Results: In total, 6062 patients with PsA were included, contributing 8172 treatment starts (table 1). SEC was mainly used as 2nd or ≥3rd line treatment. The survival curves and 1-year treatment retention rates, stratified by line of treatment, were similar for SEC compared to the TNFi, with some differences between the different TNFi (fig 1, table 2). Adjusted hazard ratios (HR) also indicated similar risk of SEC withdrawal compared to ADA (table 2).

Table 1. Patient characteristics at treatment start

	1 st line		2 nd line		≥3 rd line	
	SEC N=164	TNFi N=3808	SEC N=273	TNFi N=1767	SEC N=767	TNFi N=1393
Females	48%	47%	44%	42%	36%	39%
Age, years	52 (13)	49 (13)	50 (12)	50 (13)	52 (12)	51 (12)
Disease duration, years	12 (10)	10 (10)	13 (10)	13 (10)	16 (10)	16 (10)
Swollen joint count 28	3 (4)	2 (3)	2 (3)	2 (3)	3 (4)	2 (3)
CRP, mg/L	10 (18)	10 (17)	7 (11)	9 (17)	13 (22)	11 (20)
Patient global score	57 (24)	58 (24)	60 (25)	59 (26)	68 (23)	65 (24)
Concomitant therapy						
csDMARD	30%	60%	41%	57%	49%	53%
Methotrexate	24%	49%	31%	48%	40%	44%
Sulphasalazine	2%	9%	5%	5%	4%	6%

Numbers are mean (SD) unless noted otherwise

Table 2. One year treatment retention and hazard of discontinuation for SEC and TNFi

Line of treatment	Drug	N	1 year treatment retention % (95% CI)	Adjusted HR (95% CI) for discontinuation
1 st line	ADA	569	73 (69-76)	Ref
	CZP	273	66 (60-72)	1.2 (0.9-1.6)
	ETN	1747	73 (71-75)	0.9 (0.7-1.1)
	GOL	212	67 (60-73)	1.2 (0.9-1.7)
	IFX	1007	62 (59-65)	1.4 (1.1-1.7)
2 nd line	SEC	164	72 (63-78)	1.0 (0.7-1.4)
	ADA	415	69 (63-73)	Ref
	CZP	176	51 (43-58)	1.6 (1.2-2.2)
	ETN	701	63 (59-66)	1.2 (0.9-1.5)
	GOL	151	69 (61-76)	0.9 (0.6-1.2)
≥3 rd line	IFX	324	65 (59-70)	1.0 (0.8-1.4)
	SEC	273	69 (62-74)	0.9 (0.7-1.2)
	ADA	346	67 (62-72)	Ref
	CZP	221	49 (42-56)	1.5 (1.2-2.0)
	ETN	372	62 (57-67)	1.1 (0.9-1.5)
	GOL	206	56 (49-63)	1.3 (1.0-1.8)
	IFX	248	57 (50-63)	1.3 (1.0-1.8)
	SEC	767	63 (59-67)	1.0 (0.8-1.3)

Conclusion: In this large study of bDMARD treatment of PsA in clinical practice, SEC was most often used as 2nd or ≥3rd line treatment, and the treatment retention of SEC was comparable with that of TNFi. Further analyses, taking into account other comorbidities, channeling and effectiveness will be presented.

Figure 1. Treatment retention for secukinumab and TNFi, stratified by 1st, 2nd and ≥3rd line of treatment.

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THU0395
EFFICACY OF IXEKIZUMAB ON DISEASE ACTIVITY AND QUALITY OF LIFE IN PATIENTS WITH ACTIVE NON-RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS AND OBJECTIVE SIGNS OF INFLAMMATION, STRATIFIED BY BASELINE CRP/SACROILIAC JOINT MRI STATUS

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Background: Ixekizumab (IXE), a high-affinity anti-interleukin-17A monoclonal antibody, is effective in patients (pts) with active non-radiographic axial spondyloarthritis (nr-axSpA), who had elevated C-reactive protein (CRP) and/or active sacroiliitis on magnetic resonance imaging (MRI).¹

Objectives: To determine if disease activity and patient-reported outcomes at Week 16 were similar between groups after stratifying pts by CRP/sacroiliac joint (SIJ) MRI status at baseline.

Methods: COAST-X (NCT02757352) included pts with active nr-axSpA and objective signs of inflammation, i.e. presence of sacroiliitis on MRI (Assessment of Spondyloarthritis International Society [ASAS]/ Outcome Measures in Rheumatology criteria) or elevation of serum CRP (>5.0mg/L). Pts were randomized 1:1:1 to receive subcutaneous 80mg IXE every 4 weeks (Q4W) or Q2W, or placebo (PBO). Depending on the baseline values of CRP and MRI SIJ (Spondyloarthritis Research Consortium of Canada [SPARCC] score), pts in the intent-to-treat population (N=239) were divided into 3 subgroups (CRP >5 and MRI ≥2; CRP ≤5 and MRI ≥2; CRP >5 and MRI <2). Logistic regression analysis with treatment, subgroup, and treatment-by-subgroup interaction was used to detect treatment group differences in ASAS40, Ankylosing Spondylitis Disease Activity Score (ASDAS) <2.1 (low disease activity), and Bath Ankylosing Spondylitis Disease Activity Index 50 (BASDAI50) responses at Week 16. Analysis of covariance model with baseline value, treatment, subgroup, and treatment-by-subgroup interaction was used to detect the treatment group difference in change from baseline in Short Form-36 physical component score (SF-36 PCS).

