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**Table SI. Comorbidities of vitiligo after systemic literature search and evaluation by a team of four specialists**

<b>Comorbidities</b>	<b>ICD-10-GM code</b>
<b>Skin comorbidities</b>	
Herpes virus infection	B00
Viral warts	B07
Onychomycosis	B35.1
Tinea pedis	B35.3
Tinea corporis	B35.4
Pityriasis versicolor	B36.0
Hemangioma	D18.0
Teleangiectasia	I78.1
Ulcer	K25, K26, K27, K28
Impetigo	L01
Infections	L02-L05, L08
Pyoderma	L08.0
Neurodermatitis	L20
Seborrheic eczema	L21
Allergic contact dermatitis	L23
Food allergies	L27.2
Pruritus	L29
Exsiccation dermatosis	L30
Intertriginous dermatitis	L30.4
Psoriasis	L40.0 – L40.4, L40.7, L40.8, L40.9
Psoriatic arthropathy	L40.5+
Psoriatic arthritis	L40.5, M09.0; M07.0-M07.3
Urticaria	L50
Diseases of the nails	L60
Alopecia areata (hair loss)	L63
Acne	L70
Rosacea	L71
Folliculitis	L73.9
Lupus erythematosus (non-syst.)	L93
Nevus flammeus	Q82.5
<b>No skin comorbidities</b>	
Certain infectious and parasitic diseases/viral hepatitis and Diseases of the digestive system/diseases of the liver"	B18, K73
HIV	B20 – B24
Malignant neoplasms	C00 – C97
Colorectal cancer	C18
Lung cancer	C34
Breast cancer	C50
Prostate cancer	C61
Malignant neoplasms of the thyroid and other endocrine glands	C73
Lymphoma	C81 – C86
Leukemia	C91 – C95
Angioedema	D84.1
Diseases of the thyroid gland	E01 - E07
Diabetes mellitus, type I	E10
Diabetes mellitus, type II, other	E11, E13, E14
Ovarian dysfunction	E28.2
Diseases of other endocrine glands	E31

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Obesity	E66
Hyperlipidemia	E78
Hypercholesterolemia	E78.0
Hyperuricemia	E79
Other metabolic disorders	E88
Dementia*	F00 – F03
Alcohol abuse*	F10
Smoking*	F17
Schizophrenia*	F20
Depression*	F32 – F33
Phobic disorders*	F40
Other anxiety disorders*	F41
Reactions to severe stress and adjustment disorders*	F43
Profound developmental disorders (autism) *	F84
ADHD*	F90, F98.8
Alzheimer's disease	G30
Multiple sclerosis	G35
Migraine*	G43
Insomnia*	G47
Sleep apnea	G47.3
Myasthenia gravis	G70
Chronic fatigue syndrome	G93.3
Keratitis	H16
Iridocyclitis	H20
Cataract	H25, H26
Uveitis	H44.1
Meniere's disease	H81.0
Hypertension	I10 – I13
Ischemic heart disease	I20 – I25
Acute myocardial infarction	I21
Recurrent myocardial infarction	I22
Heart failure	I50
Cerebrovascular diseases	I60 – I69
Stroke	I63
pAVK Peripheral arterial occlusive disease of the extremities	I70.2
Aortic aneurysm	I71
Thrombosis, phlebitis and thrombophlebitis	I80
Varices of the lower extremities	I83
Spider veins	I83.9
Rhinitis allergica	J30.1 – J30.4
Sinus infections	J32
Chronic diseases of the palatine and pharyngeal tonsils	J35
Other chronic obstructive pulmonary disease	J42
Chronic bronchitis	J42, J44
Other chronic obstructive pulmonary disease	J44
Bronchial asthma	J45, J46
Periodontitis	K05.2 – K05.6
Reflux	K21.9
Gastritis and duodenitis	K29
Crohn's disease	K50
ulcerative colitis	K51
Food allergies	K52.2
Cirrhosis of the liver	K74.-, K70.3
Non-alcoholic steatohepatitis	K75.8
Chronic pancreatitis	K86

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Rheumatoid arthritis	M05
Other chronic polyarthritis	M06
Osteoarthritis	M15 – M19
Systemic diseases of the connective tissue	M30 – M36
Systemic lupus erythematosus	M32
Systemic sclerosis	M34
Sicca syndrome (Sjögren's syndrome)	M35.0
Osteoporosis	M80, M81, M82
Renal insufficiency	N18 – N19
Abdominal pain*	R10
Nausea	R11
Fever of other and unknown cause	R50
Transaminase increase	R74.0
Food allergies	T78.0
Angioneurotic edema	T78.3

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\*Mental health comorbidities

**Table SII. Prevalences (n (%)) and relative risk (RR) for relevant comorbidity in insured persons with vitiligo (ICD-10-GM L80) compared to insured persons without vitiligo**

Comorbidity	vitiligo (N=4,631)		without vitiligo (N= 13,893)		vitiligo vs. without vitiligo	
	n (%)	Lower - upper 95% CI	n (%)	Lower - upper 95% CI	RR	Lower - upper 95% CI
Alopecia areata (hair loss)	69 (1.49)	1.14 - 1.84	29 (0.21)	0.13 - 0.28	7.14	4.63 - 11.00
Pityriasis versicolor	62 (1.34)	1.01 - 1.67	32 (0.23)	0.15 - 0.31	5.81	3.80 - 8.89
Impetigo	33 (0.71)	0.47 - 0.95	29 (0.21)	0.13 - 0.28	3.41	2.08 - 5.62
Tinea corporis	39 (0.84)	0.58 - 1.11	36 (0.26)	0.17 - 0.34	3.25	2.07 - 5.11
Systemic sclerosis	16 (0.35)	0.18 - 0.51	15 (0.11)	0.05 - 0.16	3.20	1.58 - 6.47
Diabetes mellitus, type I	196 (4.23)	3.65 - 4.81	194 (1.40)	1.20 - 1.59	3.03	2.49 - 3.69
Tinea pedis	63 (1.36)	1.03 - 1.69	64 (0.46)	0.35 - 0.57	2.95	2.09 - 4.18
Teleangiectasia	32 (0.69)	0.45 - 0.93	36 (0.26)	0.17 - 0.34	2.67	1.66 - 4.29
Seborrheic eczema	116 (2.50)	2.05 - 2.95	145 (1.04)	0.87 - 1.21	2.40	1.88 - 3.06
Pruritus	190 (4.10)	3.53 - 4.67	248 (1.79)	1.56 - 2.01	2.30	1.91 - 2.77
Psoriasis	328 (7.08)	6.34 - 7.82	431 (3.10)	2.81 - 3.39	2.28	1.99 - 2.63
Iridocyclitis	23 (0.50)	0.29 - 0.70	31 (0.22)	0.14 - 0.30	2.23	1.30 - 3.81
Neurodermatitis	351 (7.58)	6.82 - 8.34	485 (3.49)	3.19 - 3.80	2.17	1.90 - 2.48
Psoriatic arthritis	48 (1.04)	0.74 - 1.33	67 (0.48)	0.37 - 0.60	2.15	1.49 - 3.11
Urticaria	97 (2.09)	1.68 - 2.51	136 (0.98)	0.82 - 1.14	2.14	1.65 - 2.77
Folliculitis	31 (0.67)	0.43 - 0.90	44 (0.32)	0.22 - 0.41	2.11	1.34 - 3.34
Profound developmental disorders	16 (0.35)	0.18 - 0.51	23 (0.17)	0.10 - 0.23	2.09	1.10 - 3.95
Malignant neopl. of the thyroid	17 (0.37)	0.19 - 0.54	25 (0.18)	0.11 - 0.25	2.04	1.10 - 3.77
Psoriatic arthropathy	42 (0.91)	0.63 - 1.18	63 (0.45)	0.34 - 0.57	2.00	1.36 - 2.95
Viral warts	161 (3.48)	2.95 - 4.00	243 (1.75)	1.53 - 1.97	1.99	1.63 - 2.42
Diseases of other endocrine glands	28 (0.60)	0.38 - 0.83	2 (0.01)	0.00 - 0.03	42.00	10.01 - 176.24
Onychomycosis	189 (4.08)	3.51 - 4.65	286 (2.06)	1.82 - 2.29	1.98	1.65 - 2.38
Exsiccation dermatosis	666 (14.38)	13.37 - 15.39	1015 (7.31)	6.87 - 7.74	1.97	1.80 - 2.16
Diseases of the nails	102 (2.20)	1.78 - 2.63	156 (1.12)	0.95 - 1.30	1.96	1.53 - 2.51
Hemangioma	163 (3.52)	2.99 - 4.05	254 (1.83)	1.61 - 2.05	1.93	1.59 - 2.34
Meniere's disease	26 (0.56)	0.35 - 0.78	41 (0.30)	0.20 - 0.39	1.90	1.17 - 3.11
Crohn's disease	40 (0.86)	0.60 - 1.13	65 (0.47)	0.35 - 0.58	1.85	1.25 - 2.73
Phobic disorders	95 (2.05)	1.64 - 2.46	160 (1.15)	0.97 - 1.33	1.78	1.38 - 2.29
ulcerative colitis	52 (1.12)	0.82 - 1.43	88 (0.63)	0.50 - 0.77	1.77	1.26 - 2.49
Other chronic polyarthritis	192 (4.15)	3.57 - 4.72	330 (2.38)	2.12 - 2.63	1.75	1.47 - 2.08
Intertriginous dermatitis	70 (1.51)	1.16 - 1.86	121 (0.87)	0.72 - 1.03	1.74	1.30 - 2.33
Rosacea	197 (4.25)	3.67 - 4.84	341 (2.45)	2.20 - 2.71	1.73	1.46 - 2.06
Diseases of the thyroid gland	1935 (41.78)	40.36 - 43.20	3381 (24.34)	23.62 - 25.05	1.72	1.64 - 1.80
Sinus infections	197 (4.25)	3.67 - 4.84	345 (2.48)	2.22 - 2.74	1.71	1.44 - 2.03

