

Table SI: Dementia Classifications

DEMENTIA CATEGORY	DEMENTIA TYPE	ICD-9 CODE
ALZHEIMER'S	Alzheimer's Disease	331.0
VASCULAR DEMENTIAS	Vascular dementia with delirium	290.41
	Vascular dementia with delusion	290.42
	Vascular dementia with depression	290.43
	Vascular dementia, unspecified	290.4, 290.40
OTHER DEMENTIAS	Dementia NOS without behavioral disturbance	294.20
	Dementia without behavioral disturbance	294.10
	Dementia with behavioral disturbance	294.11
	Dementia with Lewy bodies	331.82
	Dementia, unspecified	294.2
	Senile dementia, uncomplicated	290.0
	Presenile dementia	290.10, 290.1
	Dementias	290
	Senile dementia with delusional or depressive features	290.2
	Frontotemporal dementia NEC	331.19
	Frontotemporal dementia	331.1

This table displays the dementia classifications used in our study, based on ICD-9 codes.

Table SII. Psoriasis treatment Information for PSM Groups

NUMBER OF SYSTEMIC TREATMENTS	ALL N(%)= 1766 (100)	CONTROL N (%)= 883 (50)	STUDY N (%)= 883(50)	P-VALUE
1	1151 (65.2)	672 (76.1)	479 (54.2)	<0.001*
2	515 (29.2)	194 (22.0)	321 (36.4)	<0.001*
3	95 (5.4)	16 (1.8)	79 (8.9)	<0.001*
4	5 (0.3)	1 (0.1)	4 (0.5)	0.002*
Acitretin	825 (46.7)	397 (45.0)	428 (48.5)	0.152*
Apremilast	251 (14.2)	68 (7.7)	183 (20.7)	<0.001*
Cyclosporin	72 (4.1)	19 (2.2)	53 (6.0)	<0.001*
Methotrexate	1338 (75.8)	628 (71.1)	710 (80.4)	<0.001*

Table SII presents the number and percentage of participants using different types of systemic medications across the study and the control group. *Significance level set at 0.05

Table SIII: Average Treatment Duration of Biologic Treatments

Drug / Biologic	Number of patients
	N = 883 (%)
Number of tried drugs	
1	319 (36.1)
2	298 (33.7)
3	143 (16.2)
4	67 (7.6)
5	40 (4.5)
6	9 (1.0)
7	7 (0.8)
Adalimumab	582 (65.9)
Certolizumab	20 (2.3)
Etanercept	480 (54.4)
Guselkumab	112 (12.7)
Infliximab	72 (8.2)
Ixekizumab	126 (14.3)
Risankizumab	135 (15.3)
Secukinumab	242 (27.4)
Ustekinumab	146 (16.5)

Table SIII presents the number and percentage of participants in the systemic + biologic group who received various types of biologic medications, as well as the distribution of the number of different biologic medications taken by the participants.

Table SIV: Dementia type and prevalence in PSM groups

DEMENTIA TYPE	ALL N(%) 1766 (100)	CONTROL N (%)= 883 (50)	STUDY N (%)= 883 (50)	P-VALUE
Dementia	132 (7.5)	78 (8.8)	54 (6.1)	0.037*
Alzheimer's Dementia	73 (4.1)	44 (5.0)	29 (3.3)	0.072
Vascular Dementia	11 (0.6)	8 (0.9)	3 (0.3)	0.140
Other Dementia	48 (2.7)	26 (2.9)	22 (2.5)	0.559

This table shows the number and percentage of participants within each dementia type across PSM groups.

Significance level set at 0.05

Table SV: Prevalence of Comorbidities in raw groups

Condition	All N(%) 5680 (100)	Controls N (%) = 4797 (84.5)	Study N (%) = 883 (15.5)	P-value
PVD	479 (8.4)	427 (8.9)	52 (5.9)	0.002*
Atherosclerosis	1104 (19.4)	935 (19.5)	169 (19.1)	0.853
CVA	855 (15.1)	759 (15.8)	96 (10.8)	<0.001*
Diabetes	2495 (43.9)	2099 (43.8)	396 (44.8)	0.008*
Obesity	2847 (50.1)	2381 (49.6)	466 (52.8)	0.092
Hyperlipidemia	4894 (86.2)	4136 (86.2)	758 (85.8)	0.750
Depression	1051 (18.5)	909 (18.9)	148 (16.6)	0.047*
Hypertension	3886 (68.4)	3325 (69.3)	561 (63.5)	<0.001*
Ulcerative Colitis	62 (1.1)	52 (1.1)	10 (1.1)	0.860
Crohn's	45 (0.8)	38 (0.8)	7 (0.8)	0.915
Atopic Dermatitis	318 (5.6)	290 (6.1)	28 (3.1)	<0.001*
SLE	48 (0.8)	38 (0.7)	7 (0.8)	0.916
Rheumatoid Arthritis	1260 (22.2)	997 (20.8)	263 (29.8)	.001*0<
Ischemic Heart Disease	1780 (31.3)	1524 (31.8)	256 (29.0)	0.105
Alcoholic Fatty Liver	1250 (22.0)	990 (20.6)	260 (29.4)	<0.001*
Psoriatic Arthritis	2089 (36.8)	1472 (30.7)	617 (69.9)	<0.001*
Endocrine Metabolic Disorders	5584 (98.3)	4721 (98.4)	863 (97.7)	0.155
Diseases of the Blood	3263 (57.4)	2796 (58.3)	467 (52.9)	0.003*
Diseases of the Musculoskeletal	5615 (98.9)	4739 (98.8)	876 (99.2)	0.387
Diseases of the Circulatory	5186 (91.3)	4391 (91.5)	795 (90.0)	0.152
Diseases of the Ear	4599 (81.0)	3866 (80.6)	773(83)	0.093
Diseases of the Eye	5419 (95.4)	4576 (95.4)	843 (95.5)	1
Diseases of the Genitourinary	5395 (95.0)	4551 (94.9)	844 (95.6)	0.402
Diseases of the Digestive	5355 (94.3)	4510 (94.0)	845 (95.7)	0.048*
Diseases of the Nervous System	4328 (76.2)	3653 (76.2)	675 (76.4)	0.863
Respiratory Diseases	5581 (98.3)	4709 (98.2)	872 (98.8)	0.263
Neoplasms	4442 (78.2)	3752 (78.2)	690 (78.1)	<0.001*
Injury and Poisoning	5274 (92.9)	4453 (92.8)	821 (93.0)	0.943
Infectious and Parasitic	5350 (94.2)	4511 (94.0)	839 (95.0)	0.273
Mental Disorders	4095 (72.1)	3490 (72.7)	605(68.5)	<0.001*

This table presents the clinical background information for raw groups across various comorbidities including specific risk morbidities and the ICD-9 categories of diseases. *Significance level set at 0.05