Table 1. Effectiveness of golimumab at 3 months in the GO-BEYOND-Italy study

Rheumatoid arthritis (n=38)		Psoriatic arthritis (n=91)		Axial spondyloarthritis (n=64)	
DAS28-CRP, mean (SD)	n=27	DAS28-CRP, mean (SD)	n=47	ASDAS-CRP, mean (SD)	n=44
V0 / V1	4.05 (0.8) / 3.10* (1.0)	V0 / V1	3.66 (1.0) / 2.79* (1.2)	V0 / V1	2.86 (1.0) / 2.33* (1.0)
V1: DAS28-CRP disease activity, n (%)	n=27	V1: EULAR response, n (%)	n=33	V1: ASDAS-CRP disease activity, n (%)	n=46
Remission	8 (29.6)	Good	16 (48.5)	Inactive disease	7 (15.2)
Low disease activity	6 (22.2)	Moderate	10 (30.3)	Low disease activity	12 (26.1)
Moderate disease activity	13 (48.1)	No response	7 (21.2)	High disease activity	22 (47.8)
				Very high disease activity	5 (10.9)
V1: EULAR response, n (%)	n=23	V1: MDA, n (%)	n=75		
Good	7 (30.4)	Yes	21 (28.0)	BASDAI, mean (SD)	n=50
Moderate	8 (34.8)			V0 / V1	5.99 (2.1) / 4.92 (2.3)*
No response	8 (34.8)			V1: BASDAI50, n (%)	7 (14.0)
				ASAS-HI, mean (SD)	n=48
				V0 / V1	10.67 (3.8) / 9.68 (4.6) ^Δ

*p value for the difference from V0 <0.01. ^Δ p for the difference from V0=0.032. Abbreviations: ASDAS: Ankylosing Spondylitis Disease Activity Score; ASAS-HI: Assessment of SpondyloArthritis international society Health Index; BASDAI: Bath Ankylosing Spondylitis Disease Activity Index; CRP: C-reactive protein; DAS: disease activity score; EULAR: European League Against Rheumatism; MDA: Minimal Disease Activity; SD: standard deviation; V0: baseline; V1: 3 months evaluation.

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AB0468 IS THE USE OF INTERLEUKIN 17 INHIBITORS IN SPONDYLOARTHRITIS RELATED TO THE CLINICAL MANIFESTATIONS? 12-MONTH EXPERIENCE OF ONE RHEUMATOLOGY CENTER

M. Khapsirokova¹, Z. Kolkhidova¹, S. Erdes², ¹V.A. Nasonova Research Institute of Rheumatology, Moscow, Clinic, Moscow, Russian Federation; ²V.A. Nasonova Research Institute of Rheumatology, Moscow, Russia., Clinic, Moscow, Russian Federation

Background: Therapy with interleukin 17 (iIL17) inhibitors in Russia is indicated for patients with ankylosing spondylitis (AS) or psoriatic arthritis (PSA). If standard therapy is ineffective in these diseases, both tumor necrosis factor inhibitors (iTNF) and iIL17 can be prescribed as the first biologics.

Objectives: To study the clinical features of patients with spondyloarthritis (SPA) who were first prescribed iIL17 in a rheumatology center for 12 months.

Methods: During the period from January to December 2019, iIL17 was initiated to 43 SPA patients. To compare the clinical picture, the study additionally included 40 SPA patients who were prescribed iTNF during the same period. The diagnosis of AS was based on the mNY criteria, and psoriatic arthritis was based on the CASPAR criteria. In the combined group of 83 patients, AS was in 52 (62.7%), and PSA – in 31; the age of patients was 39.3±10.8 years, and the duration of the disease was 15.1±8.2 years; men were 47 (56.6%).