Rheumatoid arthritis	54 (1.17)	0.86 - 1.48	96 (0.69)	0.55 - 0.83	1.69	1.21 - 2.35
Systemic diseases of the connective tissue	230 (4.97)	4.34 - 5.59	415 (2.99)	2.70 - 3.27	1.66	1.42 - 1.95
Reflux	246 (5.31)	4.67 - 5.96	460 (3.31)	3.01 - 3.61	1.60	1.38 - 1.87
Chronic pancreatitis	77 (1.66)	1.29 - 2.03	144 (1.04)	0.87 - 1.20	1.60	1.22 - 2.11
Herpes virus infection	59 (1.27)	0.95 - 1.60	114 (0.82)	0.67 - 0.97	1.55	1.14 - 2.12
Allergic contact dermatitis	109 (2.35)	1.92 - 2.79	223 (1.61)	1.40 - 1.81	1.47	1.17 - 1.84
ADHD	47 (1.01)	0.73 - 1.30	97 (0.70)	0.56 - 0.84	1.45	1.03 - 2.06
Migraine	323 (6.97)	6.24 - 7.71	673 (4.84)	4.49 - 5.20	1.44	1.27 - 1.64
Sicca syndrome (Sjögren's syndrome)	96 (2.07)	1.66 - 2.48	203 (1.46)	1.26 - 1.66	1.42	1.12 - 1.80
Abdominal pain	610 (13.17)	12.20 - 14.15	1296 (9.33)	8.84 - 9.81	1.41	1.29 - 1.55
Osteoarthritis	1426 (30.79)	29.46 - 32.12	3062 (22.04)	21.35 - 22.73	1.40	1.32 - 1.47
Spider veins	592 (12.78)	11.82 - 13.75	1280 (9.21)	8.73 - 9.69	1.39	1.27 - 1.52
Varices of the lower extremities	654 (14.12)	13.12 - 15.13	1426 (10.26)	9.76 - 10.77	1.38	1.26 - 1.50
Acne	112 (2.42)	1.98 - 2.86	245 (1.76)	1.54 - 1.98	1.37	1.10 - 1.71
Gastritis and duodenitis	535 (11.55)	10.63 - 12.47	1172 (8.44)	7.97 - 8.90	1.37	1.24 - 1.51
Reactions to severe stress and adjustment disorders	512 (11.06)	10.15 - 11.96	1122 (8.08)	7.62 - 8.53	1.37	1.24 - 1.51
Other metabolic disorders	134 (2.89)	2.41 - 3.38	297 (2.14)	1.90 - 2.38	1.35	1.11 - 1.66
Osteoporosis	448 (9.67)	8.82 - 10.53	995 (7.16)	6.73 - 7.59	1.35	1.21 - 1.50
Cataract	877 (18.94)	17.81 - 20.07	1974 (14.21)	13.63 - 14.79	1.33	1.24 - 1.43
Rhinitis allergica	523 (11.29)	10.38 - 12.21	1179 (8.49)	8.02 - 8.95	1.33	1.21 - 1.47
Breast cancer	161 (3.48)	2.95 - 4.00	363 (2.61)	2.35 - 2.88	1.33	1.11 - 1.60
Other anxiety disorders	447 (9.65)	8.80 - 10.50	1015 (7.31)	6.87 - 7.74	1.32	1.19 - 1.47
Bronchial asthma	506 (10.93)	10.03 - 11.82	1158 (8.34)	7.88 - 8.79	1.31	1.19 - 1.45
Hypercholesterolemia	989 (21.36)	20.18 - 22.54	2319 (16.69)	16.07 - 17.31	1.28	1.20 - 1.37
Sleep apnea	201 (4.34)	3.75 - 4.93	474 (3.41)	3.11 - 3.71	1.27	1.08 - 1.50
Insomnia	500 (10.80)	9.90 - 11.69	1187 (8.54)	8.08 - 9.01	1.26	1.14 - 1.40
Infections	160 (3.45)	2.93 - 3.98	386 (2.78)	2.51 - 3.05	1.24	1.04 - 1.49
Depression	1000 (21.59)	20.41 - 22.78	2435 (17.53)	16.89 - 18.16	1.23	1.15 - 1.32
Hyperlipidemia	1591 (34.36)	32.99 - 35.72	3889 (27.99)	27.25 - 28.74	1.23	1.17 - 1.29
Malignant neoplasms	678 (14.64)	13.62 - 15.66	1670 (12.02)	11.48 - 12.56	1.22	1.12 - 1.32
Hyperuricemia	368 (7.95)	7.17 - 8.73	947 (6.82)	6.40 - 7.24	1.17	1.04 - 1.31
Diabetes mellitus, type II, other	734 (15.85)	14.80 - 16.90	1918 (13.81)	13.23 - 14.38	1.15	1.06 - 1.24
Obesity	696 (15.03)	14.00 - 16.06	1829 (13.16)	12.60 - 13.73	1.14	1.05 - 1.24
Ischemic heart disease	538 (11.62)	10.69 - 12.54	1463 (10.53)	10.02 - 11.04	1.10	1.01 - 1.21
Hypertension	2148 (46.38)	44.95 - 47.82	6023 (43.35)	42.53 - 44.18	1.07	1.03 - 1.11
Dementia	121 (2.61)	2.15 - 3.07	466 (3.35)	3.05 - 3.65	0.78	0.64 - 0.95
Stroke	53 (1.14)	0.84 - 1.45	222 (1.60)	1.39 - 1.81	0.72	0.53 - 0.96
Fever of unknown cause	48 (1.04)	0.74 - 1.33	206 (1.48)	1.28 - 1.68	0.70	0.51 - 0.96

