treatments with abatacept, tocilizumab, rituximab or ustekinumab were recorded.

Average baseline BASDAI was 6.54 (0.4-12.8), and 5.01 (0-10) after 6 mo SCK therapy. Baseline BASFI was 5.8 (0.4-10) and 4.8 (0-9.6) at 6 months. Adverse events did not differ from those reported in clinical trials.

Conclusion: Population receiving SCK in real-world setting is different to clinical trials: more complex patients, with higher disease activity, higher use of previous bDMARDs and higher comorbidity, particularly cardiovascular risk, infections or malignancy that could preclude the use of other biologic therapies. A relevant percentage of off-label prescription in nrAx-SpA is reported. Further studies are needed to characterize this population and its clinical response and tolerability to SCK therapy.

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AB0702

TREATMENT EFFECT OF TUMOR NECROSIS FACTOR α INHIBITORS ON MAGNETIC RESONANCE IMAGING PROGRESSION IN PATIENTS WITH SPONDYLOARTHRITIS: A META-ANALYSIS

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Background: Treatment effect of tumor necrosis factor α inhibitors (TNFi) in patients with spondyloarthritis (SpA) had been proved by plenty of studies that could remarkably eliminate symptoms, signs, and laboratory inflammatory manifestations [1,2]. Simultaneously, the treatment effect of TNFi on delaying radiographic progression in SpA was often reported [3,4], including magnetic resonance imaging (MRI) which has a high sensitivity on detecting the earliest inflammation [5].

Objectives: A meta-analysis was performed to summarize the treatment effect of TNFi on MRI progression reflected by SPARCC score in SpA patients

Methods: Comprehensive search was conducted in the electronic databases of OVID Medline, OVID EMBASE and Cochrane library on Nov.27, 2018. All randomized controlled trials (RCTs) focused on MRI progression and disease activity in SpA patients treated with TNFi were included. Primary outcome was the Spondyloarthritis Research Consortium Canad (SPARCC) MRI scoring system, accompanied with or without other outcomes, including Ankylosing Spondylitis Disease Activity Score (ASDAS), Bath Ankylosing Spondylitis disease activity index (BASDAI), Bath Ankylosing Spondylitis functional index (BASFI), C-reactive protein (CRP). Data were pooled by mean differences (MD) with 95% confidence intervals (CI) and publication bias was assessed by funnel plot. Sensitivity analysis was performed to test the result robustness. Jadad scale was applied to assess the methodology quality of included trials. Two reviewers independently selected studies, extracted data, and assessed study quality.

Results: Totally 10 RCTs enrolled 1006 patients with high methodology were included. Compared with control group, TNFi significantly improved SPARCC score at sacroiliac joint (SIJ) (MD=2.84, 95% CI 2.43-3.25), SPARCC score of spine (MD=1.87, 95% CI 1.27-2.46), ASDAS (MD=0.96, 95% CI 0.71-1.20), BASDAI (MD=1.15, 95% CI 0.51-1.78), BASFI (MD=0.95, 95% CI 0.51-1.40), and CRP (MD=4.64, 95% CI 1.06-8.23) in double-blind phase. Subgroup analyses by disease subgroup and individual TNFi showed treatment effect of TNFi on delaying MRI progression was not affected by disease subgroup and individual TNFi. Sensitivity analysis showed the treatment effects of TNFi versus placebo were consistent with TNFi versus controls, suggesting the results of the study were robust. The funnel plot of SPARCC score at SIJ based on TNFi versus control in double-blind phase was asymmetric, suggesting there might have potential publication bias.

Conclusion: TNFi are effective to treat SpA patients and delay MRI progression which are assessed by SPARCC score and treatment effect is consistent among disease subgroups and individual TNFi.

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AB0703

INFLAMMATORY BOWEL DISEASES AMONG SECUKINUMAB-TREATED PATIENTS: FIRST RESULTS OF THE MISSIL REGISTRY

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Background: Interleukin 17 (IL17) blockade is a therapeutic alternative for patients who are Tumor Necrosis Factor inhibitor-Inadequate Responders. However, in randomized controlled trials, cases of de novo inflammatory bowel diseases (IBD) have been reported in patients treated by IL17 inhibitors.

