10 year period the annual proportion of patients did not significantly change neither for treatment with prednisolone (14.9%), synthetic DMARDs (53.0%, Methotrexate 38.5%) or biologics (29.9%), this both for TNF (28.1%) and non-TNF inhibitors (1.8%).

Conclusions: Despite obvious limitations using disease activity measures (28 joint count, DAS28 and CDAI) designed for use in RA, our study indicate that disease activity decreased in our PsA outpatients over the 10 year period. This despite no significant change in proportions of patients treated with sDMARDs and bDMARDs. For PROMs no significant changes was seen. With new available outcome measures designed for use in PsA and more treatment options available e.g. secukinumab (IL17 inhibition) and ustekinumab (IL12/23) and tofacitinib (JAK inhibitor) further improvements in clinical outcomes both for disease activity and patient perception can be expected.

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THU0310 BIOLOGIC DISEASE-MODIFYING ANTIRHEUMATIC DRUGS IN PSORIATIC ARTHRITIS: A REAL-WORLD COHORT OF 439 PATIENTS

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Background: For more than 15 years, severe psoriatic arthritis (PsA) has been treated only by TNF inhibitors. Two new Biologic Disease-modifying Antirheumatic Drugs (bDMARDs) have recently arrived on the market with different targets: IL12–23 for ustekinumab and IL 17 for secukinumab. Few studies exist with a large number of patients and with required hindsight.

Objectives: The objective was to assess drug survival in an observational cohort of 630 PsA depending on the line of treatment and to analyse the reasons of discontinuation.

Methods: This is a retrospective, multicentric observational study based on the data of the registry RIC Nord de France, from patients suffering from PsA (CASPAR criteria) and treated by bDMARDs from January 2000 to August 2017. Drug survival is defined as the time from initiation to discontinuation (stop/switch) of biologic therapy on the registry. The number of patients who discontinued each treatment and the duration of therapy were recorded. Using Kaplan-Meier survival curves and Cox-regression analyses [hazard ratios (HR) and 95% confidence intervals (CIs)], time to discontinuation was compared across cohorts undergoing first-, second- or third-line treatment.

Abstract THU0310 – Figure 1. Drug survival of biotherapies at first-line treatment

Results: Out of 630 PsA, 439 were included with a mean follow up greater than or equal to 6 months. The sex ratio was balanced with 47% of women. The mean age was 54.5 years old and the body mass index (BMI) was 28.7 kg/m². The disease duration was 14.25 years. 51.6% of patients did not smoke. The DAS-28

CRP was 3.99 at the initiation of the biotherapy. The drug survival of the TNF inhibitors was similar at first-line treatment (n=439 patients) (figure 1) and at second-line treatment (n=238 patients). The drug survival of infliximab was statistically longer at third-line treatment (n=209) (p<0.0001), as the drug survival of TNF inhibitors compared to non TNF inhibitor biotherapies (ustekinumab and secukinumab) (p0.011). There was no impact of the age, the sex or the BMI on the drug survival. The discontinuation was mainly due to primary and secondary failure at first-line (respectively 33.33% and 33.71%) and to adverse events at second- and third-line (respectively 30.22% and 44.55%).

Conclusions: The results of the large observational study confirm those of the clinical trials, especially for the patients with failing initial TNF inhibitor therapy.

Disclosure of Interest: None declared

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THU0311 IMPACT OF SECUKINUMAB TREATMENT ON PSORIATIC ARTHRITIS PATIENTS WITH OR WITHOUT ENTHESITIS AT BASELINE: POOLED DATA FROM TWO PHASE 3 STUDIES (FUTURE 2 AND FUTURE 3)

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Background: Enthesitis is a common phenotypic manifestation of psoriatic arthritis (PsA) affecting approximately 70% of patients (pts) and may be associated with worse outcomes. ¹ Secukinumab (SEC), a fully human monoclonal antibody that selectively neutralises IL-17A, provided significant and sustained improvement in the signs and symptoms of active PsA, with sustained resolution of enthesitis in Phase 3 studies.^{2,3}

Objectives: To report the impact of SEC treatment on efficacy outcome measures in active PsA pts with or without baseline (BL) enthesitis (defined by Leeds Enthesitis Index) using pooled data from the FUTURE 2 (NCT01752634) and FUTURE 3 (NCT01989468) studies over 2 years.

