cardiovascular, were common. Compared to patients treated with TNFi, UST was more often given as 2nd or 3rd line bDMARD and in patients with more axial and skin disease. Among patients who switched to a 2nd or 3rd line bDMARD, those not on concomitant csDMARDs preferentially received UST.

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SAT0338

PREDICTION OF CARDIOVASCULAR EVENTS IN PATIENTS WITH PSORIATIC ARTHRITIS: PERFORMANCE OF FIVE RISK ALGORITHMS IN AN ITALIAN BICENTRIC STUDY

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Background: The burden of cardiovascular (CV) risk in patients with psoriatic arthritis (PsA) is increased. Prediction of CV risk and consequent preventive strategies play a pivotal role in management of PsA. Recently, EULAR recommendations suggested to use a multiplication by the factor of 1.5 of original CV risk algorithms in patients with rheumatoid arthritis and other inflammatory arthritis.¹

Objectives: To evaluate the performance and calibration of five original and adapted according to EULAR recommendations CV risk algorithms in PsA: SCORE, CUORE, Framingham Risk Score (FRS), QRISK2, and Reynold's Risk Score (RRS).

Methods: Prospectively collected data from two Central-Southern Italian cohorts of patients with an history of PsA of almost 10 years at November 2017 and without a personal history of CV disease (CVD) at baseline has been used. The primary outcome was the first CV event: sudden cardiac death, coronary artery diseases (CAD) (stable and unstable angina pectoris, myocardial infarction), cerebral vascular accident (CVA), transient ischaemic attack (TIA), peripheral artery disease (PAD) and heart failure (HF). Discriminatory ability for CV risk prediction was evaluated by the area under the receiver operating curve (ROC). Calibration between predicted risk and observed events was assessed by Hosmer-Lemeshow (HL) tests and calibration plots. Fisher's exact test has been used for analysis of contingency table 1, while Mann-Whitney test has been used to compare ranks. Sensibility, specificity, and odds ratio were calculated for low-to-intermediate risk cut-off (1% for SCORE, 10% for all the other algorithms) and for intermediate-to-high risk cut-off (5% for SCORE, 20% for all the other algorithms).

Results: 155 patients (57±10.57 years) were enrolled with an observation of 1550 patient/year. During follow-up, 21 patients had a CV event (1.35 events per 100 patient/years): 8 cases of myocardial infarction or unstable angina pectoris, 3 cases of stable angina pectoris, 2 cases of TIA, 4 cases of PAD, 4 cases of HF. No fatal events were reported. Area under the ROC were 0.7679 (95% CI 0.64768 to 0.88812), 0.864 (95% CI 0.79675 to 0.93278), 0.7575 (95% CI 0.65784 to

0.85708), 0.8660 (95% CI 0.79428 to 0.93772), and 0.7183 (95% CI 0.57795 to 0.85862) for SCORE, CUORE, FRS, QRISK2, and RRS, respectively, suggesting fair to good discriminative ability between patients with or without a CV event (figure 1). HL tests demonstrated poor model fit ($p < 0.05$) for SCORE, CUORE, and RRS, but not for FRS and QRISK2 ($p > 0.05$). Discriminative ability and calibration were not improved by adaption of the algorithms according to EULAR indications. A large amount of patients who experienced a CV event was at "low risk" (minimum 17.6% for SCORE and maximum 81.8% for RRS) or at "low-intermediate" risk (minimum 52.9% for SCORE and maximum 95.2% for FRS).

Conclusions: Adaption of the CV risk algorithms according to EULAR indications did not provide improvement in discriminative ability and calibration in patients with PsA from Centre and South of Italy. In PsA, an excess of CV events has been observed in patients at "low risk" or "low-intermediate risk".

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SAT0339

IMPACT OF ALTERNATE MECHANISM OF ACTION BIOLOGICS ON TUMOUR NECROSIS FACTOR INHIBITOR (TNF) PRESCRIBING IN PSORIATIC ARTHRITIS: RESULTS FROM A NATIONAL PATIENT CHART AUDIT

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Background: Tumour Necrosis Factor-inhibitor (TNF) therapy has long been the standard of care for adult patients diagnosed with moderate to severe psoriatic arthritis (PsA), though several new biologics and small molecules have recently received FDA approval for the treatment of PsA.

Objectives: This research sought to understand the extent to which biologics and small molecules with a different mechanism of action (MOA) have been adopted for the treatment of PsA and their impact on the use of well-established TNFs in the United States.