Objectives: To describe patients treated by IL 17 inhibitors developing new onset IBD (Crohn's disease and ulcerative colitis).

Methods: A French national registry called MISSIL was started in February 2018 to collect the cases of these patients. This registry is conducted by rheumatologist, dermatologist and gastroenterologist learned societies specialized on immune-mediated inflammatory diseases (IMID). In France, secukinumab has been granted market authorization in June 2016 and ixekizumab in April 2018.

Results: 12 cases were reported between February and December 2018 : 11 patients with new onset Crohn's disease and one with ulcerative colitis. Mean age was 51 $\pm$ 14.3 years old and 8/12 were female. 6 presented an axial spondyloarthritis, 3 a peripheral spondyloarthritis and 3 both. 9/10 were HLA-B27 positive. 4/10 have a radiographic sacroiliitis and 3/10 a MRI sacroiliitis. Only one was biological Disease-modifying antirheumatic drug (bDMARD)-naïve. Crohn's disease was mainly located at the ileum, colon and rectum. The mean time to onset of symptoms was 4.9 $\pm$ 5.6 months. The main symptoms were diarrhoea, nausea and vomiting and loss of weight. Median CRP at the onset of symptoms was 107 mg/L (66.5-200.7). 9 patients underwent biopsies. 5 were in favour of Crohn's disease. IL17 inhibitors were consistently stopped. Patients were treated by corticosteroids (9/12), mesalazine (3/12), methotrexate (2/12), thiopurines (1/12), infliximab (3/12), adalimumab (1/12), golimumab (1/12), ustekinumab (3/12). The evolution was favourable under treatment with healing (5/12), improvement (4/12) or stabilization (1/12). One patient worsened under treatment and one died (massive myocardial infarction).

Conclusion: IBD under IL 17 inhibitors are rare and lead to discuss the potential iatrogenic role of IL 17 inhibitor drugs. Further cases and case control studies are needed to better characterize this complication and identify patients at risk to develop IBD under IL 17 inhibitor.

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AB0704

EFFECTIVENESS AND SAFETY OF INFLIXIMAB AND GOLIMUMAB IN ANKYLOSING SPONDYLITIS PATIENTS FROM A PROSPECTIVE OBSERVATIONAL REGISTRY

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Background: Long-term registries are essential to evaluate new therapies in a patient population that differs from clinical trial and usually varies over time.

Objectives: To describe the profile of ankylosing spondylitis (AS) patients treated with infliximab (IFX) or golimumab (GLM) treatment in Canadian routine care along with its long-term effectiveness and safety.

Methods: 810 AS patients treated with IFX or GLM were enrolled into the Biologic Treatment Registry Across Canada (BioTRAC) registry between 2005-2015 and 2010-2017, respectively. Study visits occurred at baseline and every 6 months thereafter, as needed per routine care. Effectiveness was assessed with changes in ASDAS, BASDAI, BASFI, MDGA, HAQ-DI, PtGA, back pain and acute phase reactants. Safety was evaluated with the incidence of adverse events (AEs) and drug survival rates.

Results: Of the 389 IFX- and 421 GLM-treated patients, the proportion of males were 62.7% and 59.1%, the mean age were 45.6 and 45.7 years and the mean disease duration were 8.6 and 6.0 years, respectively. Most patients were bio-naïve (>82.7%). Interestingly, we observed a significant decrease in disease duration in the IFX cohort from a median of 8.0 to 3.5 and 1.0 years in 2005-2008, 2009-2012 and 2013-2015, respectively ($p<0.001$). A reduction in baseline BASFI score (6.3 vs. 5.9 vs 5.1; $P=0.011$) and in the proportion of patient in ASDAS very high disease activity (48.4%, 43.8%, 30.3%; $p=0.004$) were also observed. As for the GLM cohort, most disease parameters including median disease duration (1.6 years), mean baseline BASFI (5.3) and the proportion of patients in ASDAS very high disease activity (48%) remained similar from 2010-2017.

Treatment with both IFX and GLM significantly improved all disease parameters over time ($P<0.001$) from baseline up to 120 and 84 months, respectively, with similar efficacy between agents.