Methods: SEC and placebo (PBO) were administered weekly during the first 4 weeks (wks) followed by subcutaneous maintenance dosing every 4 wks thereafter (PBO until Wk 16/24). The results are reported only for SEC 300 and 150 mg (approved doses). Efficacy outcomes (ACR20/50/70, PASI 90, HAQ-DI, SF-36 PCS and DAS28-CRP) were analysed *post-hoc* in pts with enthesitis at BL (BLE; n=466) or without enthesitis at BL (No BLE; n=246). Observed data are presented for binary variables and least-square (LS) means from analysis of covariance for continuous variables.

Results: A total of 65% of pts had BLE. BL demographics were balanced between the BLE and No BLE groups except for a higher proportion of females and numerically higher tender joint count, disability (HAQ-DI) and lower physical function (SF-36 PCS) in BLE pts than No BLE pts. At Wk 16, improvements in ACR and PASI responses, HAQ-DI, SF-36 PCS and DAS28-CRP were similar in both groups treated with SEC 300 mg, but were lower (except for PASI) in BLE pts treated with SEC 150 mg (table 1). Improvements in these outcomes followed a similar trend to Wk 104 in SEC-treated pts (table 1).

Abstract THU0311 – Table 1. Summary of Results with Secukinumab

	Wk	BLE			No BLE		
		300 mg	150 mg	PBO	300 mg	150 mg	PBO
ACR20 ^a	16	53.5	46.5	19.6	53.7	64.6	18.1
	104	56.8	52.4	-	62.6	62.9	-
ACR50 ^a	16	31.3	21.4	6.7	35.8	35.4	5.6
	104	44.7	24.8	-	47.3	34.3	-
ACR70 ^a	16	16.0	8.2	1.8	21.1	16.5	1.4
	104	26.5	15.2	-	34.1	21.4	-
PASI	16	50.0	36.6	7.9	42.1	37.0	6.7
	104	67.9	59.7	-	73.5	44.4	-
HAQ-DI ^d	16	-0.5	-0.3	-0.2	-0.5	-0.5	-0.2
	104	-0.5	-0.4	-	-0.5	-0.6	-
SF-36 PCS ^d	16	6.4	3.7	2.5	6.5	7.4	2.6
	104	7.4	4.3	-	6.6	6.9	-
DAS28- ^a	16	-1.5	-1.05	-0.5	-1.35	-1.6	-0.5
	104	-1.7	-1.6	-	-2.0	-1.9	-

^aResponse,%; ^bAt Wk 16/104, n=144/132 (SEC 300), 159/145 (SEC 150) and 163 (PBO) with enthesitis and n=95/91 (SEC 300), 79/70 (SEC 150) and 72 (PBO) without enthesitis at BL; ^cAt Wk 16/104, n=66/56 (SEC 300), 82/62 (SEC 150) and 63 (PBO) with enthesitis and n=38/34 (SEC 300), 46/36 (SEC 150) and 30 (PBO) without enthesitis at BL (psoriasis subset); ^dLS mean

Conclusions: Although pts with BLE had more severe BL clinical characteristics than pts with No BLE, SEC showed higher efficacy than PBO at Wk 16 and sustained efficacy over 104 wks in both groups with greater magnitude of improvement in pts treated with SEC 300 mg than 150 mg.

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THU0312

RISK OF INFECTION IN PATIENTS WITH PSORIASIS/ PSORIATIC ARTHRITIS: A POPULATION-BASED STUDY IN THE PROVINCE OF BRITISH COLUMBIA

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Background: Psoriasis (PsO) is a chronic autoimmune disease of the skin with a third of patients (pts) also developing inflammatory arthritis (PsA), which can lead to joint destruction. Research suggests that pts with PsA have an increased risk of complications (e.g. cardiovascular disease). There are limited data on the risk of infections among pts with PsO/PsA.

Objectives: To assess the risk of mild and severe infections in pts with newly diagnosed PsO/PsA in a general population.

Methods: Using administrative health data from British Columbia (Canada) we developed an incident cohort of pts diagnosed with PsO/PsA between 1996 and 2013, with equal control pts matched on sex, age and calendar year. PsO/PsA cases were determined by: a) one International Classification of Diseases code (696.X) for PsO/PsA assessed by a rheumatologist or dermatologist; b) ≥2 diagnostic codes for PsO/PsA, ≥2 months apart in a 2 year period assessed by a non-rheumatologist or dermatologist; c) ≥1 hospitalisation with a diagnostic code for

PsO/PsA. Individuals with a history of HIV or tuberculosis were excluded. Outcomes were mild infections (requiring a physician visit and antibiotics) or serious infections (requiring hospitalisation). Adjusted risks of these infections were estimated using generalised estimating equation extensions of multivariate Poisson regression models.

