

with factors for treatment, baseline value, and randomization stratification. Least-squares mean changes from baseline and between-group differences with 95% confidence intervals were calculated.

**Results:** MRI scans from 87 patients with an evaluable MRI at baseline and Week 12 (or early termination visit) were re-evaluated (48 filgotinib, 39 placebo). Erosion scores decreased in the filgotinib group and increased in the placebo group ( $p=0.02$  for between-group difference; Table 1; Figure 1a). Backfill scores increased in the filgotinib group but not in the placebo group ( $p=0.005$ ; Table 1; Figure 1b). There was no statistically significant between-group difference in SSS total ankylosis ( $p=0.46$ ) or fat lesion ( $p=0.17$ ) changes from baseline (Table 1).

**Table 1. Summary of Spondyloarthritis Research Consortium of Canada Sacroiliac Joint Structural Scores.**

Score	Mean (SD) BL score	LSM change from BL (95% CI) at Week 12	LSM group difference at Week 12 (95% CI)
Erosion			
FIL 200 mg	3.38 (5.34)	-0.46 (-1.31, 0.40)	-1.01 (-1.87, -0.16)
PBO	2.62 (3.76)	0.56 (-0.31, 1.42)	[ $p=0.02$ ]
Backfill			
FIL 200 mg	1.02 (1.99)	0.76 (0.07, 1.45)	1.02 (0.32, 1.72)
PBO	1.35 (2.59)	-0.26 (-0.97, 0.45)	[ $p=0.005$ ]
Fat metaplasia			
FIL 200 mg	4.19 (6.06)	0.37 (-0.23, 0.97)	0.43 (-0.18, 1.03)
PBO	4.35 (5.44)	-0.06 (-0.67, 0.56)	[ $p=0.17$ ]
Ankylosis			
FIL 200 mg	9.58 (8.15)	0.14 (-0.02, 0.30)	0.06 (-0.10, 0.22)
PBO	9.83 (8.45)	0.08 (-0.08, 0.25)	[ $p=0.46$ ]

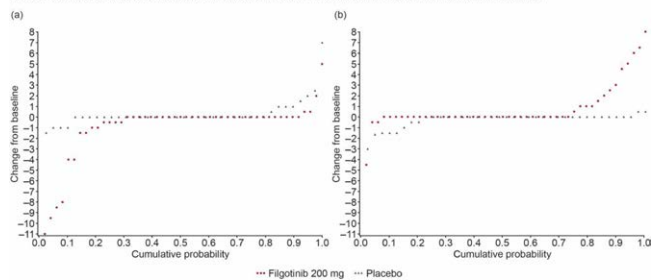
BL, baseline; CI, confidence interval; FIL, filgotinib; LSM, least-squares mean; PBO, placebo; SD, standard deviation

**Conclusion:** In addition to previously reported decreases in SPARCC inflammation, filgotinib was associated with significant reduction in SIJ erosion scores and increase in backfill scores at Week 12 of the TORTUGA trial, versus placebo. Long-term effects are to be determined.

#### References:

[1] van der Heijde D, et al. *Lancet* 2018;392:2378–87.

**Figure 1.** Cumulative probability of change from baseline to Week 12 in total erosion score (a) and total backfill score (b).



**Acknowledgments:** We thank Robert Lambert for his review of the MRI scans in the role of adjudicator. The TORTUGA trial was sponsored by Galapagos NV and co-funded by Galapagos NV and Gilead Sciences. Medical writing support was provided by Hannah Mace MPharmacol, CMPP (Aspire Scientific Ltd, Bollington, UK) and funded by Galapagos NV (Mechelen, Belgium).

**Disclosure of Interests:** Walter P. Maksymowych Grant/research support from: AbbVie, Novartis, Pfizer, and UCB, Consultant of: AbbVie, Boehringer Ingelheim, Celgene, Eli Lilly, Galapagos, Janssen, Novartis, Pfizer, and UCB, Employee of: Chief Medical Officer of CARE Arthritis Limited, Speakers bureau: AbbVie, Janssen, Novartis, Pfizer, and UCB, Mikkel Østergaard Grant/research support from: AbbVie, Bristol-Myers Squibb, Celgene, Merck, and Novartis, Consultant of: AbbVie, Bristol-Myers Squibb, Boehringer Ingelheim, Celgene, Eli Lilly, Hospira, Janssen, Merck, Novartis, Novo Nordisk, Orion, Pfizer, Regeneron, Roche, Sandoz, Sanofi, and UCB, Speakers bureau: AbbVie, Bristol-Myers Squibb, Boehringer Ingelheim, Celgene, Eli Lilly, Hospira, Janssen, Merck, Novartis, Novo Nordisk, Orion, Pfizer, Regeneron, Roche, Sandoz, Sanofi, and UCB, Robert B.M. Landewé Consultant of: AbbVie; AstraZeneca; Bristol-Myers Squibb; Eli Lilly & Co.; Galapagos NV; Novartis; Pfizer; UCB Pharma, William Barchuk Shareholder of: Gilead Sciences Inc and Eli Lilly, Employee of: Current employee of Gilead Sciences Inc and a former employee of AbbVie, Eli Lilly, and Johnson & Johnson, Ke Liu Shareholder of: Gilead Sciences Inc (stockholder), Employee of: Gilead Sciences Inc, Chantal Tasset Shareholder of: Galapagos (share/warrant holder), Employee of: Galapagos, Leen Gilles Consultant of: Galapagos, Thijs Hendriks Shareholder of:

