and modified baseline observation carried forward for continuous data. Safety data were analyzed for all patients who received ≥ 1 dose of IXE.

Table 1. Demographic and efficacy results for patients continuously treated with IXE for 116 weeks

	IXE Q4W N=157		IXE Q2W N=195	
Demographics				
Age	42.7 (13.0)		41.8 (11.2)	
Male (n, [%])	124 (79.0)		132 (67.7)	
Baseline ASDAS	3.92 (0.80)		3.95 (0.76)	
Baseline BASDAI	7.07 (1.26)		7.18 (1.35)	
Baseline BASFI	6.57 (1.76)		6.74 (1.86)	
Baseline BASMI	4.08 (1.46)		3.97 (1.52)	
Baseline SF-36 PCS	33.90 (7.27)		33.26 (6.88)	
Outcome measure				
Response (n, [%])	Week 52	Week 116	Week 52	Week 116
ASDAS <2.1	75 (47.8)	69 (43.9)	88 (45.1)	96 (49.2)
ASAS partial remission	34 (21.7)	31 (19.7)	35 (17.9)	39 (20.0)
ASAS40	82 (52.2)	89 (56.7)	99 (50.8)	108 (55.4)
BASDAI50	78 (49.7)	75 (47.8)	83 (42.6)	99 (50.8)
Change from baseline				
ASDAS	-1.64 (1.05)	-1.60 (1.15)	-1.63 (1.03)	-1.78 (1.04)
BASFI	-2.88 (2.31)	-2.76 (2.39)	-2.83 (2.38)	-3.15 (2.34)
BASMI	-0.57 (0.95)	-0.57 (0.93)	-0.53 (0.92)	-0.60 (1.00)
SF-36 PCS	9.03 (8.62)	8.43 (8.70)	8.87 (7.57)	9.86 (8.45)

Data are mean (SD) unless otherwise noted. Non-responder imputation was used for categorical variables, and modified baseline observation carried forward for continuous variables.

Results: Of the 773 patients enrolled in COAST-Y, 86.0% completed Week 116 of treatment (52 weeks of one of the originating trials and 64 weeks of COAST-Y). Among the patients continuously treated with IXE for 116 weeks (IXE Q4W: N=157; IXE Q2W: N=195), 46.9% achieved low disease activity (ASDAS <2.1), and 19.9% achieved ASAS partial remission at 116 weeks (Table 1; Figure 1). In comparison to baseline, 56.0% achieved ASAS40 (Table 1). The mean change from baseline at Week 116 was -1.70 for ASDAS, -2.98 for BASFI, and 9.22 for SF-36 Physical Component Summary (Table 1). Similar observed responses were achieved between the patients continuously treated with IXE and patients initially treated with placebo or adalimumab. For the 932 patients in the safety population, no new safety signals were identified.

Conclusion: Ixekizumab treatment led to consistent and sustained long-term improvements in disease activity and quality of life in patients with r- and nr-ax-SpA, with no new safety signals after up to 2 years of treatment.

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Figure: ASDAS <2.1 responses for patients continuously treated with IXE for 116 weeks

Non-responder imputation was used for ASDAS <2.1.

Abbreviations (Table and Figure): ASAS40=achieving 40% improvement in Assessment of SpondyloArthritis International Society (ASAS) criteria; ASDAS=Ankylosing Spondylitis Disease Activity Score; BASDAI50=achieving 50% improvement in Bath Ankylosing Spondylitis Disease Activity Index; BASFI=Bath Ankylosing Spondylitis Functional Index; BASMI=Bath Ankylosing Spondylitis Metrology Index; IXE=ixekizumab; Q2W=every 2 weeks; Q4W=every 4 weeks; SF-36 PCS=36-item Short-Form Health Survey Physical Component Summary.

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POS0913 UVEAL CATARACT IN PATIENTS WITH SPONDYLOARTHRITIS AND OTHER IMMUNO-INFLAMMATORY DISEASES AND ITS SURGICAL TREATMENT

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Background: Uveitis is a common extra-skeletal manifestation of various systemic diseases, in particular, spondyloarthritis (SpA). Uveal cataract is the frequent complication of endogenous uveitis. Surgical treatment of uveal cataracts is associated with certain problems, the main being a potential risk of recurrence of uveitis, especially in the case of intraocular lens (IOL) implantation.

Objectives: To analyse the results of surgery of complicated uveal cataract in patients with SpA and other rheumatic disorders.