Methods: We conducted a retrospective chart review of patients diagnosed with PsA (n=1,008), who had switched from one biologic therapy or apremilast to another in the prior twelve weeks. Data were collected in April 2017 and included clinical and non-clinical patient demographics, as well as physician demographics and attitudinal survey responses. This study was a non-longitudinal trending analysis to a 2016 audit following the same methodology.

Results: 78% of the participating rheumatologists reported recent changes to the management of their patients with PsA. The two most commonly recalled treatment shifts were: more aggressive use of biologics in general and an increased use non-TNF agents for the treatment of PsA. With increased treatment options, US rheumatologists are switching patients more frequently and faster than previously recorded. In 2017, US rheumatologists reported that, over the course of a year, 29% of their biologic and apremilast treated patients are switched to a

different brand, a figure significantly up from 2016 (25%). Furthermore, a higher percent of the audited switched patients occurred within six months of initiating the prior agent compared to the prior year (56% vs. 40%).

In 2017, switching between TNF agents significantly decreased from 52% in 2016 to 41% in 2017, and switches from a TNF to an alternate MOA biologic significantly increased from 13% to 20%, respectively. The growth in the switching share of alternative MOAs was driven primarily by increased use of secukinumab, an Interleukin-17 inhibitor approved in January 2016. While most of the secukinumab patients originated from TNF inhibitors, ustekinumab switching share was also impacted. Indeed, rheumatologists indicated that 33% of the patients switched to secukinumab in 2017 would have been placed on ustekinumab if secukinumab had not been available.

Conclusions: Increased biologic and small molecule options for the treatment of PsA has resulted in US rheumatologists switching patients more frequently and faster than in the past. Though TNF inhibitors remain the predominant mechanism of action for the treatment of PsA, the introduction of secukinumab has had a direct impact on the PsA switching environment in 2017 and recent approvals in the form of tofacitinib, ixekizumab, and abatacept are hypothesised to further impact the PsA switching environment in 2018.

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SAT0340

PSA-DISK, A NOVEL VISUAL INSTRUMENT TO ASSESS THE BURDEN OF DISEASE IN PSORIATIC ARTHRITIS PATIENTS

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Background: The assessment of joint disease in psoriasis (PsO) patients is paramount, particularly where consensus among dermatology and rheumatology specialists is necessary.

Objectives: To evaluate the prevalence of psoriatic arthritis (PsA) in PsO patients and assess how a novel 16-item visual instrument (PsA-Disk) correlates with the disease and its clinical manifestations.

Methods: Data were prospectively collected from 8 dermatological/rheumatological centres across Italy. During their first dermatological visit, patients completed both PEST (Psoriasis Epidemiology Screening Tool) and PsA-disk questionnaires. Rheumatological visit was performed in order to confirm presence/absence of PsA. Clinimetric and disease activity variables were recorded.

Results: From a total of 239 PsO patients, 120 (50.2%) patients were diagnosed with PsA. More PsA-positive patients had nail PsO (54.2% vs. 42%, $p=0.05$) and a PEST score ≥ 3 vs. PsA-negative patients (77.5% vs. 37.8%, $p<0.001$). PsA-positive patients presented with significantly higher ESR (21.9 ± 17.1 vs. 15.9 ± 10.2 mm/h, $p=0.041$), NAPSI-feet (10.2 ± 9.7 vs. 3.9 ± 7.8 , $p=0.002$), NAPSI-(hands+feet; 9.3 ± 6.8 vs. 4.6 ± 7.9 , $p=0.007$), and PsA-Disk scores (73.9 ± 32.1 vs. 58.1 ± 39.8 , $p<0.001$) vs. PsA-negative patients. PsA-patients with axial involvement had higher PsA-Disk scores (86.7 vs. 72.5 , $p=0.088$) as well as patients with knee arthritis (98.4 vs. 71.5 , $p=0.006$). PsA-Disk scores were also positively correlated with number of swollen ($r=0.2$, $p<0.05$) and tender joints ($r=0.24$, $p=0.021$), patient- ($r=0.4$, $p<0.001$) and physician-pain-VAS ($r=0.33$, $p<0.001$), PGA-VAS ($r=0.23$, $p=0.025$), physician-HAQ ($r=0.38$, $p=0.011$), DAS-44 ($r=0.25$, $p=0.023$) and DAPSA scores ($r=0.31$, $p=0.005$) (figure 1A). Examples of the powerful visual use of this instrument can be seen in figure 1B.

Abstract – Figure 1. [A] Correlation between clinical variables and PsA-Disk score in PsA+ patients.