Schizophrenia	22 (0.48)	0.28 - 0.67	116 (0.83)	0.68 - 0.99	0.57	0.36 - 0.90
Angioneurotic edema	18 (0.39)	0.21 - 0.57	33 (0.24)	0.16 - 0.32	1.64	0.92 - 2.90
Nausea	150 (3.24)	2.73 - 3.75	379 (2.73)	2.46 - 3.00	1.19	0.99 - 1.43
Food allergies	1 (0.02)	0.00 - 0.06	1 (0.01)	0.00 - 0.02	3.00	0.19 - 47.95
Uveitis	1 (0.02)	0.00 - 0.06	1 (0.01)	0.00 - 0.02	3.00	0.19 - 47.95
Food allergies	6 (0.13)	0.03 - 0.23	7 (0.05)	0.01 - 0.09	2.57	0.86 - 7.65
Angioedema	2 (0.04)	0.00 - 0.10	3 (0.02)	0.00 - 0.05	2.00	0.33 - 11.97
Ovarian dysfunction	12 (0.26)	0.11 - 0.41	20 (0.14)	0.08 - 0.21	1.80	0.88 - 3.68
Lupus erythematosus (non-syst.)	17 (0.37)	0.19 - 0.54	29 (0.21)	0.13 - 0.28	1.76	0.97 - 3.20
Chronic fatigue syndrome	27 (0.58)	0.36 - 0.80	51 (0.37)	0.27 - 0.47	1.59	1.00 - 2.53
Systemic lupus erythematosus	8 (0.17)	0.05 - 0.29	16 (0.12)	0.06 - 0.17	1.50	0.64 - 3.50
Pyoderma	12 (0.26)	0.11 - 0.41	24 (0.17)	0.10 - 0.24	1.50	0.75 - 3.00
Myasthenia gravis	8 (0.17)	0.05 - 0.29	16 (0.12)	0.06 - 0.17	1.50	0.64 - 3.50
HIV	9 (0.19)	0.07 - 0.32	19 (0.14)	0.08 - 0.20	1.42	0.64 - 3.14
Diseases of the liver"	27 (0.58)	0.36 - 0.80	58 (0.42)	0.31 - 0.52	1.40	0.89 - 2.20
Periodontitis	5 (0.11)	0.01 - 0.20	11 (0.08)	0.03 - 0.13	1.36	0.47 - 3.92
Transaminase increase	47 (1.01)	0.73 - 1.30	110 (0.79)	0.64 - 0.94	1.28	0.91 - 1.80
Thrombosis, phlebitis and thrombophlebitis	83 (1.79)	1.41 - 2.17	197 (1.42)	1.22 - 1.61	1.26	0.98 - 1.63
Keratitis	43 (0.93)	0.65 - 1.20	106 (0.76)	0.62 - 0.91	1.22	0.86 - 1.73
Other COPD	59 (1.27)	0.95 - 1.60	148 (1.07)	0.89 - 1.24	1.20	0.89 - 1.61
Nevus flammeus	10 (0.22)	0.08 - 0.35	26 (0.19)	0.12 - 0.26	1.15	0.56 - 2.39
Leukemia	21 (0.45)	0.26 - 0.65	55 (0.40)	0.29 - 0.50	1.15	0.69 - 1.89
Prostate cancer	79 (1.71)	1.33 - 2.08	207 (1.49)	1.29 - 1.69	1.14	0.89 - 1.48
Non-alcoholic steatohepatitis	11 (0.24)	0.10 - 0.38	29 (0.21)	0.13 - 0.28	1.14	0.57 - 2.28
Aortic aneurysm	74 (1.60)	1.24 - 1.96	200 (1.44)	1.24 - 1.64	1.11	0.85 - 1.45
Renal insufficiency	417 (9.00)	8.18 - 9.83	1137 (8.18)	7.73 - 8.64	1.10	0.99 - 1.22
Lymphoma	28 (0.60)	0.38 - 0.83	77 (0.55)	0.43 - 0.68	1.09	0.71 - 1.68
Ulcer	42 (0.91)	0.63 - 1.18	117 (0.84)	0.69 - 0.99	1.08	0.76 - 1.53
Colorectal cancer	41 (0.89)	0.62 - 1.16	117 (0.84)	0.69 - 0.99	1.05	0.74 - 1.50
Acute myocardial infarction	56 (1.21)	0.89 - 1.52	160 (1.15)	0.97 - 1.33	1.05	0.78 - 1.42
pAVK Peripheral arterial occlusive disease of the extremities	127 (2.74)	2.27 - 3.21	369 (2.66)	2.39 - 2.92	1.03	0.85 - 1.26
Multiple sclerosis	24 (0.52)	0.31 - 0.73	71 (0.51)	0.39 - 0.63	1.01	0.64 - 1.61
Heart failure	289 (6.24)	5.54 - 6.94	880 (6.33)	5.93 - 6.74	0.99	0.87 - 1.12
Smoking	293 (6.33)	5.63 - 7.03	901 (6.49)	6.08 - 6.89	0.98	0.86 - 1.11
Cerebrovascular diseases	436 (9.41)	8.57 - 10.26	1356 (9.76)	9.27 - 10.25	0.96	0.87 - 1.07
Chronic bronchitis	298 (6.43)	5.73 - 7.14	979 (7.05)	6.62 - 7.47	0.91	0.81 - 1.04
Alzheimer's disease	43 (0.93)	0.65 - 1.20	143 (1.03)	0.86 - 1.20	0.90	0.64 - 1.27
Other chronic obstructive pulmonary disease	258 (5.57)	4.91 - 6.23	871 (6.27)	5.87 - 6.67	0.89	0.78 - 1.02