Results: In the iIL17 group, AS had 23 (53.5%) patients, and PSA – 20 (46.5%), while in the iTNF group, respectively, 29 (72.5%) and 11 (27.5%; $\chi^2=3.2$, $p=0.76$). Among the patients who were prescribed iIL17, men were 29 (67%), and in the iTNF group – 18 (45%; $\chi^2=4.2$, $p=0.04$). In terms of activity indicators (ESR, CRP, BASDAI ASDAS-CRP), patients who were prescribed iIL17 or iTNF did not differ significantly from each other. Peripheral arthritis, dactylitis, and entesitis were observed with almost the same frequency in both groups. In the iIL17 group, there were almost 2 times more patients with psoriasis (53.5% and 25.0%; $p<0.05$) than in group iTNF and among them, significantly more frequent the patients had previous experience of iTNF treatment (41.9% and 17.5%; $p<0.05$). Disease-modifying antirheumatic drugs often received patients in iTNF group (80.0% and 48.8%; $p<0.05$).

Conclusion: Thus, in clinical practice iIL17 often prescribed for SPA male patients with psoriasis and previous treatment experience by iTNF. The activity of the disease and the presence of non-axial manifestations practically do not affect the choice of biological therapy.

Disclosure of Interests: None declared.

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AB0469 PROTON PUMP INHIBITORS MAY IMPAIR RESPONSE TO TNF-INHIBITORS IN SPONDYLOARTHRITIS PATIENTS

M. Masson¹, M. Kostine¹, T. Barnetche¹, A. Saraux², A. Ruyssen-Witrand³, T. Thomas⁴, D. Wendling⁵, M. E. Truchetet¹, C. Richez¹, T. Schaevebeke¹.

¹Bordeaux University Hospital, Rheumatology, Bordeaux, France; ²Brest University Hospital, Rheumatology, Brest, France; ³Toulouse University Hospital, Rheumatology, Toulouse, France; ⁴Saint-Etienne University Hospital, Rheumatology, Saint-Etienne, France; ⁵Besançon University Hospital, Rheumatology, Besançon, France

Background: Considering the potential role of the gut microbiota in the pathophysiology of spondyloarthritis (SpA) as in the therapeutic response to biologics (1), we evaluated the hypothesis that co-medications known to interfere with the gut microbiota could impair the therapeutic response to TNF-inhibitors (TNF-i) in SpA patients. This was first suggested by the results of a retrospective cohort showing that a co-medication with proton pump inhibitors (PPIs), non-steroidal anti-inflammatory drugs (NSAIDs) or antibiotics was significantly associated with a decreased chance to respond to a first TNF-i, independently of each other (2).

Objectives: To validate in a replication cohort the potential negative association between therapeutic response to TNF-i and co-medication with commonly used drugs.

Methods: Demographic information and disease characteristics were retrospectively collected. Patients were classified as responder (R) or non-responder (NR) according to the BASDAI (< 40/100) value at month 6 or to the clinician judgment (when BASDAI was not available). We collected all drugs known to interfere with the gut microbiota that were administered 1 month before and during the first 3 months of the TNF-i treatment. We only considered drugs given to more than 5% of patients. Univariate and multivariate analyses were performed to evaluate the relationship between co-medications, predictors of response known from literature and TNF-i response. All analyses were computed on STATA 13.1 with a statistically significant threshold of 0.05.

Results: We included from 4 different centres 185 patients having axial SpA with radiographic or magnetic sacroiliitis in 75% and 73% of cases, respectively. One third of them had peripheral involvement. 73% were B27 positive. TNF-i administrated were infliximab (8%), etanercept (22%), adalimumab (44%) golimumab (19%), certolizumab (7%). 127 patients (69%) were considered as R. 59.4% of patients who received NSAIDs were R, compared to 81% not treated with NSAIDs ($p<0.0001$). 43.3% of patients receiving PPIs were R compared to 83% of patients PPI free ($p<0.0001$). Differences were not significant for antibiotics, methotrexate (MTX), psychotic drugs and corticosteroids. Considering known predictors of response, a magnetic sacroiliitis and the age at TNF-i initiation were significantly associated with a higher proportion of R patients ($p=0.048$ and 0.018 respectively). In multivariate analysis, PPIs intake remained associated with a poorer response to a first TNF-i ($p<0.001$), even though 88% of patients exposed to PPIs received also NSAIDs.

