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**Table SI.** ATC-codes used to define psoriasis-related drugs.

Type of Drug	ATC kod	Substance
Biologic Agent	L04AA24	Abatacept
	L04AA21	Efalizumab
	L04AB01	Etanercept
	L04AB02	Infliximab
	L04AB04	Adalimumab
	L04AB05	Certolizumabpegol
	L04AB06	Golimumab
	L04AC03	Anakinra
	L04AC05	Ustekinumab
	L04AC07	Tocilizumab
	L04AC10	Sekukinumab
	L01XC02	Rituximab
	Non-biologic Systemic drugs	L04AX01
L01BA01		Metotrexat
L04AX03		Metotrexat
L01BB03		Tioguanin
L04AD01		Ciklosporin
D05BB02		Acitretin
D05AX01		Fumaric acid
D05BA02		Metoxsalen (psoralen med PUVA)
L04AA32		Apremilast
L04AA13		Leflunomid
A07EC01		Sulfasalazine
M01CB01		Natriumaurotiomalat
M01CB03		Auranofin
P01BA01		Chloroquine
Topical agent with vitamin D		D05AX02
	D05AX52	Calcipotriol, combinations
Dermatological corticosteroids	D07AA02	Hydrocortisone
	D07AB01	Clobetasone (group II)

D07AB02	Hydrocortisone butyrate
D07AC01	Betamethasone (group III)
D07AC13	Mometasone furoate
D07AC17	Fluticasone
D07AD01	Clobetasone (group IV)
D07XB02	Triamcinolone
D07XC01	Betamethasone
D07XC03	Diflucortolone

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Emollients

D02AB	Zinc products
D02AE01	Carbamide
D02AF	Salicylic acid preparations
D02AX	Other emollients and protectives
D05AA	Tars
D05AC01	Dithranol
D05	Antipsoriatics (not specified)

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**Table SII.** Mean annual direct costs over different cost components for patients with PPP compared to population-based and psoriasis vulgaris matched controls, respectively. All costs are for 2015 and in Euro (rounded to whole Euros).

Costs in 2015	PPP patients, n=14 715		Population-based controls <sup>a</sup> , n=67 725		P- value <sup>b</sup>	PV controls <sup>c</sup> , n=41 933		P- value <sup>b</sup>
	Mean cost (95% CI)		Mean cost (95% CI)			Mean cost (95% CI)		
<b>All-cause physician visits</b>	846	(819-873)	561	(549-572)	<0.001	878	(860-897)	0.069
<i>PPP-specific physician visits</i>	<b>60</b>	<i>(57-63)</i>	<i>NA</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	
<b>All-cause inpatient stays</b>	1 253	(1 167-1 339)	750	(722-779)	<0.001	1 124	(1 079-1 169)	0.006
<i>PPP-specific inpatient stay</i>	<b>32</b>	<i>(23-40)</i>	<i>NA</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	
<b>All-cause drug treatment</b>	870	(826-914)	369	(354-384)	<0.001	919	(890-947)	0.082
<b><i>Psoriasis-related drugs<sup>d</sup></i></b>	<b>376</b>	<b>(347-406)</b>	37	(33-41)	<0.001	421	(403-439)	0.011
<i>Biologics</i>	313	<i>(284-342)</i>	31	<i>(26-35)</i>	<0.001	323	<i>(305-340)</i>	<i>0.574</i>
<i>Systemic non-biologics</i>	26	<i>(23-29)</i>	3	<i>(2-3)</i>	<0.001	27	<i>(25-29)</i>	<i>0.760</i>
<i>Topical agents with vitamin D</i>	12	<i>(11-13)</i>	<i>NA</i>	<i>NA</i>		38	<i>(37-39)</i>	<0.001
<i>Dermatological corticosteroids</i>	8	<i>(8-9)</i>	1	<i>(1-1)</i>	<0.001	14	<i>(14-14)</i>	<0.001
<i>Emollients</i>	16	<i>(16-17)</i>	2	<i>(2-2)</i>	<0.001	20	<i>(20-21)</i>	<0.001
<b><i>Non-psoriasis-related drugs</i></b>	494	<b>(461-526)</b>	334	<b>(320-433)</b>	0.100	497	<b>(475-435)</b>	0.870
<b>Total cost</b>	2 969	<b>(2 855-3 083)</b>	1 680	<b>(1 641-1 719)</b>	<0.001	2 921	<b>(2 857-2 985)</b>	0.458

PPP= palmoplantar pustulosis psoriasis (L40.3 as primary or secondary diagnosis); PV= psoriasis vulgaris (L40.0 or L40.9 as primary diagnosis); CI= confidence interval; N/A=not applicable. Bold figures=PPP-related costs

<sup>a</sup> Matched to PPP cases for year of birth, sex and residential area.

<sup>b</sup> PPP cases versus matched controls for all-cause utilisation

<sup>c</sup> Matched to PPP cases for year of birth, sex and index year

<sup>d</sup> For list of psoriasis-related drugs, see Table SI.

**Table SIII.** Characteristics of the PPP patient group without psoriasis vulgaris and matched psoriasis vulgaris controls which were included in the subgroup analyses.

<b>Characteristic</b>	<b>PPP patients without PV</b>	<b>PV controls<sup>a</sup></b>
<b>Index year (median, IQR)</b>	2009 (2007; 2013)	2009 (2007; 2013)
<b>Individuals, alive and in Sweden in 2015</b>	11 593	33 084
<b>Sex, n in 2015 (%)</b>		
Men	2 571 (22.2)	7 252 (21.9)
Women	9 022 (77.8)	25 832 (78.1)
<b>Age in 2015, mean (sd)</b>		
All	59.8 (14.9)	59.3 (14.5)
Men	57.2 (17.6)	57.2 (16.9)
Women	60.4 (13.9)	59.9 (13.7)

PPP= palmoplantar pustulosis psoriasis (L40.3 as primary or secondary diagnosis), PV= psoriasis vulgaris (L40.0 or L40.9 as primary diagnosis), IQR=interquartile range, sd=standard deviation.