Methods: 30 pts (34 eyes) with uveal cataract as a result of systemic immuno-inflammatory diseases were assessed in the "Research Institute of Eye Diseases" in the period from 2006 to 2018. The postoperative follow-up period ranged from 2 to 12 years. 20 pts had different variants of SpA (Group 1): 7 (7 eyes) - ankylosing spondylitis, 1 (1 eye) - reactive arthritis, 1 (1 eye) - psoriatic arthritis, 4 (6 eyes) - juvenile spondyloarthritis, 8 (8 eyes) non-radiological SpA. 10 patients (11 eyes) had other systemic diseases (Group 2): 1 (1 eye) Behcet's disease, 1 (1 eye) - multiple sclerosis, 3 (3 eyes) - Fuchs heterochromic cyclitis, 2 (2 eyes) - cutaneous psoriasis, and 3 (4 eyes) - uveitis of unknown etiology. 4 pts (6 eyes) with juvenile arthritis and pronounced corneal ribbon degeneration were underwent standard intracapsular cryoextraction of the cataract, followed by optical correction of aphakia using spectacle lenses. In other cases, ultrasound phacoemulsification with IOL implantation was used as a surgical aid. All patients had a period of uveitis remission before operation for at least 2 months. Anti-inflammatory therapy using local glucocorticoid and local and systemic nonsteroidal antiinflammatory drugs was prescribed 2 weeks before and within a month after the operation. Intra and postoperative complications, fluctuations in intraocular pressure (IOP), improvement of visual acuity, and the frequency of uveitis flares after surgery were assessed as the main criteria for analyzing the results of surgery.

Results: A statistically significant decrease in the number of uveitis exacerbations was observed in all pts: in group 1 - from 2.5 ± 0.65 to 1.2 ± 0.65 per year ($p < 0.0001$), in group 2 - from 2.55 ± 0.21 to 0.89 ± 0.21 per year ($p < 0.0001$), while there were no statistically significant differences between the groups ($p = 0.31$). Statistically significant increase in maximum visual acuity was observed in all groups: in group 1 - from 0.2 ± 0.38 to 0.58 ± 0.74 , $p < 0.0001$, in group 2 - from 0.24 ± 0.05 to 0.69 ± 0.07 , $p < 0.0001$. No complications were observed during operations. The phenomena of bullous keratopathy after intracapsular extraction were noted in 2 pts with juvenile arthritis and ribbon-like corneal degeneration. No progression of corneal changes was observed. Opacity in the central zone of the posterior capsule in the period from 2 to 24 months after surgery occurred in 7 cases. In all cases, laser dissection of the posterior lens capsule was performed. Transient increase in IOP in the early postoperative period, normalized by local hypotensive therapy, occurred in 8 cases in groups I. In the long-term follow-up period (2-24 months), persistent IOP decompensation occurred in 6

cases in groups 1 and in 3 cases in groups 2, which required various types of anti-glaucoma operations. Cystic macular edema developed in one case 5 months after surgery as a result of uveitis exacerbation and was stopped by corticosteroid therapy.

Conclusion: Surgery of uveal cataracts in pts with SpA and other immuno-inflammatory diseases providing adequate pre- and postoperative anti-inflammatory therapy improves visual acuity and reduces the frequency of uveitis relapses. Monitoring of IOP is necessary in the postoperative period.

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POS0914

IS THERE AN ASSOCIATION BETWEEN AUTOANTIBODIES INDUCTION AND LOSS OF THERAPEUTIC EFFICACY IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS AND PSORIATIC ARTHRITIS TREATED WITH ANTI-TNF- α AGENTS?

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Background: Induction of autoantibodies is frequently observed in patients treated with a TNF- α blocker. According to other authors, the incidence of induction of antinuclear antibodies (ANA) and anti-double stranded DNA antibodies (anti-dsDNA) varies between 23-57% and 9-33%, respectively. However, it is unknown whether the induction of these autoantibodies affects the pharmacokinetics and bioavailability of biotreatment and, consequently, reduces the efficacy and safety of the drug.

Objectives: To analyze if there is an association between autoantibodies induction and therapeutic efficacy in a monocentric cohort of patients with axial spondyloarthritis (axSpA) and psoriatic arthritis (PsA) treated with anti-TNF- α agents.

Methods: The authors performed a retrospective analysis of patients with axSpA and PsA treated in our University Hospital with a TNF- α blocker as first biologic agent, and analysed the autoantibodies induction rate after 12 (T12) and 24 (T24) months of therapy. Then, they investigated the influence of autoantibodies in therapeutic efficacy at T12 and T24. Clinical evaluation, laboratory findings including erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) and disease activity and functional scores (Bath Ankylosing Spondylitis Disease Activity Index – BASDAI, AS Disease Activity Score with CRP – ASDAS-CRP, Bath AS Functional Index – BASFI) were collected from reuma.pt and medical records. For PsA patients, Disease Activity Score-28-CRP (DAS28-CRP), Simple Disease Activity Index (SDAI), Clinical Disease Activity Index (CDAI) and Health Assessment Questionnaire (HAQ) scores were also collected. Patients with positive ANA (titer > 1/100) prior to anti-TNF- α therapy were excluded. Continuous variables were analyzed using a t-test and categorical variables using a Chi-square test. P-value <0.05 was considered statistically significant.

