept	L04AB01
Guselkumab	L04AC16
Ixekizumab	L04AC13
Infliximab ^b	L04AB02
Secukinumab	L04AC10
Certolizumab pegol	L04AB05
Ustekinumab	L04AC05
Brodalumab	L04AC12
Adalimumab	L04AB04
Other	
Apremilast	L04AA32
Topical	
Antipsoriatics	D05
Calcitriol	D05AX03
Calcipotriol	D05AX02, D05AX52
Corticosteroids, dermatologic preparations	D07
Corticosteroids, weak (group I)	D07AA, D07BA, D07CA
Corticosteroids, moderately potent (group II)	D07AB, D07BB, D07CB
Corticosteroids, potent (group III)	D07AC, D07BC, D07CC
Corticosteroids, very potent (group IV)	D07AD, D07BD, D07CD
Betamethasone-salicylic acid	D07XC01
Folic acid and derivatives	B03BB
Emollients	Specified by KELA
Other treatment groups investigated in the study	
Antiemetics and antinauseants	A04A

Treatment	ATC code
Antifungals for dermatologic use	D01
Antibiotics and chemotherapeutics for dermatologic use	D06
Antibacterials for systemic use	J01
Anti-infectives for systemic use	J02

ATC: anatomical therapeutic chemical.

^aBiologics include treatments that were in use for psoriasis vulgaris or psoriasis arthritis in Finland during the observation period.

^bDuring the observation period, infliximab was used only in hospitals and is thus excluded from the analyses, which were based on purchases of reimbursed drugs.

Table SIII. Comorbidities among the non-biologic starters subgroup

Comorbidities	Non-biologic starters, n (%) (n=40,159)
Based on ICD-10 codes	
Essential (primary) hypertension	12,998 (32.4)
Arthropathy	12,776 (31.8)
Dorsopathies	11,762 (29.3)
Acute upper respiratory infections	9,806 (24.4)
Dermatitis and eczema	8,346 (20.8)
Type 2 diabetes mellitus	7,228 (18.0)
Osteoarthritis	7,119 (17.7)
Severe ischemic arrhythmias	5,733 (14.3)
Hypercholesterolemia	5,613 (14.0)
Influenza and pneumonia	5,270 (13.1)
Psoriatic arthritis	4,754 (11.8)
Other lower respiratory infections	5,042 (12.6)
Cancer	5,021 (12.5)
Asthma	3,982 (9.9)
Major depressive disorder	3,894 (9.7)
Heart failure	2,706 (6.7)
Hemorrhagic or embolic stroke	2,666 (6.6)
Chronic obstructive pulmonary disease	2,246 (5.6)
Gout	1,731 (4.3)
Kidney diseases	1,613 (4.0)
Crohn's disease	433 (1.1)
Ulcerative colitis	699 (1.7)
Crohn's disease or ulcerative colitis	1,013 (2.5)
Rheumatoid arthritis	1,266 (3.2)
Based on healthcare specialty code	
Skin and allergy	22,360 (55.7)
Psychiatry	4,894 (12.2)
Internal medicine	23,334 (58.1)
Oncology	2,180 (5.4)
Ophthalmology	9,387 (23.4)

ICD-10: International Classification of Diseases, Tenth Revision.