AEs were reported for 67.9% and 70.5% (136 and 131 events/100 PYs) and SAEs for 15.4% and 8.1% (10.5 and 22.7 events/100 PYs) covering 1251.3 and 674.8 years of exposure for IFX- and GLM-treated patients, respectively. The most frequently occurring AEs (>7% of patient in either group) were upper respiratory tract infection, arthralgia and back pain. Two deaths occurred in IFX-treated patients (myocardial infarct, drowning) and two among GLM-treated patients (oropharyngeal cancer; neutropenia, staphylococcal/pseudomonas infections, septic shock).

The proportion of patients who discontinued treatment were 65.8% over a mean 3.2 years of exposure in the IFX cohort and 56.8% over 1.6 years in the GLM cohort.

Conclusion: Both IFX and GLM treatment significantly reduced disease activity and improved functionality in a similar fashion and were well tolerated in patients with AS. Differences in baseline characteristics over time demonstrate improvement in early diagnosis of AS and earlier access to biologic therapies.

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AB0705

AQUILA STUDY IN GERMANY – REAL WORLD ADHERENCE AND PERSISTENCE OF SECUKINUMAB TREATMENT IN ANKYLOSING SPONDYLITIS AND PSORIATIC ARTHRITIS PATIENTS – AN INTERIM ANALYSIS

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Background: Secukinumab (SEC) has been shown to be an effective treatment for patients (pts) with ankylosing spondylitis (AS) and psoriatic arthritis (PsA) in several phase III studies^{1,2}. Clinical studies reduce confounding factors, but do not guarantee the same results in real world where treating physicians deal with comorbidities, adherence and persistence challenges. Especially medication adherence has a direct impact on health outcomes. However, there is limited information on the adherence and persistence of SEC in routine care.

Objectives: The aim of this interim analysis is to report baseline (BL) characteristics and to assess adherence rate as well as treatment persistence of SEC in AS and PsA pts under real world conditions.

Methods: AQUILA is an ongoing, non-interventional study enrolling 2000 pts with active AS or PsA in Germany. Adherence was calculated as the proportion of the accumulated actual dose divided by the accumulated target dose (according to summary of product characteristics) during the maintenance phase (week 6 to 52). Adherence rate was calculated as the proportion of pts who achieved an adherence of >80% at wk 52. These calculations included pts who discontinued treatment with SEC; still ongoing pts were excluded from this interim analysis. Treatment persistence (time from study inclusion, i.e. date of informed consent, until treatment discontinuation) stratified by biologic/biosimilar (Bx) pretreatment was analyzed using Kaplan-Meier plots.

Results: This interim analysis describes 952 pts (AS n=311, PsA n=641) who were included at BL. In total, 51.4% (n=489) of the pts were female and 48.6% (n=463) male, mean age was 50.8 years, and 67.8% (n=645) were pretreated with Bx. At treatment start with SEC, pts presented with a number of extra-articular manifestations/comorbidities: plaque psoriasis 11.6% (n=36) in AS and 66.3% (n=425) in PsA, uveitis 6.4% (n=20) in AS and 1.7% (n=11) in PsA, depression 15.4% (n=48) in AS and 15.4% (n=99) in PsA, coronary heart disease 3.5% (n=11) in AS and 7.9% (n=51) in PsA, stroke 0.6% (n=2) in AS and 1.9% (n=12) in PsA, and heart insufficiency 1.6% (n=5) in AS and 3.0% (n=19) in PsA.

Adherence rates for SEC [95% CI] at week 52 were 64.5% [58.3,70.5] and 56.0% [51.5; 60.4] for AS and PsA, respectively.

In both AS and PsA, more Bx-pretreated pts discontinued treatment than Bx-naïve pts (AS: 38.0% versus 18.9%; PsA: 32.3% versus 20.7%). The most frequent reason for discontinuation was "adverse event/insufficient response/loss of efficacy" in both Bx-pretreated (n=73, 33.0%/n=111, 26.2%) as well as in Bx-naïve (n=10, 11.1%/n=34, 15.7%) AS/PsA pts. Moreover, Kaplan-Meier analysis showed that in both AS (Figure 1a) and PsA (Figure 1b) groups, Bx-naïve pts who received SEC as first line therapy had a higher persistence rate than those pretreated with Bx.