Galapagos (share/warrant holder), Employee of: Galapagos, Robin Besuyen Shareholder of: Galapagos, Employee of: Galapagos, Xenofon Baraliakos Grant/research support from: Grant/research support from: AbbVie, BMS, Celgene, Chugai, Merck, Novartis, Pfizer, UCB and Werfen, Consultant of: AbbVie, BMS, Celgene, Chugai, Merck, Novartis, Pfizer, UCB and Werfen, Speakers bureau: AbbVie, BMS, Celgene, Chugai, Merck, Novartis, Pfizer, UCB and Werfen

DOI: 10.1136/annrheumdis-2020-eular.2553

THU0378

## DO COMORBIDITIES DECREASE THE FIRST TNF-INHIBITOR RETENTION AND TREATMENT RESPONSE IN AXIAL SPONDYLOARTHRITIS PATIENTS? DATA FROM TURKBIO

Y. Erez<sup>1</sup>, A. Karakas<sup>1</sup>, S. B. Kocaer<sup>1</sup>, T. Yüce Inel<sup>1</sup>, S. Gulle<sup>1</sup>, A. Köken Avşar<sup>1</sup>, S. Uslu<sup>1</sup>, G. Can<sup>1</sup>, İ. Sari<sup>1</sup>, M. Birlik<sup>1</sup>, E. Dalkılıç<sup>2</sup>, Y. Pehlivan<sup>2</sup>, S. Senel<sup>3</sup>, S. Akar<sup>4</sup>, S. S. Koca<sup>5</sup>, A. Tufan<sup>6</sup>, A. Yazici<sup>7</sup>, S. Yılmaz<sup>8</sup>, N. Inanc<sup>9</sup>, D. Solmaz<sup>4</sup>, N. Akkoc<sup>10</sup>, F. Onen<sup>1</sup> on behalf of TURKBIO Study Group. <sup>1</sup>Dokuz Eylül University Medical Faculty, Rheumatology, Izmir, Turkey; <sup>2</sup>Uludağ University, Rheumatology, Bursa, Turkey; <sup>3</sup>Erciyes University, Rheumatology, Kayseri, Turkey; <sup>4</sup>Katip Celebi University, Rheumatology, Izmir, Turkey; <sup>5</sup>Firat University, Rheumatology, Elazığ, Turkey; <sup>6</sup>Gazi University, Rheumatology, Ankara, Turkey; <sup>7</sup>Kocaeli University, Rheumatology, Kocaeli, Turkey; <sup>8</sup>Selçuk University, Rheumatology, Konya, Turkey; <sup>9</sup>Marmara University, Rheumatology, Istanbul, Turkey; <sup>10</sup>Celal Bayar University, Rheumatology, Manisa, Turkey

**Background:** The frequency of comorbidities has increased in spondyloarthritis patients compared to the general population. The effect of comorbidities on tumour necrosis factor alpha inhibitor (TNFi) drug retention and treatment response has not been well evaluated.

**Objectives:** The purpose of this study to assess the impact of comorbidities on the first TNFi drug survival and treatment response in patients with axial spondyloarthritis (axSpA) registered in the TURKBIO database.

**Methods:** In this study, the frequency of comorbidities, disease activity scores at baseline and month 6 and drug retention were recorded in AxSpA patients initiating first TNFi treatment between 2011 and 2019. Kaplan Meier plot and log rank tests were used for drug survival analysis. Cox regression analysis with HR was performed to evaluate the correlation between comorbidities and drug survival.

**Results:** There were 2428 patients with AxSpA (39.3% female) who used their first TNFi during the study period. Among them, a total of 770 (31%) had at least one comorbid disease. Hypertension was the most common comorbidity (9.7%), followed by the affective disorders (8%) and chronic lung disease (5.8%). The baseline characteristics of patients are shown in Table 1. The presence of any comorbidity did not impact the first TNFi retention (Figure 1). When comorbidities were analysed separately, we found that only history of cerebrovascular event was negatively associated with drug retention rate (HR: 6.9,  $p=0.008$ ). There was no statistically significant difference in Bath AS Disease Activity Index 50% (BASDAI50) response between patients with and without comorbidity at 6 months. Less axSpA patients with comorbidity achieved a ASDAS score  $\leq 2.1$  compared to patients without comorbidity at 6 months.