Food allergies	2 (0.04)	0.00 - 0.10	7 (0.05)	0.01 - 0.09	0.86	0.18 - 4.12
Lung cancer	13 (0.28)	0.13 - 0.43	47 (0.34)	0.24 - 0.43	0.83	0.45 - 1.53
Alcohol abuse	73 (1.58)	1.22 - 1.94	279 (2.01)	1.77 - 2.24	0.78	0.61 - 1.01
Recurrent myocardial infarction	0 (0.00)	0.00 - 0.00	1 (0.01)	0.00 - 0.02	0.00	0.00 - 0.00
Cirrhosis of the liver	30 (0.65)	0.42 - 0.88	98 (0.71)	0.57 - 0.84	0.92	0.61 - 1.38
Alopecia areata (hair loss)	69 (1.49)	1.14 - 1.84	29 (0.21)	0.13 - 0.28	7.14	4.63 - 11.00
Pityriasis versicolor	62 (1.34)	1.01 - 1.67	32 (0.23)	0.15 - 0.31	5.81	3.80 - 8.89
Impetigo	33 (0.71)	0.47 - 0.95	29 (0.21)	0.13 - 0.28	3.41	2.08 - 5.62
Tinea corporis	39 (0.84)	0.58 - 1.11	36 (0.26)	0.17 - 0.34	3.25	2.07 - 5.11
Systemic sclerosis	16 (0.35)	0.18 - 0.51	15 (0.11)	0.05 - 0.16	3.20	1.58 - 6.47
Diabetes mellitus, type I	196 (4.23)	3.65 - 4.81	194 (1.40)	1.20 - 1.59	3.03	2.49 - 3.69
Tinea pedis	63 (1.36)	1.03 - 1.69	64 (0.46)	0.35 - 0.57	2.95	2.09 - 4.18
Teleangiectasia	32 (0.69)	0.45 - 0.93	36 (0.26)	0.17 - 0.34	2.67	1.66 - 4.29
Seborrheic eczema	116 (2.50)	2.05 - 2.95	145 (1.04)	0.87 - 1.21	2.40	1.88 - 3.06
Pruritus	190 (4.10)	3.53 - 4.67	248 (1.79)	1.56 - 2.01	2.30	1.91 - 2.77
Psoriasis	328 (7.08)	6.34 - 7.82	431 (3.10)	2.81 - 3.39	2.28	1.99 - 2.63
Iridocyclitis	23 (0.50)	0.29 - 0.70	31 (0.22)	0.14 - 0.30	2.23	1.30 - 3.81
Neurodermatitis	351 (7.58)	6.82 - 8.34	485 (3.49)	3.19 - 3.80	2.17	1.90 - 2.48
Psoriatic arthritis	48 (1.04)	0.74 - 1.33	67 (0.48)	0.37 - 0.60	2.15	1.49 - 3.11
Urticaria	97 (2.09)	1.68 - 2.51	136 (0.98)	0.82 - 1.14	2.14	1.65 - 2.77
Folliculitis	31 (0.67)	0.43 - 0.90	44 (0.32)	0.22 - 0.41	2.11	1.34 - 3.34
Profound developmental disorders	16 (0.35)	0.18 - 0.51	23 (0.17)	0.10 - 0.23	2.09	1.10 - 3.95
Malignant neopl. of the thyroid	17 (0.37)	0.19 - 0.54	25 (0.18)	0.11 - 0.25	2.04	1.10 - 3.77
Psoriatic arthropathy	42 (0.91)	0.63 - 1.18	63 (0.45)	0.34 - 0.57	2.00	1.36 - 2.95
Viral warts	161 (3.48)	2.95 - 4.00	243 (1.75)	1.53 - 1.97	1.99	1.63 - 2.42
Diseases of other endocrine glands	28 (0.60)	0.38 - 0.83	2 (0.01)	0.00 - 0.03	42.00	10.01 - 176.24
Onychomycosis	189 (4.08)	3.51 - 4.65	286 (2.06)	1.82 - 2.29	1.98	1.65 - 2.38

**Table SIII. Prevalences (n (%)) and relative risk (RR) for relevant comorbidity in insured persons with vitiligo (ICD-10-GM L80) compared to insured persons with atopic dermatitis (ICD-10-GM L20)**

Comorbidity	vitiligo (N=4,631)		atopic dermatitis (N= 13,893)		vitiligo vs. atopic dermatitis	
	n (%)	Lower - upper 95% CI	n (%)	Lower - upper 95% CI	RR	Lower - upper 95% CI
Systemic sclerosis	16 (0.35)	0.18 - 0.51	16 (0.12)	0.06 - 0.17	3.00	1.50 - 4.90
Pityriasis versicolor	62 (1.34)	1.01 - 1.67	70 (0.50)	0.39 - 0.62	2.66	1.89 - 3.73
Diabetes mellitus, type I	196 (4.23)	3.65 - 4.81	235 (1.69)	1.48 - 1.91	2.50	2.08 - 3.02
Alopecia areata (hair loss)	69 (1.49)	1.14 - 1.84	113 (0.81)	0.66 - 0.96	1.83	1.36 - 2.47
Diseases of the thyroid gland	1935 (41.78)	40.36 - 43.20	4038 (29.06)	28.31 - 29.82	1.44	1.38 - 1.50
Other chronic polyarthritis	192 (4.15)	3.57 - 4.72	416 (2.99)	2.71 - 3.28	1.38	1.17 - 1.64
Hypercholesterolemia	989 (21.36)	20.18 - 22.54	2725 (19.61)	18.95 - 20.27	1.09	1.02 - 1.16
Cataract	877 (18.94)	17.81 - 20.07	2429 (17.48)	16.85 - 18.12	1.08	1.01 - 1.16
Diseases of other endocrine glands	28 (0.60)	0.38 - 0.83	3 (0.02)	0.00 - 0.05	28.00	8.52 - 92.06
Cerebrovascular diseases	436 (9.41)	8.57 - 10.26	1490 (10.72)	10.21 - 11.24	0.88	0.79 - 0.97
Smoking	293 (6.33)	5.63 - 7.03	1098 (7.90)	7.45 - 8.35	0.80	0.71 - 0.91
Psoriasis	328 (7.08)	6.34 - 7.82	1254 (9.03)	8.55 - 9.50	0.78	0.70 - 0.88
Acne	112 (2.42)	1.98 - 2.86	434 (3.12)	2.83 - 3.41	0.77	0.63 - 0.95
Tinea pedis	63 (1.36)	1.03 - 1.69	259 (1.86)	1.64 - 2.09	0.73	0.56 - 0.96
Infections	160 (3.45)	2.93 - 3.98	672 (4.84)	4.48 - 5.19	0.71	0.60 - 0.85
Herpes virus infection	59 (1.27)	0.95 - 1.60	248 (1.79)	1.56 - 2.01	0.71	0.54 - 0.95
Unspecified chronic bronchitis	59 (1.27)	0.95 - 1.60	253 (1.82)	1.60 - 2.04	0.70	0.53 - 0.93
Intertriginous dermatitis	70 (1.51)	1.16 - 1.86	313 (2.25)	2.01 - 2.50	0.67	0.52 - 0.87
Alcohol abuse	73 (1.58)	1.22 - 1.94	327 (2.35)	2.10 - 2.61	0.67	0.52 - 0.86
Impetigo	33 (0.71)	0.47 - 0.95	149 (1.07)	0.90 - 1.24	0.66	0.46 - 0.97
Chronic bronchitis	298 (6.43)	5.73 - 7.14	1366 (9.83)	9.34 - 10.33	0.65	0.58 - 0.74
Other COPD	258 (5.57)	4.91 - 6.23	1190 (8.57)	8.10 - 9.03	0.65	0.57 - 0.74
Rosacea	197 (4.25)	3.67 - 4.84	926 (6.67)	6.25 - 7.08	0.64	0.55 - 0.74
Urticaria	97 (2.09)	1.68 - 2.51	457 (3.29)	2.99 - 3.59	0.64	0.51 - 0.79
Pruritus	190 (4.10)	3.53 - 4.67	908 (6.54)	6.12 - 6.95	0.63	0.54 - 0.73
Seborrheic eczema	116 (2.50)	2.05 - 2.95	572 (4.12)	3.79 - 4.45	0.61	0.50 - 0.74
Folliculitis	31 (0.67)	0.43 - 0.90	153 (1.10)	0.93 - 1.27	0.61	0.41 - 0.89
Keratitis	43 (0.93)	0.65 - 1.20	216 (1.55)	1.35 - 1.76	0.60	0.43 - 0.83
Exsiccation dermatosis	666 (14.38)	13.37 - 15.39	3374 (24.29)	23.57 - 25.00	0.59	0.55 - 0.64
Tinea corporis	39 (0.84)	0.58 - 1.11	211 (1.52)	1.32 - 1.72	0.55	0.39 - 0.78
Bronchial asthma	506 (10.93)	10.03 - 11.82	2795 (20.12)	19.45 - 20.78	0.54	0.50 - 0.59
Rhinitis allergica	523 (11.29)	10.38 - 12.21	3049 (21.95)	21.26 - 22.63	0.51	0.47 - 0.56
Allergic contact dermatitis	109 (2.35)	1.92 - 2.79	824 (5.93)	5.54 - 6.32	0.40	0.33 - 0.48
Food allergies	6 (0.13)	0.03 - 0.23	65 (0.47)	0.35 - 0.58	0.28	0.12 - 0.64

