

Table SI. Data Dictionary: variables included in the study and extracted from Hospital Information Systems.

Category	Variable name	Time reference	Type
Demographics	Age; Gender; Patient ID; Civil Status; Qualification	At first diagnosis of psoriasis	Structured
Comorbidities and risk factors	Myocardial infarction; Heart failure; Psoriatic arthritis; Cardiomyopathy; Cardiac arrhythmia; Atrial fibrillation; Cardiovascular disease; Autoimmune disease; Pulmonary disease; Neurological damage; Arteriopathy; Solid tumor; Hematologic tumor; Connective tissue disease; Kidney disease; Hemiplegia; Dementia; Peptic ulcer; Hepatitis; Liver disease; Cirrhosis; Pancreatitis; Cerebrovascular disease; Lymphoma; HIV positivity; Anemia; STROKE; Metastasized tumors; Obesity; Dyslipidemia; Hypertension; Diabetes mellitus; Hypercholesterolemia; Smoking	All	Unstructured (Clinical diaries, clinical history, discharge letters)
Interventions	Dialysis; Organ transplantation; Chemotherapy; Radiotherapy; Medical implants	All	Unstructured (Clinical diaries, clinical history, discharge letters)
Laboratory exams	Uric acid; Ureic nitrogen; Cholesterol; Creatinine; Hematocrit; Hemoglobin; HbA1c; Ferritin; White blood cells; Red blood cells; Liquor glucose; Serum glucose; Urinary glucose; Glycaemia; Lymphocytes; MCH; MCHC; MCV; NT-ProBNP; Platelet; Serum potassium; Serum sodium; Serum transferrin; Urinary transferrin; eGFR; Troponin I Ultra; High Sensitivity Troponin	All	Structured
Medications	Drugs included in ATC 1 st level A, B, C, D, G, H, J, L, M, N, P, R, S, V	During hospitalizations	Unstructured (Medical history, Discharge letters, Dermatological consultancies)
Hospitalization data	Patient ID; Admission ID; Reason for admission; Order of admission; Date/Time of admission; Date/Time of discharge; Diagnosis	All	Structured

Abbreviations. ATC: anatomical therapeutic chemical classification; eGFR: estimated glomerular filtration rate; HbA1c: glycated hemoglobin; MCH: mean corpuscular hemoglobin; MCHC: mean corpuscular hemoglobin concentration; MCV: mean corpuscular volume; NT-proBNP: N-terminal pro-B-type natriuretic peptide.

Table SII. Clinical characteristics, risk factors and hospitalization characteristics by type of hospital admission in which psoriasis diagnosis emerged (*patients admitted to the emergency department; patients firstly admitted to the emergency department and subsequently to an inpatient unit; electively admitted patients; and patients who accessed hospital in a day hospital setting*). Continuous variables are reported as means with relative standard deviation and p-values refer to one-way ANOVA test. Categorical variables are reported as numbers and relative percentages and p-values refer to Chi-square (χ^2) test.

		Overall	ED	ED-inpatient unit	Scheduled Hospitalization	DH	AOV/Chi2-square test
N.		2223	37 (1.7%)	291 (13.1%)	590 (26.5%)	1305 (58.7%)	
Sex (%)	F	1195 (53.8)	18 (48.6)	125 (43.0)	253 (42.9)	799 (61.2)	<0.001
	M	1028 (46.2)	19 (51.4)	166 (57.0)	337 (57.1)	506 (38.8)	
Age [mean (SD)]		56.08 (15.73)	53.27 (20.03)	60.29 (17.81)	57.57 (16.03)	54.54 (14.71)	<0.001
Hospitalization characteristics							
Days of hospitalization [mean (SD)]		4.40 (6.89)	0.57 (1.24)	11.51 (12.23)	7.68 (6.84)	1.44 (1.10)	<0.001
Primary diagnosis PSO (%)	1	1500 (67.5)	22 (59.5)	52 (17.9)	360 (61.0)	1066 (81.7)	<0.001
Dermatology Unit (%)	1	465 (21.8)	0 (NaN)	4 (1.7)	275 (46.6)	186 (14.3)	NaN
N. of ED dermatological consultancies [mean (SD)]		1.19 (0.59)	1.26 (0.75)	1.13 (0.43)	NaN (NA)	NaN (NA)	0.418
Comorbidities and risk factors							
Psoriatic arthritis (%)		1455 (65.5)	9 (24.3)	118 (40.5)	278 (47.1)	1050 (80.5)	<0.001
Heart attack (%)		226 (10.2)	5 (13.5)	58 (19.9)	79 (13.4)	84 (6.4)	<0.001
Heart failure (%)		142 (6.4)	5 (13.5)	49 (16.8)	49 (8.3)	39 (3.0)	<0.001
Cardiomyopathy (%)		17 (0.8)	1 (2.7)	8 (2.7)	5 (0.8)	3 (0.2)	<0.001
Arrhythmia (%)		35 (1.6)	1 (2.7)	11 (3.8)	10 (1.7)	13 (1.0)	0.006
Atrial fibrillation (%)		114 (5.1)	1 (2.7)	29 (10.0)	36 (6.1)	48 (3.7)	<0.001
Cardiovascular disease (%)		274 (12.3)	6 (16.2)	80 (27.5)	100 (16.9)	88 (6.7)	<0.001
Autoimmune disease (%)		2207 (99.3)	33 (89.2)	281 (96.6)	588 (99.7)	1305 (100.0)	<0.001
Pulmonary disease (%)		227 (10.2)	8 (21.6)	62 (21.3)	67 (11.4)	90 (6.9)	<0.001
Neurological injury (%)		16 (0.7)	0 (0.0)	7 (2.4)	4 (0.7)	5 (0.4)	0.003
Arteriopathy (%)		64 (2.9)	1 (2.7)	21 (7.2)	23 (3.9)	19 (1.5)	<0.001
Cancer (%)		423 (19.0)	8 (21.6)	93 (32.0)	150 (25.4)	172 (13.2)	<0.001