<sup>a</sup> Matched for year of birth, sex and index year

**Table SIV.** Results from subgroup analyses. Physician visits and inpatient stays during 2015 for PPP patients without PV compared to matched psoriasis vulgaris controls.

Healthcare use in 2015	PPP patients without PV, N=11 593	PV controls <sup>a</sup> , N=33 084	P- value <sup>b</sup>	
	All-cause utilisation	PPP-specific utilisation <sup>c</sup>	All-cause utilisation	
<b>Physician visits</b>				
Persons with visits, n (%)	7 606 (65.6)	1 869 (16.1)	2 2941 (69.4)	<0.001
Visits for those with any visit, mean (sd)	4.1 (6.2)	1.7 (1.7)	4.4 (6.8)	0.003
Visits for those with any visit, median (Q1, Q3)	3 (1; 5)	1 (1; 2)	3 (1; 5)	0.052
<b>Inpatient stays</b>				
Persons with inpatient stays, n (%)	1 766 (15.2)	67 (0.6)	4865 (14.7)	0.169
LOS for those with inpatient stay, mean (sd)	11.7 (22.3)	8.2 (9.2)	11.4 (20.5)	0.680
LOS for those with inpatient stay, median (Q1, Q3)	5 (3; 12)	5 (3; 9)	5 (3; 12)	0.980

PPP= palmoplantar pustulosis psoriasis (L40.3 as primary or secondary diagnosis), PV= Psoriasis vulgaris (L40.0 or L40.9 as primary diagnosis), sd= standard deviation, Q1= first quartile, Q3= third quartile, LOS= length of stay (in days)

<sup>a</sup> Matched for year of birth, sex and index year

<sup>b</sup> GPP patients versus matched controls

**Table SV.** Results from subgroup analyses. Drug use during 2015 for patients with PPP without psoriasis vulgaris compared to psoriasis vulgaris controls.

<b>Drug use in 2015</b>	<b>PPP cases without PV, n=11 593</b>	<b>PV controls, n=33 084<sup>a</sup></b>	<b>P-value<sup>b</sup></b>
<b>All-cause drug treatment</b>			
Persons with any filled prescription, n (%)	10 543 (90.9)	30 857 (93.3)	<0.001
<b><i>Non-psoriasis-related drugs</i></b>			
Persons with any filled prescription, n (%)	10 351 (89.3)	29 720 (89.8)	0.097
<b><i>Psoriasis-related drugs<sup>c</sup></i></b>			
Persons with any filled prescription, n (%)	5 339 (46.1)	20 568 (62.2)	<0.001
Biologics	327 (2.8)	1 165 (3.5)	<0.001
Systemic non-biologics	1 112 (9.6)	4 326 (13.1)	<0.001
Topical agents with vitamin D	779 (6.7)	7 679 (23.2)	<0.001
Dermatological corticosteroids	3 430 (29.6)	13 235 (40.0)	<0.001
Emollients	2 984 (25.7)	10 800 (32.6)	<0.001

PPP= palmoplantar pustulosis psoriasis (L40.3 as primary or secondary diagnosis), PV= Psoriasis vulgaris (L40.0 or L40.9 as primary diagnosis)

<sup>a</sup> Matched for year of birth, sex and index year

<sup>b</sup> For list of psoriasis-related drugs, see Table SI

**Table SVI.** Results from subgroup analyses. Mean annual cost over different cost components for patients with PPP without psoriasis vulgaris compared to psoriasis vulgaris controls. All costs are for 2015 and in Euro (rounded to whole Euros).

Costs in 2015	PPP patients without PV, n=11 593		PV controls <sup>a</sup> , n=33 084		P-value <sup>b</sup>
	Mean cost (95% CI)		Mean cost (95% CI)		
<b>All-cause physician visits</b>	804	(771-835)	876	(856-897)	<0.001
<i>GPP-specific physician visits</i>	57	(53-60)	NA	NA	
<b>All-cause inpatient stays</b>	1 206	(1 109-1 302)	1 106	(1 057-1 130)	0.052
<i>GPP-specific inpatient stays</i>	23	(17-30)	NA	NA	
<b>All-cause drug treatment</b>	870	(826-914)	919	(890-947)	0.082
<b><i>Psoriasis-related drugs<sup>b</sup></i></b>	276	(248-304)	413	(393-433)	<0.001
<i>Biologics</i>	231	(204-259)	316	(296-335)	<0.001
<i>Systemic non-biologics</i>	18	(15-20)	26	(24-28)	<0.001
<i>Topical agents with vitamin D</i>	7	(6-8)	37	(36-39)	<0.001
<i>Dermatological corticosteroids</i>	7	(7-7)	14	(14-14)	<0.001
<i>Emollients</i>	13	(13-14)	20	(19-21)	<0.001
<b><i>Non-psoriasis-related drugs</i></b>	464	(430-499)	494	(469-519)	0.211
<b>Total cost</b>	2 750	(2 624-2 876)	2 890	(2 820-2 961)	0.050

PPP= palmoplantar pustulosis psoriasis (L40.3 as primary or secondary diagnosis); PV= Psoriasis vulgaris (L40.0 or L40.9 as primary diagnosis), CI= confidence interval, N/A= not applicable

<sup>a</sup> Matched for year of birth, sex and index year

<sup>b</sup> For list of psoriasis-related drugs, see Table SI.