Figure 1 [A]. Correlation between clinical variables and PsA-Disk score in PsA+ patients.

Clinical characteristic	N	Mean±SD	Coefficient (r)	p-value
Time to diagnosis PsA (years)	75	1.7±5.4	0.14	NS
CRP (mg/dl)	98	5.5±11.2	0.008	NS
ESR (mm/h)	102	21.9±17.1	-0.013	NS
N. swollen joints	105	3.2±4.3	0.2	0.05
N. tender joints	105	6.8±5.7	0.24	0.021
Pain-VAS – patients assessment	104	6.2±2.4	0.4	<0.001
Pain-VAS – physicians assessment	104	4.7±2.5	0.33	<0.001
PGA-VAS	105	5.8±2.2	0.23	0.025
HAQ	43	0.9±0.5	0.38	0.011
BASDAI	23	4.5±1.3	0.27	NS
DAS-44	89	2.7±1.1	0.25	0.023
CPDAI	49	5.4±2.2	0.18	NS
DAPSA	86	24.8±11.5	0.31	0.005

HAQ=Health Assessment Questionnaire; CRP=C-reactive protein; ESR=erythrocyte sedimentation rate; PGA=physician global assessment; VAS=visual analogue scale; DAS=disability score; CPDAI=clinical physician global assessment; DAPSA=disability assessment in psoriasis; NS=not significant; r=correlation coefficient; p=p-value.

* Spearman rank correlation coefficient (r).

Conclusions: PsA-Disk is a novel instrument helping both dermatologist and rheumatologist in the rapid assessment PsA, facilitating in the timely therapeutic management of these patients.

Disclosure of Interest: None declared

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SAT0341

EFFICACY AND SAFETY OF IXEKIZUMAB IN PATIENTS WITH ACTIVE PSORIATIC ARTHRITIS AND PREVIOUS INADEQUATE RESPONSE TO TNF INHIBITORS: 52-WEEK RESULTS FROM A PHASE 3 STUDY

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Background: Ixekizumab (IXE) is a high affinity monoclonal antibody that selectively targets interleukin-17A. In patients with active psoriatic arthritis (PsA) who had an inadequate response to tumour necrosis factor inhibitors (TNFi), IXE was superior to placebo (PBO) in improving the signs and symptoms of PsA after 24 weeks of treatment (SPIRIT-P2; NCT02349295).¹

Objectives: The objective of this study is to report the Week 52 interim efficacy and safety findings of IXE treatment during the Extension Period (EP) of SPIRIT-P2 (Weeks 24–156).

Methods: SPIRIT-P2 is a Phase 3, multicenter, double-blind study. All 363 patients had an inadequate response to one or two TNFi or were intolerant to TNFi. During the Double-Blind Treatment Period (DBTP; Weeks 0–24), patients were randomly assigned 1:1:1 to subcutaneous administration of either 80 mg IXE every 4 weeks (Q4W; n=122) or every 2 weeks (Q2W; n=123) following a 160 mg starting dose at Week 0, or PBO (n=118). Of these, 310 patients completed the DBTP and entered the EP (Weeks 24–156). Patients randomised to IXE at Week 0 continued the same dose regimen in the EP. PBO patients were re-randomised (1:1) to IXE Q4W or Q2W at Week 16 (inadequate responders) or 24. In this interim analysis, efficacy (up to Week 52) and safety (up to Week 156) were analysed using the EP population, defined as all patients who received at least 1 dose of study drug in the EP. Missing values were considered non-response for categorical data and were imputed by modified baseline observation carried forward for continuous data.

Results: In the DBTP, a significantly higher percentage of patients achieved ACR20 at Week 24 with IXE Q4W (53%) or Q2W (48%) than with PBO (20%).¹ For patients who entered the EP, the mean age was 52 years, 47% were male, the mean time since PsA onset was 12 years, and mean tender and swollen joint counts at baseline (Week 0) were 23 and 12, respectively. For EP patients who were initially randomised to IXE Q4W or Q2W during the DBTP, ACR20 responses at Week 52 were 68% and 59%, respectively. For patients treated with PBO during the DBTP and re-randomised to IXE Q4W or Q2W during the EP, ACR20 responses at Week 52 were 61% and 50%, respectively. Additional efficacy measures are depicted in the Table. The frequency of adverse events (AEs) in the EP is presented in the Table; the majority were mild or moderate in severity. Serious AEs occurred in 15 patients, and one death occurred in the EP population: a myocardial infarction in a PBO/IXE Q2W patient 502 days after starting IXE.