Results: In the axSpA group, 235 patients were included, 44.5% were females, mean age at diagnosis of 42.3 $\pm$ 12.4 years and median disease duration of 11.5 (IQR 6.0-21.0) years. Positive ANA were observed in 16.9% at T12 and 26.3% at T24 and positive anti-dsDNA in 3.4% at T12 and 3.8% at T24, with similar conversion rates between different anti-TNF drugs and no significant gender difference. A significant difference in ASDAS-CRP was found in axSpA patients with and without ANA at T12 (p=0.047). ASDAS-CRP was 1.16 times higher in patients with ANA comparing to patients without them. However, no difference was found in the others disease activity and functional scores at T12. Furthermore, no significant difference, including ASDAS-CRP, was found at T24. Also, there was no significant difference found when comparing patients with and without anti-dsDNA.

In the PsA group, 94 patients were included, 46.8% were females, mean age at diagnosis of 46.7 $\pm$ 11.7 years and median disease duration of 11.5 (IQR 6.5-16.5) years. Positive ANA were found in 14.9% at T12 and 21.3% at T24 and positive anti-dsDNA in 2.1% at T12 and 3.2% at T24. When comparing the groups with and without ANA and with and without anti-dsDNA at T12 and T24, no significant difference in disease activity and functional scores was found.

Conclusion: This study revealed high rates of serology conversion, similar to the rates described before. The authors found that ASDAS-CRP was higher in axSpA patients with ANA after 12 months of therapy. However, this difference was no longer evident after 24 months. No other significant difference was found

between patients with and without ANA or with and without anti-dsDNA. The authors consider that the induction of autoantibodies may interfere with the response to anti-TNF- α therapy in a short and initial period of time. Long-term follow-up data are lacking to say whether that influence will disappear consistently over the long run, as they observed after 12 months of therapy. However, they can state that, *a priori*, seroconversion should not lead to treatment suspension because of concerns about loss of efficacy.

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POS0915

SUSTAINABILITY OF IXEKIZUMAB RESPONSE AT THE INDIVIDUAL PATIENT LEVEL OVER TIME IN RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS

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Background: Ixekizumab (IXE) has demonstrated efficacy in treating the signs and symptoms of radiographic axial spondyloarthritis (r-axSpA) in patients (pts) up to week (Wk) 52 [1]. Pts may experience fluctuations in the improvements of their symptoms, which may impact their overall quality of life [2]. Providing data at the pt level is important to support consistency and sustainability of efficacy.

Objectives: To analyse IXE response for sustainability at the individual pt level, between Wks 16 and 52.

Methods: COAST-V (NCT02696785) and COAST-W (NCT02696798) were two phase 3, multicentre, randomised, double-blind, placebo-controlled studies (adalimumab was the active control in COAST-V). Pts with active r-axSpA who were either biologic disease modifying anti-rheumatic drug (bDMARD) naïve (COAST-V) or, inadequate responders or intolerant to up to 2 TNF inhibitors (COAST-W) received IXE every 4 weeks (Q4W) or every 2 weeks (Q2W). Only IXE Q4W pts were included in the present analysis (approved dosage for the indication). Separate analyses were conducted on pts who achieved either end-point; ASAS40 or ASDAS<2.1. The proportion (%) of pts who achieved either ASAS40 or ASDAS<2.1, at Wk 16 and at each visit out to Wk 52 (total of 8 visits) was assessed. Missing data were imputed as non-response. Heatmaps were used to depict the data analysed at the individual patient level across all visits.

Results: In COAST-V, 81 pts enrolled in the trial were initially randomised to IXE Q4W. Of those, 48% (N=39) of pts achieved ASAS40 at Wk 16 (Figure 1), of which 59% (N=23) maintained ASAS40 at every visit afterwards. In total, 85% (N=33) of the ASAS40 achievers at Wk 16 maintained ASAS40 with some (26% (N=10)) fluctuations, between ASAS40 and ASDAS20. In COAST-W, 114 pts enrolled in the trial were initially randomised to IXE Q4W. Of those, 25.4% (N=29) pts achieved ASAS40 at Wk 16, of which, 69% (N=20) maintained ASAS40 at every visit afterwards. In total, 83% (N=24), of the ASAS40 achievers at Wk 16 maintained ASAS40 with some (14% (N=4)) fluctuations, between ASAS40 and ASDAS20.

Of the 81 pts initially randomised to IXE Q4W in COAST-V, 35 pts achieved low disease activity (ASDAS<2.1, LDA) at Wk 16. Of those, 54% (N=19) of pts maintained LDA at every visit afterwards. In total, 91% (N=32) of the ASDAS-LDA

Figure 1. Heatmap diagram depicting the sustained effect of IXE over time at the pt level in pts with r-axSpA from COAST-V. Each row corresponds to an individual ASAS40 responder at Wk 16.