Recurrent myocardial infarction	0 (0.00)	0.00 - 0.00	1 (0.01)	0.00 - 0.02	0.00	0.00 - 0.00
Angioedema	2 (0.04)	0.00 - 0.10	1 (0.01)	0.00 - 0.02	6.00	0.54 - 66.15
Malignant neoplasms of the thyroid and other endocrine glands	17 (0.37)	0.19 - 0.54	29 (0.21)	0.13 - 0.28	1.76	0.97 - 3.20
Profound developmental disorders (autism)	16 (0.35)	0.18 - 0.51	28 (0.20)	0.13 - 0.28	1.71	0.93 - 3.17
Uveitis	1 (0.02)	0.00 - 0.06	2 (0.01)	0.00 - 0.03	1.50	0.14 - 16.54
Non-alcoholic steatohepatitis	11 (0.24)	0.10 - 0.38	23 (0.17)	0.10 - 0.23	1.43	0.70 - 2.94
Diseases of the liver"	27 (0.58)	0.36 - 0.80	58 (0.42)	0.31 - 0.52	1.40	0.89 - 2.20
Rheumatoid arthritis	54 (1.17)	0.86 - 1.48	124 (0.89)	0.74 - 1.05	1.31	0.95 - 1.80
Colorectal cancer	41 (0.89)	0.62 - 1.16	95 (0.68)	0.55 - 0.82	1.29	0.90 - 1.86
Ovarian dysfunction	12 (0.26)	0.11 - 0.41	28 (0.20)	0.13 - 0.28	1.29	0.65 - 2.53
Leukemia	21 (0.45)	0.26 - 0.65	49 (0.35)	0.25 - 0.45	1.29	0.77 - 2.14
Myasthenia gravis	8 (0.17)	0.05 - 0.29	19 (0.14)	0.08 - 0.20	1.26	0.55 - 2.88
Meniere's disease	26 (0.56)	0.35 - 0.78	62 (0.45)	0.34 - 0.56	1.26	0.80 - 1.99
Periodontitis	5 (0.11)	0.01 - 0.20	12 (0.09)	0.04 - 0.14	1.25	0.44 - 3.55
Lupus erythematosus (non-syst.)	17 (0.37)	0.19 - 0.54	42 (0.30)	0.21 - 0.39	1.21	0.69 - 2.13
Iridocyclitis	23 (0.50)	0.29 - 0.70	59 (0.42)	0.32 - 0.53	1.17	0.72 - 1.89
ulcerative colitis	52 (1.12)	0.82 - 1.43	134 (0.96)	0.80 - 1.13	1.16	0.85 - 1.60
Systemic diseases of the connective tissue	230 (4.97)	4.34 - 5.59	597 (4.30)	3.96 - 4.63	1.16	0.99 - 1.34
Systemic lupus erythematosus	8 (0.17)	0.05 - 0.29	21 (0.15)	0.09 - 0.22	1.14	0.51 - 2.58
Hemangioma	163 (3.52)	2.99 - 4.05	428 (3.08)	2.79 - 3.37	1.14	0.96 - 1.36
Breast cancer	161 (3.48)	2.95 - 4.00	424 (3.05)	2.77 - 3.34	1.14	0.95 - 1.36
Chronic pancreatitis	77 (1.66)	1.29 - 2.03	207 (1.49)	1.29 - 1.69	1.12	0.86 - 1.45
Acute myocardial infarction	56 (1.21)	0.89 - 1.52	155 (1.12)	0.94 - 1.29	1.08	0.80 - 1.47
Chronic fatigue syndrome	27 (0.58)	0.36 - 0.80	75 (0.54)	0.42 - 0.66	1.08	0.70 - 1.67
Crohn's disease	40 (0.86)	0.60 - 1.13	112 (0.81)	0.66 - 0.95	1.07	0.75 - 1.53
Gastritis and duodenitis	535 (11.55)	10.63 - 12.47	1504 (10.83)	10.31 - 11.34	1.07	0.97 - 1.17
Prostate cancer	79 (1.71)	1.33 - 2.08	223 (1.61)	1.40 - 1.81	1.06	0.82 - 1.37
Diabetes mellitus, type II, other	734 (15.85)	14.80 - 16.90	2073 (14.92)	14.33 - 15.51	1.06	0.98 - 1.15
Abdominal pain	610 (13.17)	12.20 - 14.15	1725 (12.42)	11.87 - 12.96	1.06	0.97 - 1.16
Angioneurotic edema	18 (0.39)	0.21 - 0.57	51 (0.37)	0.27 - 0.47	1.06	0.62 - 1.81
Onychomycosis	189 (4.08)	3.51 - 4.65	537 (3.87)	3.54 - 4.19	1.06	0.90 - 1.24
Sinus infections	197 (4.25)	3.67 - 4.84	565 (4.07)	3.74 - 4.40	1.05	0.89 - 1.23
Osteoarthritis	1426 (30.79)	29.46 - 32.12	4115 (29.62)	28.86 - 30.38	1.04	0.99 - 1.09
Reflux	246 (5.31)	4.67 - 5.96	710 (5.11)	4.74 - 5.48	1.04	0.90 - 1.20
Viral warts	161 (3.48)	2.95 - 4.00	465 (3.35)	3.05 - 3.65	1.04	0.87 - 1.24
Osteoporosis	448 (9.67)	8.82 - 10.53	1295 (9.32)	8.84 - 9.80	1.04	0.94 - 1.15