**Table 1. Baseline Characteristics of Patients**

Radiographic Spondyloarthritis, n (%)	2318 (95.5)
Female, n(%)	954 (39.3)
Age, year	42.2±11.8
Age at diagnosis, years	32.5± 11.3
Age at initial TNFi, years	39.4 ± 11.1
Symptom duration, years	9.7± 7.5
Time to initial TNFi, years	7±6.8
HLA-B27 positivity, n (%)	1144 (47.1)
Smokers, n (%)	1068 (44)
Baseline BASDAI	35.5±22.2
Baseline ASDAS-CRP	2.8±1.1
Baseline CRP (mg/L)	15.7±24.4
VAS global patient	46.6±28.7

-Quantitative variables are presented as mean ± SD, and qualitative variables are presented as frequency and percentage

-ASDAS-CRP, Ankylosing Spondylitis Disease Activity Score using C-reactive protein VAS, visual analogue scale

**Conclusion:** The results of this study demonstrated that the presence of previous cerebrovascular event decreased the first TNFi survival in patients with axSpA. It also suggested that comorbidities might decrease TNFi treatment response.

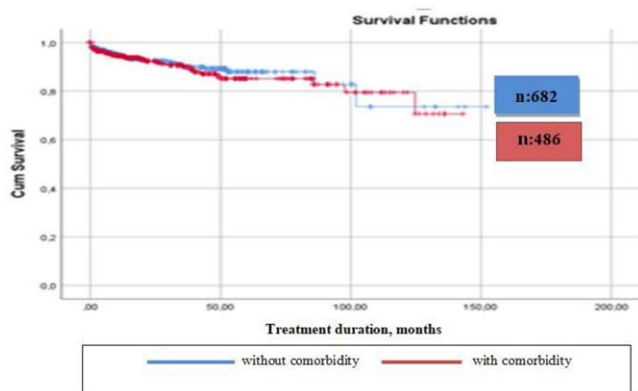


Figure 1. Drug survival of initial TNFi in AxSpA patients (p=0.56).

**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2020-eular.2925

THU0379

### REDUCTION OF ANTERIOR UVEITIS FLARES IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS FOLLOWING ONE YEAR OF TREATMENT WITH CERTOLIZUMAB PEGOL: 48-WEEK INTERIM RESULTS FROM A 96-WEEK OPEN-LABEL STUDY

I. Van der Horst-Bruinsma<sup>1</sup>, R. Van Bentum<sup>1</sup>, F. Verbraak<sup>1</sup>, T. Rath<sup>2</sup>, J. Rosenbaum<sup>3,4</sup>, M. Misterska-Skora<sup>5</sup>, B. Hoepken<sup>6</sup>, O. Irvin-Sellers<sup>7</sup>, B. Vanlunen<sup>8</sup>, L. Bauer<sup>6</sup>, M. Rudwaleit<sup>9,10</sup>. <sup>1</sup>Amsterdam University Medical Center, Amsterdam, Netherlands; <sup>2</sup>St Franziskus-Hospital, Münster, Germany; <sup>3</sup>Devers Eye Institute, Portland, United States of America; <sup>4</sup>Oregon Health and Science University, Portland, United States of America; <sup>5</sup>Wrocław Medical University, Wrocław, Poland; <sup>6</sup>UCB Pharma, Monheim am Rhein, Germany; <sup>7</sup>UCB Pharma, Slough, United Kingdom; <sup>8</sup>UCB Pharma, Raleigh, United States of America; <sup>9</sup>Klinikum Bielefeld and Charité, Berlin, Germany; <sup>10</sup>Ghent University, Ghent, Belgium

**Background:** Acute anterior uveitis (AAU), inflammation of the anterior uveal tract, is reported in up to 40% of patients (pts) with axial spondyloarthritis (axSpA).<sup>1</sup> AAU is associated with significant clinical burden; symptoms include blurred vision, photophobia and pain.<sup>2</sup> Previous studies have shown that TNF inhibitors (TNFi) can reduce AAU flare incidence in pts with radiographic axSpA,<sup>3-5</sup> but few have focused on pts across the full axSpA spectrum.

**Objectives:** To analyse the impact of certolizumab pegol (CZP) treatment on AAU in pts with active radiographic and non-radiographic axSpA and a recent history of AAU.