Results: We identified 84 616 newly diagnosed pts with PsO/PsA (51.6% female; mean age 49.5 years [SD: 18.2]) who were matched with an equal non-PsO/PsA cohort. Pts with PsO/PsA had a higher risk of developing mild infections during follow-up, including HIV (2.6-fold) and mycosis (2-fold), compared with the general population. PsO/PsA also increased the risk of severe infections including *Chlamydia* (1.7-fold) and viral diseases with exanthema (2.6-fold) (table 1).

P-Y=patient years

Conclusions: This large epidemiological study demonstrates that pts with PsO/PsA are at significantly higher risk of acquiring infections. The role of therapy for PsO/PsA on the risk of these infections needs to be evaluated.

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THU0313

IXEKIZUMAB IMPROVES NAIL AND SKIN LESIONS THROUGH 52 WEEKS IN PATIENTS WITH ACTIVE PSORIATIC ARTHRITIS AND INADEQUATE RESPONSE TO TUMOUR NECROSIS FACTOR INHIBITORS

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Background: Ixekizumab (IXE) is a high-affinity monoclonal antibody selectively targeting interleukin-17A. Compared to placebo (PBO), IXE resulted in significantly greater reduction and clearance of fingernail and skin lesions at Wk 24 in patients (pts) with active psoriatic arthritis (PsA) and inadequate response (IR) to tumour necrosis factor inhibitors (TNF-i).¹

Objectives: This analysis examined the persistence of effect at 1 year.

Methods: In this Phase 3, double-blind trial (SPIRIT-P2; NCT02349295), pts with active PsA who were TNF-i-IR were randomised to PBO or 80 mg IXE SC every 2 or 4 Wks (IXEQ2W, IXEQ4W), after a 160 mg starting dose.² At Wk 16, pts with IR to treatment (ERB supplement defined) received rescue therapy and pts on PBO

Abstract THU0312 – Table 1. Incidence Rate (IR) and Rate Ratio (RR) of Mild and Severe Infections Among PsO/PsA Pts Compared With the General Population

Outcomes	PsO/PsA cohort		Mild infections Non-PsO/PsA cohort		RR (95% CI)	Severe infections PsO/PsA cohort		Non-PsO/PsA cohort		RR (95% CI)
	n	IR (per 100K P-Y)	n	IR (per 100K P-Y)		n	IR (per 100K P-Y)	n	IR (per 100K P-Y)	
Viral diseases with exanthema	5612	912.7	3735	611.3	1.49 (1.43–1.56)	47	7.3	18	2.9	2.56 (1.49–4.40)
HIV-related infections	119	18.6	41	6.5	2.63 (1.91–3.63)	–	–	–	–	–
Intestinal infections	3659	587	2420	392.5	1.50 (1.42–1.57)	835	130.6	508	81	1.61 (1.44–1.80)
Mycoses	5318	867.9	2520	409.3	2.12 (2.02–2.22)	–	–	–	–	–
Poliomyelitis	78	12.2	48	7.6	1.59 (1.11–2.28)	–	–	–	–	–
Syphilis venereal	514	80.4	391	62.4	1.29 (1.13–1.47)	–	–	–	–	–
Tuberculosis	340	53.1	212	33.8	1.52 (1.29–1.79)	–	–	–	–	–
<i>Chlamydia</i>	3580	575.8	2140	346.8	1.66 (1.57–1.75)	113	17.6	67	10.7	1.65 (1.22–2.23)
Zoonotic	73	11.4	48	7.6	1.49 (1.03–2.14)	–	–	–	–	–
Pneumonia	9622	1613.1	6306	1053.4	1.53 (1.48–1.58)	1685	264.8	1236	198	1.34 (1.24–1.44)
Intracranial abscess	37	5.8	18	2.9	2.01 (1.15–3.53)	–	–	–	–	–
Rickettsioses	140	21.8	97	15.5	1.41 (1.09–1.83)	–	–	–	–	–
Helminthiasis	110	17.2	77	12.3	1.40 (1.05–1.87)	–	–	–	–	–