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AB0466

RETENTION RATE AND EFFECTIVENESS OF SECUKINUMAB VERSUS TNF INHIBITOR SWITCHING IN ANKYLOSING SPONDYLITIS PATIENTS WITH A HISTORY OF TNF INHIBITOR TREATMENT: DATA FROM A KOREAN NATIONWIDE REGISTRY

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Background: The choice of second-line biologics for ankylosing spondylitis (AS) patients previously treated with a tumour necrosis factor inhibitor (TNFi) remains unclear

Objectives: Here, we compared drug retention and clinical efficacy between AS patients who switched biologics to secukinumab and those who switched to a different TNFi.

Methods: AS patients enrolled in the Korean College of Rheumatology BIOlogics registry were included. Patients with previous TNFi exposure were divided into the secukinumab group and the TNFi switching group. Drug retention and clinical efficacy (BASDAI50, ASAS20, ASAS40, ASDAS <2.1, ASDAS clinically important improvement, and ASDAS major improvement) were assessed at the 1 year follow-up. Propensity score (PS)-matched and covariate-adjusted logistic regression analyses were performed.

Results: 246 had available 1 year follow-up data. Secukinumab as third- or later-line biologics was more frequent than alternative TNFi (54% vs. 14%). PS-matched and multiple covariate-adjusted analyses showed that the odds ratio (OR) for drug discontinuation was comparable between the secukinumab and TNFi switching groups (OR=1.136; 95% CI, 0.843–1.531 and OR=1.000; 95% CI, 0.433–2.308, respectively). The proportion of patients who achieved BASDAI50 was also comparable between the two groups (OR=0.833; 95% CI, 0.481–1.441 in PS-matched analysis). Other clinical efficacy parameters were also comparable. In the subgroup analysis of AS patients with previous TNFi discontinuation due to ineffectiveness, all clinical efficacy parameters were comparable between the two groups.

Conclusion: In AS patients with previous exposure to a TNFi, switching biologics to secukinumab and switching to an alternative TNFi resulted in comparable drug retention and clinical efficacy.

REFERENCES:

- [1] Micheroli R, Tellenbach C, Scherer A, et al. Effectiveness of secukinumab versus an alternative TNF inhibitor in patients with axial spondyloarthritis previously exposed to TNF inhibitors in the Swiss Clinical Quality Management cohort. *Ann Rheum Dis* 2020;79:1203-9.

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AB0467

EFFECTIVENESS OF GOLIMUMAB AFTER TNF-INHIBITOR FAILURE IN PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS, PSORIATIC ARTHRITIS, OR AXIAL SPONDYLOARTHRITIS: RESULTS AT 3 MONTHS FROM THE GO-BEYOND ITALY STUDY

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Background: Golimumab showed trial efficacy in subjects with active rheumatoid arthritis (RA) previously treated with TNF-inhibitors (TNFi); no trial data are available for psoriatic arthritis (PsA) and axial spondyloarthritis (axSpA).

Objectives: To assess the effectiveness of golimumab after TNFi failure in patients with RA, PsA, or axSpA in a real-world setting.

Methods: GO-BEYOND-Italy is an ongoing, multicenter, prospective, observational study of RA, PsA, or axSpA patients starting golimumab after TNFi failure. Patients were enrolled between July 2017 and December 2019, and followed for 1 year, with evaluations at 3, 6, and 12 months. This interim analysis estimates the effectiveness after 3 months of golimumab therapy. Differences from baseline were tested by paired t-tests.

Results: 193 patients were enrolled: 38 (19.7%) with RA (median age 54 years; median disease duration 9.5 years), 91 (47.2%) with PsA (median age 53 years; median disease duration 9.0 years) and 64 (33.2%) with axSpA (median age 54 years; median disease duration 7.2 years). Majority of the RA (73.7%), PsA (51.6%) and axSpA (53.1%) were females. Previous TNFi treatment included etanercept (44.6% of patients), adalimumab (42.0%), infliximab (8.8%) and certolizumab (4.7%). The main reason for switching to golimumab was loss of efficacy of TNFi (78.9% in RA, 83.5% in PsA, 75% in axSpA). Comorbidities were highly prevalent (RA 65.8%, PsA 65.9%, axSpA 75%); hypertension (31.1%), dyslipidaemia (13.5%), fibromyalgia (10.4%) were the most common ones. DAS28-CRP significantly reduced in RA and PsA (p<0.01) after 3 months of treatment. In RA, rates of DAS28-CRP remission and low disease activity (LDA) were 29.6% and 22.2%, respectively, and 65.2% of patients achieved good/moderate EULAR response. As for PsA, good/moderate EULAR response was observed in 78.8% of patients and 28% of patients achieved minimal disease activity. In axSpA, ASDAS-CRP (p<0.01), BASDAI (p<0.01) and ASAS-HI (p=0.032) significantly reduced; rates of ASDAS-CRP inactive disease and LDA were 15.2% and 26.1%, respectively; 14% of patients had a ≥50% improvement in baseline BASDAI. After 3 months of golimumab treatment, there was a decrease in the prevalence of enthesitis (32.9% to 16.5%), nail (17.6% to 12.9%) and skin psoriasis (42.4% to 34.1%) in PsA patients; the frequency of extra articular manifestations tended to decrease also in axSpA patients.

Conclusion: Preliminary results of the GO-BEYOND-Italy study showed a good short-term effectiveness of golimumab in RA, PsA and axSpA after TNFi failure.

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. ^Δp 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

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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.

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AB0469

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

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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.