

Supplementary Material

Supplement 1. Table over comedications and associated ATC-codes included in the study.

Co-medication	ATC codes
Medication for mouth and teeth diseases	A01A: Stomatological preparations
Medication for inflammatory bowel disease	A07E: Intestinal anti-inflammatory agents
Anti-obesity treatment	A08A: Anti-obesity drugs list, excluding diet products
Antidiabetic agents	A10: Drugs used in diabetes
Vitamin D and analogues	A11C: Vitamin A and D, including combinations of the two
Vitamin B1, 6 or 12	A11D: Vitamin B1, plain and in combination with vitamin B6 and B12 A11E: Vitamin B-complex, including combinations
Calcium and Calcium -Vitamin D combination	A12A: Calcium
Anticoagulant drugs	B01: Antithrombotic agents
Cardiac glycosides (digoxin)	C01A: Cardiac glycosides list
Antiarrhythmic drugs	C01B: Class 1 and 3 antiarrhythmic drugs
Nitrates (vasodilators)	C01D: Vasodilators used in cardiac diseases
Diuretics	C03: Diuretic drugs
Topical hemorrhoids and thrombophlebitis treatment	C05: Vasoprotective drugs
Beta-blockers	C07: Beta blocking agents
Calcium channel blockers	C08: Calcium channel blockers
ACE inhibitors and Angiotensin II receptor antagonists	C09: Agents acting on the renin-angiotensin system
Lipid-reducing agents	C10: Lipid modifying agents

Topical anti-fungal agents	D01A: Antifungals for topical use
Topical calcipotriol, combination with bethametasone or ichthammol	D05A: Antipsoriatics for topical use
Dimethylfumarate or acitretin	D05B: Antipsoriatics for systemic use
Topical corticosteroids I or II	D07AA: Corticosteroids, weak (group I) D07AB: Corticosteroids, moderately potent (group II)
Topical corticosteroids III or IV	D07AC: Corticosteroids, potent (group III) D07AD: Corticosteroids, very potent (group IV)
Topical corticosteroids in combination with antibiotics or antiseptics	D07B: Corticosteroids, combinations with antiseptics D07C: Corticosteroids, combinations with antibiotics D07X: Corticosteroids, other combinations
Selenium disulfide shampoo	D11AC03: Selenium compounds
Topical tacrolimus or pimecrolimus	D11AH01: Tacrolimus D11AH02: Pimecrolimus
Erectile dysfunction treatment	G04BE: Drugs used in erectile dysfunction
Systemic corticosteroids	H02AB: Glucocorticoids
Oral mineralocorticoids	H02AA: Mineralocorticoids
Oral antibiotics	J01: Anti-bacterial drugs
Peroral anti-fungal treatment	J02: Anti-mycotic drugs D01B: Antifungals for systemic use
Methotrexate	L01BA01: Methotrexate
Immunosuppressive agents	L04AA: Selective immunosuppressants (exclusive of Apremilast and Leflunomide) L04AX: Other immunosuppressants (exclusive of Methotrexate and Dimethylfumarate)
Apremilast	L04AA32: Apremilast
TNF- α inhibitors	L04AB: Tumor necrosis factor alpha (TNF- α) inhibitors
Interleukin inhibitors	L04AC: Interleukin inhibitors
Calcineurin inhibitors	L04AD: Calcineurin inhibitors
Nonsteroidal antirheumatic drugs (NSAID)	M01A: Anti-inflammatory and antirheumatic products, non-steroids
Topical anti-inflammatory agents	M02: Topical products for joint and muscular pain

Anti-osteoporotic treatment	M05B: Drugs affecting bone structure and mineralization
Opioids	N02A: Opioid drugs list
Analgesics	N02B: Other analgesics and antipyretics
Migraine treatment	N02C: Migraine medication
Neuroleptics	N05A: Antipsychotic drugs
Benzodiazepines and sedatives	N05B: Anxiolytic drugs N05C: Hypnotics and sedatives drugs
Antidepressants	N06A: Antidepressant drugs
Nicotine and alcohol addiction drugs	N07BA: Drugs used in nicotine dependence N07BB: Drugs used in alcohol dependence
Obstructive lung disease medication	R03: Drugs for obstructive airway diseases
Antihistamines	R06: Antihistamines for systemic use
Topical medication for inflammatory eye diseases	S01B: Anti-inflammatory agents
Topical medication for inflammatory ear diseases	S02B: Corticosteroids
Topical hydrocortisone with oxitetracycline for ear and eye diseases	S03CA: Corticosteroids and anti-infectives in combination