	Univariate analysis	Multivariate analysis
	Odd Ratio (95% Confidence Interval)	
Gender	1.43 (0.76; 2.72)	
Disease duration	1.02 (0.99; 1.06)	
Age at TNF- α initiation	0.97 (0.95; 0.995)	0.97 (0.94; 0.999)
Magnetic sacroiliitis	0.46 (0.21; 0.99)	0.63 (0.26; 1.52)
Baseline BASDAI	1.02 (0.99; 1.04)	
Baseline CRP	0.99 (0.98; 1.02)	
Positive B27	0.81 (0.4; 1.68)	
Peripheral involvement	0.79 (0.4; 1.56)	
NSAIDs	2.91 (1.47; 5.77)	1.08 (0.41; 2.79)
PPIs	6.4 (3.25; 12.7)	6.9 (2.8; 17)
Antibiotics	1.87 (0.84; 4.16)	
Psychotics	1.94 (0.75; 4.97)	
Corticosteroids	1.11 (0.39; 3.11)	
Methotrexate	2.29 (0.97; 5.38)	

Conclusion: Co-medication with PPIs was considered as an independent factor associated with TNF- α failure. The hypothesis that this effect is due to their interference with the gut microbiota is only speculative but, regardless of the reason for this interaction, clinicians should be aware of the potential negative effect on TNF- α response.

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AB0470 EXPERIENCE WITH THE USE OF INTERLEUKIN 6 INHIBITOR IN SEVERE ANKYLOSING SPONDYLITIS

D. Rumiantseva¹, E. Agafonova¹, M. Urumova¹, S. Erdes¹. ¹V.A. Nasonova Research Institute of Rheumatology, Laboratory of Spondyloarthritis and Psoriatic Arthritis, Moscow, Russian Federation

Background: Inhibitors of interleukin 6 (IL6) have been found to be ineffective in ankylosing spondylitis (AS) based on the results of randomized clinical trials (RCTs) on tocilizumab (TCZ) and sarilumab [1, 2]. However, there is evidence that IL6 is actively involved in the pathogenesis of the disease [3]. In addition, the efficacy of IL6 inhibitors has been shown in patients with secondary AA amyloidosis [4].

Objectives: to analyze the effectiveness of IL6 inhibitor - TCZ in patients with AS with high disease activity and secondary AA-amyloidosis.

Methods: The analysis included 10 patients with AS receiving TCZ therapy, of which 8 (80%) men, 2 (20%) women, and 100% HLA B27 positive. The average age of the patients was 40 $\pm$ 8.6 years, the average age of disease onset was 13.4 $\pm$ 7.5 years, the average duration of AS was 25.6 $\pm$ 6.5 years. 9 patients had histologically confirmed secondary AA-amyloidosis: 100% had kidney amyloidosis, 6 (66.6%) patients also had gastrointestinal amyloidosis and 3 (33.4%) patients had heart amyloidosis. All patients had arthritis and coxitis.

Results: As the first biological drug, TCZ was prescribed to 2 patients due to the presence of manifestations of secondary AA-amyloidosis, and 8 patients had previous experience of treatment with one or more inhibitors of tumor necrosis factor- α (TNF- α). The average duration of TCZ treatment was 22.0 months [1.0; 36.0]. 8 (80%) patients continue to take TCZ therapy to date, and 2 (20%) - are transferred to TNF- α inhibitors. Table 1 shows the main clinical and laboratory characteristics of patients at the initiation of TCZ therapy and during the last

Table 1. The main clinical and laboratory characteristics of patients at the initiation and after of TCZ therapy.