Hyperlipidemia	1591 (34.36)	32.99 - 35.72	4629 (33.32)	32.54 - 34.10	1.03	0.98 - 1.08
Psoriatic arthritis	48 (1.04)	0.74 - 1.33	140 (1.01)	0.84 - 1.17	1.03	0.74 - 1.43
Malignant neoplasms	678 (14.64)	13.62 - 15.66	1978 (14.24)	13.66 - 14.82	1.03	0.95 - 1.11
Spider veins	592 (12.78)	11.82 - 13.75	1742 (12.54)	11.99 - 13.09	1.02	0.93 - 1.11
Transaminase increase	47 (1.01)	0.73 - 1.30	139 (1.00)	0.84 - 1.17	1.01	0.73 - 1.41
Teleangiectasia	32 (0.69)	0.45 - 0.93	95 (0.68)	0.55 - 0.82	1.01	0.68 - 1.51
Ischemic heart disease	538 (11.62)	10.69 - 12.54	1598 (11.50)	10.97 - 12.03	1.01	0.92 - 1.11
Thrombosis, phlebitis and thrombophlebitis	83 (1.79)	1.41 - 2.17	251 (1.81)	1.59 - 2.03	0.99	0.78 - 1.27
Phobic disorders	95 (2.05)	1.64 - 2.46	288 (2.07)	1.84 - 2.31	0.99	0.79 - 1.24
Renal insufficiency	417 (9.00)	8.18 - 9.83	1268 (9.13)	8.65 - 9.61	0.99	0.89 - 1.10
Varices of the lower extremities	654 (14.12)	13.12 - 15.13	1991 (14.33)	13.75 - 14.91	0.99	0.91 - 1.07
Hypertension	2148 (46.38)	44.95 - 47.82	6606 (47.55)	46.72 - 48.38	0.98	0.94 - 1.01
Aortic aneurysm	74 (1.60)	1.24 - 1.96	228 (1.64)	1.43 - 1.85	0.97	0.75 - 1.26
Nausea	150 (3.24)	2.73 - 3.75	463 (3.33)	3.03 - 3.63	0.97	0.81 - 1.16
Obesity	696 (15.03)	14.00 - 16.06	2153 (15.50)	14.90 - 16.10	0.97	0.90 - 1.05
Psoriatic arthropathy	42 (0.91)	0.63 - 1.18	130 (0.94)	0.78 - 1.10	0.97	0.69 - 1.37
Ulcer	42 (0.91)	0.63 - 1.18	130 (0.94)	0.78 - 1.10	0.97	0.69 - 1.37
Other metabolic disorders	134 (2.89)	2.41 - 3.38	421 (3.03)	2.75 - 3.32	0.95	0.79 - 1.16
Lymphoma	28 (0.60)	0.38 - 0.83	88 (0.63)	0.50 - 0.77	0.95	0.62 - 1.46
Depression	1000 (21.59)	20.41 - 22.78	3143 (22.62)	21.93 - 23.32	0.95	0.90 - 1.02
pAVK Peripheral arterial occlusive disease of the extremities	127 (2.74)	2.27 - 3.21	400 (2.88)	2.60 - 3.16	0.95	0.78 - 1.16
Cirrhosis of the liver	30 (0.65)	0.42 - 0.88	95 (0.68)	0.55 - 0.82	0.95	0.63 - 1.43
Insomnia	500 (10.80)	9.90 - 11.69	1593 (11.47)	10.94 - 12.00	0.94	0.86 - 1.04
Alzheimer's disease	43 (0.93)	0.65 - 1.20	137 (0.99)	0.82 - 1.15	0.94	0.67 - 1.32
Other anxiety disorders	447 (9.65)	8.80 - 10.50	1425 (10.26)	9.75 - 10.76	0.94	0.85 - 1.04
Hyperuricemia	368 (7.95)	7.17 - 8.73	1186 (8.54)	8.07 - 9.00	0.93	0.83 - 1.04
Migraine	323 (6.97)	6.24 - 7.71	1054 (7.59)	7.15 - 8.03	0.92	0.82 - 1.04
Reactions to severe stress and adjustment disorders	512 (11.06)	10.15 - 11.96	1671 (12.03)	11.49 - 12.57	0.92	0.84 - 1.01
Sicca syndrome (Sjögren's syndrome)	96 (2.07)	1.66 - 2.48	318 (2.29)	2.04 - 2.54	0.91	0.72 - 1.14
Diseases of the nails	102 (2.20)	1.78 - 2.63	342 (2.46)	2.20 - 2.72	0.89	0.72 - 1.11
Sleep apnea	201 (4.34)	3.75 - 4.93	675 (4.86)	4.50 - 5.22	0.89	0.77 - 1.04
Heart failure	289 (6.24)	5.54 - 6.94	974 (7.01)	6.59 - 7.44	0.89	0.78 - 1.01
ADHD	47 (1.01)	0.73 - 1.30	162 (1.17)	0.99 - 1.34	0.87	0.63 - 1.20
Dementia	121 (2.61)	2.15 - 3.07	420 (3.02)	2.74 - 3.31	0.86	0.71 - 1.06
Lung cancer	13 (0.28)	0.13 - 0.43	46 (0.33)	0.24 - 0.43	0.85	0.46 - 1.57
HIV	9 (0.19)	0.07 - 0.32	32 (0.23)	0.15 - 0.31	0.84	0.40 - 1.77
Fever of unknown cause	48 (1.04)	0.74 - 1.33	189 (1.36)	1.17 - 1.55	0.76	0.56 - 1.04
Stroke	53 (1.14)	0.84 - 1.45	212 (1.53)	1.32 - 1.73	0.75	0.56 - 1.01

Schizophrenia	22 (0.48)	0.28 - 0.67	91 (0.66)	0.52 - 0.79	0.73	0.46 - 1.15
Multiple sclerosis	24 (0.52)	0.31 - 0.73	109 (0.78)	0.64 - 0.93	0.66	0.43 - 1.03
Pyoderma	12 (0.26)	0.11 - 0.41	55 (0.40)	0.29 - 0.50	0.65	0.35 - 1.22
Nevus flammeus	10 (0.22)	0.08 - 0.35	52 (0.37)	0.27 - 0.48	0.58	0.29 - 1.13
Food allergies	1 (0.02)	0.00 - 0.06	6 (0.04)	0.01 - 0.08	0.50	0.06 - 4.15
Allergic and alimentary gastroenteritis and colitis	2 (0.04)	0.00 - 0.10	22 (0.16)	0.09 - 0.22	0.27	0.06 - 1.16

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**Table SIV. Prevalences (n (%)) and relative risk (RR) for relevant comorbidity in insured persons with vitiligo (ICD-10-GM L80) compared to insured persons with psoriasis (ICD-10-GM L40)**

