with the general population, and to review existing modalities for the assessment of body composition.

Methods: Electronic searches of the literature were conducted in PubMed, Medline (Ovid®), Embase (Ovid®), Cochrane Central Register and Google Scholar. Titles and abstracts were reviewed by two authors independently against a set of prespecified inclusion/exclusion criteria, reference lists were examined and synthesis of the included studies was conducted.

Results: Twenty-five whole-text papers met the inclusion criteria and were included in the final narrative analysis. The studies were of heterogeneous design and used a range of objective measures to assess body composition, including bioimpedance analysis (BIA), dual energy X-ray absorptiometry (DXA) and computed tomography (CT). Few studies met all the quality assessment criteria. 24 studies confirmed discrete biological and body composition changes in patients with psoriatic disease, which correlated positively with other indicators of metabolic syndrome, including waist circumference, waist-to-hip ratio, weight, BMI, plasma concentrations of LDL-cholesterol, leptin and apolipoprotein-B.

Conclusion: There is an increased prevalence of metabolic, anthropometric and internal body composition derangements in psoriatic patients compared with controls, and these changes seem to be independent of obesity and the customary metabolic syndrome, including higher overall body fat, visceral fat and sarcopenia. Our study highlights the applicability of several imaging techniques in the evaluation of body composition in psoriatic patients, including some novel automated systems, and future studies should focus on validation and standardization of assessment tools both in research and clinical practice.

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AB0745

REAL-LIFE EXPERIENCE FOR SECUKINUMAB IN PSORIATIC ARTHRITIS FROM HURBIO-PSA DATABASE

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Background: Biologic disease modifying anti-rheumatic drugs (bDMARD) are revolutionary treatment options for management of inflammatory arthritis. Secukinumab (SEC), anti-interleukin-17A monoclonal antibody, is a new alternative choice to anti-TNFs and IL-12/23 blocking agents in the therapy of psoriatic arthritis (PsA). In Turkey, government health insurance system covers secukinumab for at bDMARD-refractory PsA patients.

Objectives: In this study, analyzing of parameters that related with effectiveness and drug survival rates for patients using SEC from Hacettepe University Rheumatology Biologic Registry (HURBio-PsA) were aimed.

Methods: HURBio-PsA is a monocentric biologic database including 470 PsA by December 2020. Sixty-two PsA patients that recorded with prescribed SEC in the database were evaluated. Sixteen patients have no control clinical-visit were excluded. Descriptives and demographics were recorded and Kaplan-Meier analysis was used to estimate SEC drug-retention rates.

Results: Forty-two (26.1% male) PsA patients treated with SEC) were included. Characteristics of the patients at the baseline and the last visit were shown in Table. Last visit scores of DKYI, Patient VAS Global, VAS Fatigue, VAS Pain and BASDAI showed statistically significant improvements in comparison with first visit values. Median duration of SEC usage was 5.4 (Min-Max: 0.18-18.6) months. SEC drug-retention rate at 12 months were 69% and 54.4% for two PsA groups that were used previously 1 and ≥2 bDMARDs, respectively (p=0.743, Figure).

Conclusion: In this real-world study derived from single center experience; there is no statistically significant difference for drug survival rates of SEC therapy in the patient groups used 1 and ≥2 bDMARDs. Effectiveness and drug-survival should be obviously verified by data derived from multicenter large cohorts.

Table 1. Baseline characteristics of PsA patients with treated with Secukinumab

	All Patients (n=62)	1 bDMARD exposed (n=18)	≥ 2 bDMARD exposed (n=44)	p
Gender, Female, n(%)	47 (75.8)	12 (66.7)	35 (79.5)	0.334
Age at the disease diagnosis, years, mean±SD	42 ± 11.65	35 ± 5.65	38.6 ± 10.7	0.721
Age at SEC starting, years, mean±SD	48.2 ± 10.8	43 ± 2.8	49.5 ± 11.3	0.182
Median duration of SEC treatment, median (min-max)	6.3 (0.9-18.6)	3.3 (3.2-3.3)	9 (4-20)	0.519
HLA-B27 positivity, n(%)	3/24 (12.5)	1 (14.3)	2 (11.8)	1
BMI, kg/m ² , mean±SD	28.9 ± 5.9	32.6 ± 3.7	28.4 ± 6.0	0.546
Ever smoking history, n(%)	40/61 (65.6)	13 (72.2)	27 (62.8)	0.6
Uveitis, n(%)	3 (4.8)	0 (0)	3 (6.8)	0.55
PsA/Psp family history, n(%)	22 (35.5)	2 (11.1)	20 (45.5)	0.01