Results: The proportion of pts achieving ASAS40 (primary endpoint), ASDAS <2.1, and BASDAI50 (secondary endpoints) was higher in IXE treatment groups compared to PBO at Week 16 (Figure 1). The response rates in IXE-treated subjects were higher in all subgroups (CRP >5 and MRI ≥2; CRP ≤5 and MRI ≥2; CRP >5 and MRI <2) without consistent differences in efficacy between the subgroups. Similarly, pts in the IXE groups showed improvement in SF-36 PCS scores (secondary endpoint) versus pts on PBO at Week 16 (Figure 2).

Conclusion: Pts with active nr-axSpA and objective signs of inflammation at baseline who were treated with IXE showed an overall improvement in the signs and symptoms of the disease. The efficacy was not different between pts with both elevated CRP and active sacroiliitis on MRI and pts with either elevated CRP or active sacroiliitis on MRI.

Figure 1: Disease Activity and Patient-Reported Outcomes (NRI) at Week 16 by Baseline CRP and MRI SIJ

SPARCC Score

* p<0.05, as compared to PBO. Data from ITT population in 3 subgroups, N=239. Baseline CRP is defined as the last CRP value prior to first study injection.

Abbreviations: ASAS40, Assessment of Spondyloarthritis International Society 40; ASDAS, Ankylosing Spondylitis Disease Activity Score; BASDAI50, Bath Ankylosing Spondylitis Disease Activity Index 50; CRP, C-reactive protein; ITT, intent-to-treat; IXE Q4W, ixekizumab every 4 weeks; IXE Q2W, ixekizumab every 2 weeks; MRI, magnetic resonance imaging; N, number of patients in the analysis population; NRI, non-responder imputation; Ns, number of patients in each subgroup; PBO, placebo; SIJ, sacroiliac joints; SPARCC, Spondyloarthritis Research Consortium of Canada Score.

Figure 2: Change from Baseline in SF-36 PCS Score at Week 16 by Baseline CRP and MRI SIJ SPARCC Score

* p<0.05, as compared to PBO. mBOC data provided as least square mean $\pm$ standard error from ITT population in 3 subgroups, N=239. Baseline CRP is defined as the last CRP value prior to first study injection.

Abbreviations: CRP, C-reactive protein; ITT, intent-to-treat; IXE Q4W, ixekizumab every 4 weeks; IXE Q2W, ixekizumab every 2 weeks; mBOC, modified baseline observation carried forward; MRI, magnetic resonance imaging; N, number of patients in the analysis population; Ns, number of patients in each subgroup; PBO, placebo; SF-36 PCS, Short Form-36 physical component score; SIJ, sacroiliac joints; SPARCC, Spondyloarthritis Research Consortium of Canada Score.

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THU0396

IMPACT OF IXEKIZUMAB ON WORK PRODUCTIVITY IN PATIENTS WITH ANKYLOSING SPONDYLITIS: RESULTS FROM THE COAST-V AND COAST-W TRIALS AT 52 WEEKS

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Background: Patients with ankylosing spondylitis (AS) are burdened with decreased work productivity.¹ Ixekizumab (IXE), a high-affinity monoclonal antibody selectively targeting interleukin-17A, has been shown to improve disease signs and symptoms in 2 phase 3 trials assessing patients with active AS.^{2,3}

Objectives: This study investigated the effect of IXE treatment for 52 weeks on work productivity and activity impairment as measured by absenteeism, presenteeism, overall work impairment, and activity impairment in patients with active AS.

Methods: COAST-V (NCT02696785) and COAST-W (NCT02696798) were phase 3, multicenter, randomized, double-blind, placebo (PBO)-controlled (COAST-V active-controlled with adalimumab) trials investigating the efficacy of IXE every 4 weeks (Q4W) and every 2 weeks (Q2W) in 341 patients with active AS naïve to biologic disease-modifying antirheumatic drugs (bDMARDs; COAST-V) and in 316 patients who were inadequate responders or intolerant to 1 or 2 tumor necrosis factor inhibitors (TNFi; COAST-W). Patients receiving PBO were switched to IXE Q4W or Q2W at Week 16; patients receiving adalimumab (ADA) were switched to IXE Q4W or Q2W at Week 20. Data for IXE Q4W and Q2W were combined for PBO/IXE and ADA/IXE groups. Changes from baseline in work productivity were measured for those reporting full- or part-time work at Weeks 16 and 52 with the Work Productivity and Activity Impairment (WPAI) Questionnaire for Spondyloarthritis.

Results: Compared to bDMARD-naïve patients (COAST-V), TNFi-experienced patients (COAST-W) were slightly older, had longer disease duration, reported less paid employment, and had greater scores for impaired work productivity, signifying more severe baseline disease. At Week 16, bDMARD-naïve patients treated with IXE Q4W or Q2W had significant improvements in activity impairment compared to placebo (p<0.01); TNFi-experienced patients treated with IXE Q4W or Q2W had significant improvements in presenteeism (p<0.05) and overall work impairment (p<0.05; Figure). TNFi-experienced patients treated with IXE Q2W also had significant improvement in activity impairment at Week 16 (p<0.05; Figure). Improvements were sustained through Week 52 (Figure).

Conclusion: Both bDMARD-naïve and TNFi-experienced patients with AS receiving IXE had greater improvements in aspects of work productivity compared to placebo. Improvements were sustained through Week 52.

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