Comorbidity	vitiligo (N=4,610)		psoriasis (N= 13,889)		vitiligo vs. psoriasis	
	n (%)	Lower - upper 95% CI	n (%)	Lower - upper 95% CI	RR	Lower - upper 95% CI
Alopecia areata (hair loss)	69 (1.50)	1.15 - 1.85	60 (0.44)	0.33 - 0.55	3.39	2.40 - 4.78
Pityriasis versicolor	62 (1.34)	1.01 - 1.68	67 (0.49)	0.38 - 0.61	2.73	1.93 - 3.85
Mal. Neopl.: thyroid	17 (0.37)	0.19 - 0.54	24 (0.18)	0.11 - 0.25	2.09	1.12 - 3.88
Diabetes mellitus, type I	196 (4.25)	3.67 - 4.83	308 (2.27)	2.02 - 2.52	1.88	1.57 - 2.24
Hemangioma	163 (3.54)	3.00 - 4.07	352 (2.59)	2.32 - 2.86	1.36	1.14 - 1.64
Diseases: thyroid gland	1935 (41.97)	40.55 - 43.40	4266 (31.39)	30.61 - 32.17	1.34	1.28 - 1.39
Abdominal pain	610 (13.23)	12.25 - 14.21	1533 (11.28)	10.75 - 11.81	1.17	1.07 - 1.28
Cataract	877 (19.02)	17.89 - 20.16	2310 (17.00)	16.37 - 17.63	1.12	1.04 - 1.20
Diseases of other endocrine glands	28 (0.61)	0.38 - 0.83	5 (0.04)	0.00 - 0.07	16.5	6.38 - 42.72
Depression	1000 (21.69)	20.50 - 22.88	3174 (23.36)	22.65 - 24.07	0.93	0.87 - 0.99
Hypertension	2148 (46.59)	45.15 - 48.03	7188 (52.90)	52.06 - 53.73	0.88	0.85 - 0.91
Ischemic heart disease	538 (11.67)	10.74 - 12.60	1855 (13.65)	13.07 - 14.23	0.85	0.78 - 0.94
Cerebrovascular diseases	436 (9.46)	8.61 - 10.30	1540 (11.33)	10.80 - 11.87	0.83	0.75 - 0.92
Rosacea	196 (4.25)	3.67 - 4.83	697 (5.13)	4.76 - 5.50	0.83	0.71 - 0.97
Diabetes mellitus, type II, other	734 (15.92)	14.87 - 16.98	2616 (19.25)	18.59 - 19.91	0.83	0.77 - 0.89
Neurodermatitis	346 (7.51)	6.74 - 8.27	1275 (9.38)	8.89 - 9.87	0.80	0.71 - 0.90
Sleep apnea	201 (4.36)	3.77 - 4.95	751 (5.53)	5.14 - 5.91	0.79	0.68 - 0.92
Exsiccation dermatosis	663 (14.38)	13.37 - 15.39	2488 (18.31)	17.66 - 18.96	0.79	0.73 - 0.85
Hyperuricemia	368 (7.98)	7.20 - 8.77	1383 (10.18)	9.67 - 10.69	0.78	0.70 - 0.88
Heart failure	289 (6.27)	5.57 - 6.97	1123 (8.26)	7.80 - 8.73	0.76	0.67 - 0.86
Obesity	695 (15.08)	14.04 - 16.11	2799 (20.60)	19.92 - 21.28	0.73	0.68 - 0.79
pAVK Peripheral arterial occlusive disease of the extremities	127 (2.75)	2.28 - 3.23	514 (3.78)	3.46 - 4.10	0.73	0.60 - 0.88
Infections	159 (3.45)	2.92 - 3.98	645 (4.75)	4.39 - 5.10	0.73	0.61 - 0.86
Ulcer	42 (0.91)	0.64 - 1.19	178 (1.31)	1.12 - 1.50	0.70	0.50 - 0.97
Allergic contact dermatitis	109 (2.36)	1.93 - 2.80	477 (3.51)	3.20 - 3.82	0.67	0.55 - 0.83
Stroke	53 (1.15)	0.84 - 1.46	234 (1.72)	1.50 - 1.94	0.67	0.50 - 0.90
Other chronic polyarthritis	192 (4.16)	3.59 - 4.74	876 (6.45)	6.03 - 6.86	0.65	0.55 - 0.75
Intertriginous dermatitis	70 (1.52)	1.17 - 1.87	320 (2.35)	2.10 - 2.61	0.64	0.50 - 0.83
Chronic bronchitis	298 (6.46)	5.75 - 7.17	1371 (10.09)	9.58 - 10.60	0.64	0.57 - 0.72
Other COPD	258 (5.60)	4.93 - 6.26	1228 (9.04)	8.55 - 9.52	0.62	0.54 - 0.71
Smoking	293 (6.36)	5.65 - 7.06	1417 (10.43)	9.91 - 10.94	0.61	0.54 - 0.69
Schizophrenia	22 (0.48)	0.28 - 0.68	112 (0.82)	0.67 - 0.98	0.58	0.37 - 0.91

Seborrheic eczema	116 (2.52)	2.06 - 2.97	593 (4.36)	4.02 - 4.71	0.58	0.47 - 0.70
Alcohol abuse	73 (1.58)	1.22 - 1.94	408 (3.00)	2.72 - 3.29	0.53	0.41 - 0.68
Lung cancer	13 (0.28)	0.13 - 0.44	77 (0.57)	0.44 - 0.69	0.5	0.28 - 0.89
Psoriatic arthritis	48 (1.04)	0.75 - 1.33	1481 (10.90)	10.37 - 11.42	0.1	0.07 - 0.13
Psoriatic arthropathy	42 (0.91)	0.64 - 1.19	1383 (10.18)	9.67 - 10.69	0.09	0.07 - 0.12
Recurrent myocardial infarction	0 (0.00)	0.00	1 (0.01)	0.00 - 0.02	0.00	0.00 - 0.00
Profound developmental disorders (autism)	16 (0.35)	0.18 - 0.52	28 (0.21)	0.13 - 0.28	1.68	0.91 - 3.11
HIV	9 (0.20)	0.07 - 0.32	17 (0.13)	0.07 - 0.18	1.56	0.70 - 3.50
Teleangiectasia	32 (0.69)	0.45 - 0.93	63 (0.46)	0.35 - 0.58	1.50	0.98 - 2.29
Systemic sclerosis	16 (0.35)	0.18 - 0.52	32 (0.24)	0.15 - 0.32	1.47	0.81 - 2.68
Periodontitis	5 (0.11)	0.01 - 0.20	10 (0.07)	0.03 - 0.12	1.47	0.50 - 4.31
Meniere's disease	26 (0.56)	0.35 - 0.78	52 (0.38)	0.28 - 0.49	1.47	0.92 - 2.36
Uveitis	1 (0.02)	0.00 - 0.06	2 (0.01)	0.00 - 0.04	1.47	0.13 - 16.25
Chronic fatigue syndrome	27 (0.59)	0.37 - 0.81	54 (0.40)	0.29 - 0.50	1.47	0.93 - 2.34
Angioedema	2 (0.04)	0.00 - 0.10	4 (0.03)	0.00 - 0.06	1.47	0.27 - 8.04
ADHD	46 (1.00)	0.71 - 1.28	99 (0.73)	0.59 - 0.87	1.37	0.97 - 1.94
Food allergies	6 (0.13)	0.03 - 0.23	13 (0.10)	0.04 - 0.15	1.36	0.52 - 3.58
Iridocyclitis	23 (0.50)	0.30 - 0.70	53 (0.39)	0.29 - 0.49	1.28	0.79 - 2.08
Leukemia	21 (0.46)	0.26 - 0.65	50 (0.37)	0.27 - 0.47	1.24	0.74 - 2.06
Alzheimer's disease	43 (0.93)	0.66 - 1.21	106 (0.78)	0.63 - 0.93	1.20	0.84 - 1.70
Diseases of the liver"	27 (0.59)	0.37 - 0.81	67 (0.49)	0.38 - 0.61	1.19	0.76 - 1.85
Angioneurotic edema	18 (0.39)	0.21 - 0.57	45 (0.33)	0.23 - 0.43	1.18	0.68 - 2.03
Viral warts	161 (3.49)	2.96 - 4.02	405 (2.98)	2.69 - 3.27	1.17	0.98 - 1.40
Herpes virus infection	59 (1.28)	0.96 - 1.60	150 (1.10)	0.93 - 1.28	1.16	0.86 - 1.56
Chronic pancreatitis	77 (1.67)	1.30 - 2.04	196 (1.44)	1.24 - 1.64	1.16	0.89 - 1.50
Breast cancer	161 (3.49)	2.96 - 4.02	415 (3.05)	2.76 - 3.34	1.14	0.96 - 1.37
ulcerative colitis	52 (1.13)	0.82 - 1.43	135 (0.99)	0.83 - 1.16	1.14	0.83 - 1.56
Urticaria	97 (2.10)	1.69 - 2.52	253 (1.86)	1.63 - 2.09	1.13	0.90 - 1.42
Myasthenia gravis	8 (0.17)	0.05 - 0.29	21 (0.15)	0.09 - 0.22	1.12	0.50 - 2.53
Sinus infections	197 (4.27)	3.69 - 4.86	524 (3.86)	3.53 - 4.18	1.11	0.94 - 1.30
Onychomycosis	189 (4.10)	3.53 - 4.67	516 (3.80)	3.48 - 4.12	1.08	0.92 - 1.27
Migraine	323 (7.01)	6.27 - 7.74	887 (6.53)	6.11 - 6.94	1.07	0.95 - 1.21
Osteoporosis	448 (9.72)	8.86 - 10.57	1234 (9.08)	8.60 - 9.56	1.07	0.97 - 1.19
Reflux	246 (5.34)	4.69 - 5.99	683 (5.03)	4.66 - 5.39	1.06	0.92 - 1.22
Prostate cancer	79 (1.71)	1.34 - 2.09	220 (1.62)	1.41 - 1.83	1.06	0.82 - 1.37
Spider veins	592 (12.84)	11.88 - 13.81	1658 (12.20)	11.65 - 12.75	1.05	0.96 - 1.15
Lupus erythematosus (non-syst.)	17 (0.37)	0.19 - 0.54	48 (0.35)	0.25 - 0.45	1.04	0.60 - 1.81
Rhinitis allergica	523 (11.34)	10.43 - 12.26	1478 (10.88)	10.35 - 11.40	1.04	0.95 - 1.15
Colorectal cancer	41 (0.89)	0.62 - 1.16	116 (0.85)	0.70 - 1.01	1.04	0.73 - 1.49
Hypercholesterolemia	989 (21.45)	20.27 - 22.64	2812 (20.69)	20.01 - 21.37	1.04	0.97 - 1.11