Supplement 2. Tables showing patients demographics (age and sex) for psoriasis patients and controls

Variable	Psoriasis (N=4587)		Controls (N=268 949)	
	N	%	N	%
Sex				
Male	2282	49.7	134 560	50.0
Female	2305	50.3	134 389	50.0
Age				
Mean ($\pm$ SD)	57.4 $\pm$ 17.3		49.7 $\pm$ 19.5	
Range	18–103		18–105	
<= 30	411	9.0	57 908	21.2
31-40	433	9.4	39 641	14.5
41-50	707	15.4	46 018	16.8
51-60	814	17.7	42 107	15.4
61-70	1094	23.9	41 088	15.0
71-80	781	17.0	28 898	10.6
81-90	310	6.8	14 811	5.4
91+	37	0.8	3065	1.1

Variable	Mild psoriasis (N=3407)	Moderate-severe psoriasis (N=1180)
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	N	%	N	%
Sex				
Male	1677	49.2	605	51.3
Female	1730	50.8	575	48.7
Age				
Mean ($\pm$ SD)	57.5 $\pm$ 17.9		57.07 $\pm$ 15.26	
Range	18–103		18–97	
<= 30	339	10.0	72	6.1
31-40	335	9.8	98	8.3
41-50	493	14.5	214	18.1
51-60	552	16.2	262	22.2
61-70	793	23.3	301	25.5
71-80	598	17.6	183	15.5
81-90	264	7.7	46	3.9
91+	33	1.0	4	0.3

Supplement 3. Tables showing psoriasis medication dispensed by patients with psoriasis under the study period.

Psoriasis medication	Dispensation by all patients with psoriasis (%)	Sex distribution (%)	
		M (N=2282)	F (N=2305)
Topical corticosteroids I-II	100	49.7	50.3
Topical corticosteroids III-IV	82.8	47.9	52.1
Topical calcipotriol, combination with betamethasone or ichthammol	57.3	53.1	46.9
Methotrexate	22.1	51.1	48.9
Topical corticosteroids in combination with antibiotics or antiseptics	15.2	47.4	52.6
Selenium disulfide shampoo	5.9	52.2	47.8
Dimethylfumarate or acitretin	5.4	53.8	46.2
TNF- α inhibitors	5.1	55.3	44.7
Topical tacrolimus or pimecrolimus	5.1	41.5	58.5
Calcineurin inhibitors	1.2	41.8	58.2
Interleukin inhibitors	0.8	59.5	40.5
Apremilast	0.6	57.7	42.3

Psoriasis medication	Dispensation by patient with mild psoriasis (%)	Sex distribution (%)	
		M (N=1677)	F (N=1730)
Topical corticosteroids I-II	100	49.2	50.8
Topical corticosteroids III-IV	84.7	47.3	52.7
Topical calcipotriol, combination with betamethasone or ichthammol	56.6	52.6	47.4
Topical corticosteroids in combination with antibiotics or antiseptics	14.8	46.6	53.4
Selenium disulfide shampoo	6.0	50.2	49.8
Topical tacrolimus or pimecrolimus	4.8	44.2	55.8

Psoriasis medication	Dispensation by patients with moderate-severe psoriasis (%)	Sex distribution (%)	
		M (N=605)	F (N=575)
Topical corticosteroids I-II	100	51.3	48.7
Methotrexate	86.1	51.1	48.9
Topical corticosteroids III-IV	77.2	50.1	49.9
Topical calcipotriol, combination with betamethasone or ichthammol	59.5	54.7	45.3
Dimethylfumarate or acitretin	20.9	53.8	46.2
TNF- α inhibitors	19.9	55.3	44.7
Topical corticosteroids in combination with antibiotics or antiseptics	16.4	49.5	50.5
Topical tacrolimus or pimecrolimus	6.0	35.2	64.8
Selenium disulfide shampoo	5.8	57.9	42.1
Calcineurin inhibitors	4.7	41.8	58.2
Interleukin inhibitors	3.1	59.5	40.5
Apremilast	2.2	57.7	42.3