Table 2. Activity parameters of PsA patients have a least clinical visit

	1 bDMARD exposed (n=)			≥ 2 bDMARD exposed (n=)		
	First Visit	Last Visit	p	First Visit	Last Visit	p
DAS28, Median (IQR)	2.8(1.5)	2.8 (1.8)	0.155	3.9 (1.7)	3.5 (1.4)	0.414
HAQ, Median (IQR)	0.3 (0.7)	0.05 (0.61)	0.065	0.7 (0.9)	0.5 (0.85)	0.500
DKYI, Median (IQR)	4 (4.5)	0 (3)	0.049	11 (15)	5 (9)	0.003
ESR, Median (IQR)	19 (23.2)	17.5 (18.7)	0.398	28 (38)	35 (27.9)	0.082
C-RP, Median (IQR)	0.49 (0.64)	0.41 (0.75)	0.724	0.73 (1.8)	1 (2)	0.564
BASDAI, Median (IQR)	61 (61)	27.5 (48)	0.005	58 (31)	46 (39)	0.038
BASFI, Median (IQR)	38 (50)	9.4 (54.5)	0.035	43 (53)	36 (47)	0.480
Tender Joint Count, Median (IQR)	0 (0.5)	0 (0.5)	0.180	1 (4)	0 (9)	0.720
Swollen Joint Count, Median (IQR)	0 (1.2)	0 (0)	0.357	0 (2)	0 (0)	0.635
VAS Global Patient, Median (IQR)	80 (55)	25 (45)	0.006	60 (20)	50 (50)	0.032
VAS Fatigue, Median (IQR)	65 (62.5)	40 (62.5)	0.027	60 (40)	50 (40)	0.110
VAS Pain, Median (IQR)	80 (57.5)	40 (72.5)	0.022	70 (30)	60 (50)	0.170

Figure. Drug Retention Rate for Secukinumab

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AB0746

EVALUATING TENDER AND SWOLLEN JOINTS FOR THE ASSESSMENT OF INFLAMMATORY PAIN IN PSORIATIC ARTHRITIS USING ULTRASOUND

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Background: Tender and Swollen Joint Counts (TJC, SJC) are items of disease activity scores in rheumatoid arthritis (RA) and psoriatic arthritis (PsA). Recent studies suggest that TJC do not adequately reflect ongoing inflammation in RA when using Ultrasound (US) as a reference standard, and that pain might be due to other, non-inflammatory causes.^{1,2} In PsA, the role of tenderness and swelling of joints for reflecting active inflammation has not been well studied so far.

Objectives: To evaluate tender (TJ) and swollen joints (SJ) for the assessment of inflammation in PsA.

Methods: We performed a prospective study on 83 PsA patients undergoing clinical and ultrasound examinations at two study visits scheduled 12 months apart. Tenderness and swelling were assessed for 68 and 66 joints respectively and US examinations, including grey scale (GS) and power doppler (PD) were conducted at all 68 joints. GS- (range 0-204) and PD sum scores (0-204) were calculated. At patient level, correlations were performed between TJC, SJC and clinical or US values. At joint level a GS value ≥ 1 and/or PD value ≥ 1 was defined as active synovitis, which was compared to whether a joint was tender, swollen or both. A generalized linear mixed model was created to assess the predictive value of TJ and SJ for active synovitis after 12 months, taking into consideration the joint site.

Results: At baseline the median TJC and SJC for 83 patients was 4 (range 0-59) and 1 (0-20), respectively and the median GSS- and PD sum score was 16 (3-56) and 3 (0-31) respectively. SJC correlated with the GSS sum score ($r=0.37$, $p=0.004$) and PD sum score ($r=0.47$, $p<0.001$), while TJC only correlated with PD sum score ($r=0.33$, $p=0.01$). TJC correlated better than SJC with patient reported outcomes like patient global assessment (TJC: $r=0.57$, $p<0.001$; SJC $r=0.39$, $p=0.002$) and health assessment questionnaire (TJC: $r=0.50$, $p<0.001$, SJC no significant correlation). Swollen joints (with or without tenderness) showed active synovitis (GSS ≥ 1 and/or PD ≥ 1) in 67.6% of cases, while tender joints (with or without swelling) showed signs of US activation in only 34.5%. A joint that was considered swollen at baseline was more likely to express active synovitis after 12 months (OR: 4.3, 97.5 CI: 2.9-6.2), compared to a joint that was either tender or swollen at baseline (OR: 2.8, 97.5 CI: 2.1-3.5).

Conclusion: SJC are more closely linked with US signs of inflammation as compared to TJC in PsA. While swelling of a joint predicts US inflammation after a year, the information whether the joint is additionally tender or not, gives no additional predictive information.

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AB0747

SPECIFIC ULTRASOUND LESIONS IN PSORIATIC ARTHRITIS: PREVALENCE AND CORRELATION WITH DISEASE ACTIVITY

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Background: Psoriatic arthritis (PsA) is a systemic inflammatory disease with articular and extra-articular features. In recent years, Ultrasonography (US) is playing an important role in the diagnosis and monitoring of this disease. Specific US features of PsA have been reported such as enthesitis, peritendon extensor tendon inflammation (PTI) and soft tissue edema.