Reactions to severe stress and adjustment disorders	512 (11.11)	10.20 - 12.01	1462 (10.76)	10.24 - 11.28	1.03	0.94 - 1.14
Varices of the lower extremities	654 (14.19)	13.18 - 15.19	1873 (13.78)	13.20 - 14.36	1.03	0.95 - 1.12
Gastritis and duodenitis	535 (11.61)	10.68 - 12.53	1548 (11.39)	10.86 - 11.93	1.02	0.93 - 1.12
Malignant neoplasms	678 (14.71)	13.68 - 15.73	1969 (14.49)	13.90 - 15.08	1.02	0.94 - 1.10
Systemic diseases of the connective tissue	230 (4.99)	4.36 - 5.62	668 (4.92)	4.55 - 5.28	1.01	0.88 - 1.17
Other anxiety disorders	447 (9.70)	8.84 - 10.55	1311 (9.65)	9.15 - 10.14	1.01	0.91 - 1.11
Lymphoma	28 (0.61)	0.38 - 0.83	83 (0.61)	0.48 - 0.74	0.99	0.65 - 1.52
Osteoarthritis	1426 (30.93)	29.60 - 32.27	4228 (31.11)	30.34 - 31.89	0.99	0.95 - 1.05
Impetigo	33 (0.72)	0.47 - 0.96	98 (0.72)	0.58 - 0.86	0.99	0.67 - 1.47
Pruritus	190 (4.12)	3.55 - 4.70	568 (4.18)	3.84 - 4.52	0.99	0.84 - 1.16
Nevus flammeus	10 (0.22)	0.08 - 0.35	30 (0.22)	0.14 - 0.30	0.98	0.48 - 2.01
Acne	112 (2.43)	1.99 - 2.87	336 (2.47)	2.21 - 2.73	0.98	0.80 - 1.21
Bronchial asthma	506 (10.98)	10.07 - 11.88	1524 (11.21)	10.68 - 11.75	0.98	0.89 - 1.08
Phobic disorders	95 (2.06)	1.65 - 2.47	288 (2.12)	1.88 - 2.36	0.97	0.77 - 1.22
Hyperlipidemia	1591 (34.51)	33.14 - 35.88	4846 (35.66)	34.86 - 36.47	0.97	0.92 - 1.01
Thrombosis, phlebitis and thrombophlebitis	83 (1.80)	1.42 - 2.18	256 (1.88)	1.66 - 2.11	0.96	0.75 - 1.22
Folliculitis	31 (0.67)	0.44 - 0.91	98 (0.72)	0.58 - 0.86	0.93	0.62 - 1.39
Other metabolic disorders	134 (2.91)	2.42 - 3.39	432 (3.18)	2.88 - 3.47	0.91	0.76 - 1.11
Insomnia	500 (10.85)	9.95 - 11.74	1615 (11.88)	11.34 - 12.43	0.91	0.83 - 1.00
Nausea	149 (3.23)	2.72 - 3.74	483 (3.55)	3.24 - 3.87	0.91	0.76 - 1.09
Renal insufficiency	417 (9.05)	8.22 - 9.87	1354 (9.96)	9.46 - 10.47	0.91	0.82 - 1.01
Sicca syndrome (Sjögren's syndrome)	96 (2.08)	1.67 - 2.49	312 (2.30)	2.04 - 2.55	0.91	0.72 - 1.14
Rheumatoid arthritis	54 (1.17)	0.86 - 1.48	176 (1.30)	1.11 - 1.49	0.90	0.67 - 1.22
Tinea pedis	63 (1.37)	1.03 - 1.70	206 (1.52)	1.31 - 1.72	0.90	0.68 - 1.19
Tinea corporis	38 (0.82)	0.56 - 1.09	126 (0.93)	0.77 - 1.09	0.89	0.62 - 1.28
Ovarian dysfunction	12 (0.26)	0.11 - 0.41	40 (0.29)	0.20 - 0.39	0.88	0.46 - 1.68
Diseases of the nails	102 (2.21)	1.79 - 2.64	347 (2.55)	2.29 - 2.82	0.87	0.70 - 1.08
Aortic aneurysm	74 (1.61)	1.24 - 1.97	253 (1.86)	1.63 - 2.09	0.86	0.67 - 1.11
Crohn's disease	40 (0.87)	0.60 - 1.14	139 (1.02)	0.85 - 1.19	0.85	0.60 - 1.20
Dementia	121 (2.62)	2.16 - 3.09	428 (3.15)	2.86 - 3.44	0.83	0.68 - 1.02
Keratitis	43 (0.93)	0.66 - 1.21	153 (1.13)	0.95 - 1.30	0.83	0.59 - 1.16
Multiple sclerosis	24 (0.52)	0.31 - 0.73	87 (0.64)	0.51 - 0.77	0.81	0.52 - 1.28
Transaminase increase	47 (1.02)	0.73 - 1.31	171 (1.26)	1.07 - 1.45	0.81	0.59 - 1.12
Acute myocardial infarction	56 (1.21)	0.90 - 1.53	220 (1.62)	1.41 - 1.83	0.75	0.56 - 1.00
Fever of unknown cause	47 (1.02)	0.73 - 1.31	187 (1.38)	1.18 - 1.57	0.74	0.54 - 1.02
Food allergies	2 (0.04)	0.00 - 0.10	8 (0.06)	0.02 - 0.10	0.74	0.16 - 3.47
Non-alcoholic steatohepatitis	11 (0.24)	0.10 - 0.38	45 (0.33)	0.23 - 0.43	0.72	0.37 - 1.39
Cirrhosis of the liver	30 (0.65)	0.42 - 0.88	123 (0.91)	0.75 - 1.06	0.72	0.48 - 1.07

Systemic lupus erythematosus	8 (0.17)	0.05 - 0.29	35 (0.26)	0.17 - 0.34	0.67	0.31 - 1.45
Pyoderma	12 (0.26)	0.11 - 0.41	56 (0.41)	0.30 - 0.52	0.63	0.34 - 1.18
Other chronic obstructive pulmonary disease	59 (1.28)	0.96 - 1.60	215 (1.58)	1.37 - 1.79	0.81	0.61 - 1.08
Food allergies	1 (0.02)	0.00 - 0.06	10 (0.07)	0.03 - 0.12	0.29	0.04 - 2.30

NOTE: Without inpatient or outpatient psoriatic arthritis diagnosis (ICD-10-GM L40.5)