	Before TCZ	After TCZ	p
CRP, Me [25%; 75%], mg/l	95.2 [52.2; 189.0]	10.8 [0.8; 8.0]	p<0,05
Proteinuria, Me [25%; 75%], g/day.	1,6 [1,0; 2,1]	0,08 [0; 0,3]	p<0,05
BASDAI, Mean (SD)	6,1 (1,6)	3,3 (0,9)	p<0,05
ASDAS CRP, Mean (SD)	4,3 (1,1)	2,2 (0,7)	p<0,05
IBP, N (%)	10 (100%)	2 (20%)	p<0,05
Arthritis, N (%)	10 (100%)	2 (20%)	p<0,05
Coxitis, N (%)	10 (100%)	5 (50%)	p<0,05
Enthesitis, N (%)	7 (70%)	6 (60%)	p>0,05

hospitalization at the V.A. Nasonova Research Institute of Rheumatology. As you can see, against the background of TCZ therapy, both the level of CRP, proteinuria and the indices of AS activity (BASDAI, ASDAS CRP) significantly decreased. The number of patients with inflammatory back pain (IBP), arthritis and coxitis also decreased significantly.

Conclusion: The above data showed that the method of treating AS with IL6 inhibitors, in certain clinical situations, primarily such as ineffectiveness of TNF- α inhibitors, high CRP level and the development of secondary AA-amyloidosis, can be highly effective. Therefore, it is advisable to continue the set of clinical observations on the treatment of especially severe patients with AS treated with non-standard methods.

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AB0471 PATIENTS WITH RADIOGRAPHIC axSpA WHO PROGRESSED FROM ASAS20 AT WEEK 16 TO ASAS40 AT WEEK 52: RESULTS FROM COAST-W

X. Baraliakos¹, A. Deodhar², S. Liu Leage³, Y. Schymura⁴, R. Bolce⁵, D. Sandoval⁶, J. A. Walsh⁶, J. Sieper⁷. ¹Ruhr-University Bochum, Rheumatology, Bochum, Germany; ²Oregon Health & Science University, Division of Arthritis & Rheumatic Diseases, Portland, United States of America; ³Eli Lilly and Company Corporate Center, Rheumatology, Indianapolis, United States of America; ⁴Eli Lilly and Company Corporate Center, Statistics, Indianapolis, United States of America; ⁵Eli Lilly and Company Corporate Center, Medical Affairs, Indianapolis, United States of America; ⁶University of Utah, Rheumatology, Salt Lake City, United States of America; ⁷Charité - Universitätsmedizin Berlin, Campus Benjamin Franklin, Rheumatology, Berlin, Germany

Background: The timeframe for maximum treatment response varies across patients with radiographic axial spondyloarthritis (r-axSpA). Understanding which patients may benefit from additional time on treatment could influence treatment decisions.

Objectives: This post-hoc analysis aims to determine the percentage of patients, previously exposed to TNFi, who progressed from ASAS20 at week 16 to ASAS40 response at week 52 with ixekizumab (IXE) treatment and to explore factors that may associate with additional improvement after 16 weeks.

Methods: Patients who achieved Assessment of SpondyloArthritis International Society (ASAS)20 at week 16 from COAST-W (NCT02696798), a Phase 3, randomized, double-blind, placebo-controlled trial, in tumour necrosis factor inhibitor (TNFi)-experienced patients who fulfilled the ASAS criteria for r-axSpA, were analysed. Patients treated with IXE 80mg Q4W were categorized according to their ASAS response at week 52: sustaining ASAS20 but not reaching an ASAS40 response or achieving ASAS40. Patient demographics and disease characteristics at baseline were analysed by descriptive statistics, and the individual components determining ASAS response at baseline and at week 52 are provided.

Results: At week 16, 22.8% (n=26/114) of patients achieved ASAS20 but not ASAS40; of these, 2 patients discontinued the study before week 52. Amongst the patients who continued through week 52, 50% (12/24) of patients achieved ASAS40; the other 50% sustained their ASAS20 response. Patients who achieved ASAS40 at week 52 were older, had longer disease duration, were less likely to be HLA-B27 positive, and had worse BASDAI and BASFI scores at baseline (Table 1, part a). Achieving ASAS40 appeared to depend most on the Patient Global Assessment of Disease Activity and spinal pain score over time (Table 1, part b).