Objectives: The aims of this study were to evaluate the prevalence of these US signs in PsA patients and to determine their association with disease duration and activity.

Methods: Patients with peripheral PsA responding to the Classification Criteria for Psoriatic Arthritis (CASPAR) were enrolled. Clinical and biological data were extracted, and then US examination was performed by an experimented rheumatologist blinded to clinical data using a machine type Esaote MyLab 60 with a linear probe of 6-18 MHz. The following US features were evaluated: PTI at the dorsal aspect of metacarpo-phalangeal (MCP) joints, soft edema at the volar aspect of MCP joints and enthesitis of the digitorum extensor at the dorsal aspect of distal inter-phalangeal (DIP) joints.

A $p<0.05$ was considered statistically significant.

Results: We included twenty PsA patients, 8 men and 12 women, with a mean age of 55 ± 11 [33-77] years old. The mean disease duration was of 10 ± 8 [1-34] years. A family history of PsA or psoriasis was reported in 53% of cases.

Oral corticosteroids were used in 21% of patients, at a mean daily posology of 7 mg [5-10] of Prednisone equivalent, Methotrexate in 84% of cases at a mean posology of 15 mg [10-20] per week, Sulfasalazine in 10% of cases and a biological DMARD in 32% of cases (Etanercept=4, Infliximab=1, Adalimumab=1). The mean number of tender and swollen joints were respectively of 8 [0-16] and 2 [0-8]. The mean rate of patient global evaluation and visual analogue scale was of 5 [0-9].

The mean DAPSA (Disease Activity in Psoriatic Arthritis) score was of 32 ± 27 [4-112].

US examination demonstrated that all patients had at least one of the three specific signs that we were looking for. At MCP level, PTI was noted in 11% of joints with Power Doppler (PD) signal in one case and soft tissue edema was noted in 3% of joints.

At DIP level, enthesitis of digitorum extensor tendon was noted in 39% of joints. The elementary lesions reported were: enthesophyte in 25%, erosion in 8%, calcification in 5% and thickened or hypoechoic tendon in 4% of joints. However, no PD signal was detected at the enthesitis.

A positive association was found between DAPSA score and soft tissue edema ($p=0.000$), but not with PTI (0.668) and enthesitis (0.137). No relation was found between these three lesions and the disease duration.

Conclusion: The presence of soft tissue edema, enthesitis and/or PTI on US can be an argument for the diagnosis of PsA. Soft tissue edema is shown to be associated with disease activity.

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AB0748

IMPORTANCE OF COMORBIDITIES IN PATIENTS WITH ARTHRITIS PSORIATIC

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Background: Cardiovascular diseases are more prevalent in inflammatory arthritis, such as psoriatic arthropathy (PsA), than in general population. An increase in the presence of anxiety-depressive disorders has been also described in patients with psoriatic disease.

Objectives: To assess the prevalence of comorbidities in a cohort of patient with PsA, especially cardiovascular events and anxiety-depression disorders.

Methods: Observational, cross-sectional study of a cohort of patients with PsA from a monographic clinical unit in a rheumatology department to describe the presence of comorbidities: hypertension, diabetes, hyperlipemia, hyperuricemia, smoking, obesity, depression and ischemic heart disease (IHD). The

Table 1. Comorbidities in patterns of disease.

	PsA (n=145)	Peripheral disease (n=94)	Mixed disease (n=31)	Axial disease (n=20)
Age at diagnosis, year (DE)	45,4 (± 13)	45,7 ($\pm 12,9$)	45 (± 13)	43,9 ($\pm 13,8$)
Time of evolution, years (DE)	9,3 ($\pm 6,2$)	9,6 ($\pm 6,5$)	8,6 ($\pm 5,4$)	7,3 ($\pm 2,9$)
Men, n (%)	84 (57,9%)	48 (51,1%)	26 (83,9%)	10 (50%)
Women n (%)	61 (42,1%)	46 (48,9%)	5 (16,1%)	10 (50%)
Hyperlipemia, n (%)	87 (60%)	60 (63,8%)	17 (54,8%)	10 (50%)
BMI >25, n (%)	83 (57,2%)	61 (64,9%)	15 (48,4%)	7 (35%)
Hypertension, n (%)	46 (31,7%)	28 (29,8%)	13 (41,9%)	5 (25%)
Hyperuricemia, n (%)	41 (28,3%)	25 (26,6%)	11 (35,5%)	5 (25%)
Diabetes, n (%)	27 (18,6%)	20 (21,3%)	6 (19,4%)	1 (5%)
Smokers, n (%)	26 (17,9%)	13 (13,8%)	10 (32,3%)	3 (15%)
Depression, n (%)	23 (15,9%)	16 (17%)	6 (19,4%)	1 (5%)
Metabolic syndrome n (%)	23 (15,9%)	15 (16%)	5 (16%)	3 (15%)
IHD, n (%)	15 (10,3%)	7 (7,4%)	6 (19,4%)	2 (10%)