Haematological malignancy, except leukaemia and lymphoma (%)	14 (0.6)	0 (0.0)	6 (2.1)	5 (0.8)	3 (0.2)	<i>0.004</i>
Leukaemia (%)	15 (0.7)	0 (0.0)	4 (1.4)	4 (0.7)	7 (0.5)	<i>0.432</i>
Connective Tissue Disease (%)	236 (10.6)	5 (13.5)	43 (14.8)	65 (11.0)	123 (9.4)	<i>0.053</i>
Chronic Kidney Disease (%)	174 (7.8)	4 (10.8)	60 (20.6)	71 (12.0)	39 (3.0)	<i><0.001</i>
Dementia (%)	55 (2.5)	0 (0.0)	8 (2.7)	10 (1.7)	37 (2.8)	<i>0.359</i>
Peptic ulcer (%)	164 (7.4)	2 (5.4)	57 (19.6)	49 (8.3)	56 (4.3)	<i><0.001</i>
Liver disease (%)	179 (8.1)	3 (8.1)	41 (14.1)	64 (10.8)	71 (5.4)	<i><0.001</i>
Cirrhosis (%)	97 (4.4)	1 (2.7)	29 (10.0)	44 (7.5)	23 (1.8)	<i><0.001</i>
Pancreatitis (%)	36 (1.6)	0 (0.0)	14 (4.8)	9 (1.5)	13 (1.0)	<i><0.001</i>
Cerebrovascular disease (%)	36 (1.6)	0 (0.0)	12 (4.1)	9 (1.5)	15 (1.1)	<i>0.003</i>
Lymphoma (%)	27 (1.2)	0 (0.0)	9 (3.1)	10 (1.7)	8 (0.6)	<i>0.003</i>
HIV positivity (%)	59 (2.7)	0 (0.0)	20 (6.9)	18 (3.1)	21 (1.6)	<i><0.001</i>
Anemia (%)	259 (11.7)	5 (13.5)	85 (29.2)	90 (15.3)	79 (6.1)	<i><0.001</i>
Stroke (%)	145 (6.5)	5 (13.5)	36 (12.4)	47 (8.0)	57 (4.4)	<i><0.001</i>
Metastasized tumors (%)	38 (1.7)	0 (0.0)	13 (4.5)	16 (2.7)	9 (0.7)	<i><0.001</i>
Smoke habits (%)	461 (20.7)	5 (13.5)	75 (25.8)	128 (21.7)	253 (19.4)	<i>0.059</i>
Obesity (%)	339 (15.2)	5 (13.5)	41 (14.1)	82 (13.9)	211 (16.2)	<i>0.557</i>
Dyslipidemia (%)	327 (14.7)	6 (16.2)	55 (18.9)	107 (18.1)	159 (12.2)	<i>0.001</i>
Hypertension (%)	771 (34.7)	16 (43.2)	143 (49.1)	266 (45.1)	346 (26.5)	<i><0.001</i>
Diabetes (%)	380 (17.1)	10 (27.0)	91 (31.3)	122 (20.7)	157 (12.0)	<i><0.001</i>
Hypercholesterolemia (%)	125 (5.6)	2 (5.4)	18 (6.2)	32 (5.4)	73 (5.6)	<i>0.974</i>
Dialysis (%)	15 (0.7)	0 (0.0)	8 (2.7)	5 (0.8)	2 (0.2)	<i><0.001</i>
Organ transplantation (%)	40 (1.8)	0 (0.0)	12 (4.1)	8 (1.4)	20 (1.5)	<i>0.013</i>
Chemotherapy (%)	89 (4.0)	0 (0.0)	23 (7.9)	36 (6.1)	30 (2.3)	<i><0.001</i>
Radiotherapy (%)	124 (5.6)	0 (0.0)	19 (6.5)	26 (4.4)	79 (6.1)	<i>0.188</i>

Abbreviations: ED:Emergency Department; PSO: Psoriasis