**Methods:** C-VIEW (NCT03020992) is an ongoing multicentre, open-label, phase 4 study. Pts had active axSpA according to the ASAS classification, a history of recurrent AAU ( $\geq 2$  AAU flares in total and  $\geq 1$  AAU flare in the year prior to study entry), were HLA-B27 positive, and were eligible for TNFi treatment (previous failure of  $\geq 2$  NSAIDs, biologic naïve or had failed  $\leq 1$  TNFi). Pts received CZP 400 mg at Weeks (Wks) 0/2/4, then 200 mg every two wks (Q2W) to Wk 96. The primary variable was incidence of AAU flares compared to historic rates. A pre-specified interim analysis compared AAU incidence in the 48 wks prior to CZP treatment with the 48 wks of treatment, using Poisson regression adjusted for possible within-pt correlations, with period (pre- and post-baseline) and axSpA disease duration as covariates. Incidence rates (IR) were calculated based on the number of cases/pts at risk over 48 wks. Observed data are reported.

**Results:** Of 115 enrolled pts, 89 initiated CZP treatment; 85 completed Wk 48. Baseline characteristics are shown in the Table. The 48-wk interim analysis revealed significantly fewer AAU flares/pt during CZP treatment vs before treatment (Figure; Poisson-adjusted IR: 0.2 vs 1.5,  $p < 0.001$ ). The number of pts experiencing 1 and  $\geq 2$  AAU flares (64.0% and 31.5% respectively) substantially reduced during CZP treatment (12.4% and 2.2%). After 48 wks CZP treatment, disease activity improved substantially (mean  $\pm$  SD Ankylosing Spondylitis Disease Activity Score [ASDAS]:  $2.0 \pm 0.9$ ; Bath Ankylosing Spondylitis Disease Activity Index [BASDAI]:  $3.3 \pm 2.1$ ), with 31.4% pts achieving ASAS partial remission and 29.1% ASDAS major improvement. No new safety signals were identified.

**Table. Baseline characteristics**

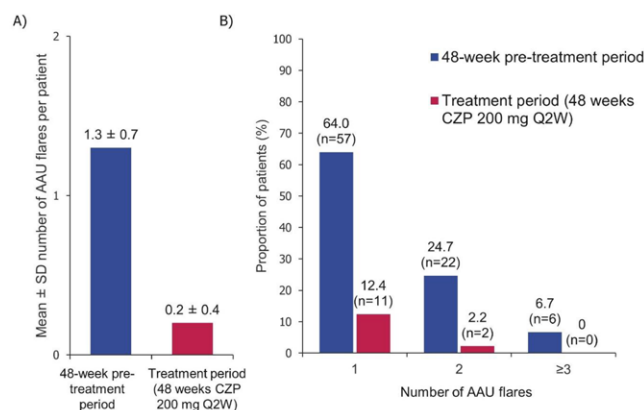
	CZP 200 mg Q2W (N=89)
Age (years), mean $\pm$ SD	46.5 $\pm$ 11.2
Male, n (%)	56 (62.9)
Racial group, n (%)	
Caucasian	87 (97.8)
Other	2 (2.2)
Diagnosis, n (%)	
Radiographic axSpA	76 (85.4)
Non-radiographic axSpA	13 (14.6)
Duration of axSpA (years), mean $\pm$ SD	8.6 $\pm$ 8.4
Time since onset of first uveitis flare (years), mean $\pm$ SD	9.9 $\pm$ 9.0
ASDAS, mean $\pm$ SD	3.5 $\pm$ 0.9
BASDAI, mean $\pm$ SD	6.5 $\pm$ 1.5

**Conclusion:** In this open-label study, AAU flare rate significantly reduced in axSpA pts with a history of recurrent AAU during the first 48 wks of CZP. Pts also experienced substantial improvements in axSpA disease activity.

#### References:

- [1] Martin TM. *Curr Opin Rheumatol* 2002;14:337–41
- [2] Bacchioga ABS. *Rheumatology (Oxford)* 2017;56:2060–7
- [3] van der Heijde D. *Rheumatology (Oxford)* 2017;56:1498–509
- [4] van Bentum RE. *J Rheumatol* 2019;46:153–9
- [5] van Denderen JC. *J Rheumatol* 2014;41:1843–8

**Figure:** (A) Mean number of acute anterior uveitis flares experienced by patients in C-VIEW and (B) proportion of patients experiencing 1, 2 or  $\geq 3$  acute anterior uveitis flares



AAU: acute anterior uveitis; CZP: certolizumab pegol; Q2W: every 2 weeks; SD: standard deviation.

**Acknowledgments:** This study was funded by UCB Pharma. Editorial services were provided by Costello Medical.

**Disclosure of Interests:** Irene van der Horst-Bruinsma Grant/research support from: AbbVie, Novartis, Eli Lilly, Bristol-Myers Squibb, MSD, Pfizer, UCB Pharma, Consultant of: AbbVie, Novartis, Eli Lilly, Bristol-Myers Squibb, MSD, Pfizer, UCB Pharma, Rianne van Bentum: None declared, Frank Verbraak Grant/research support from: Bayer, Novartis, IDxD, UCB Pharma, Consultant of: Bayer, Novartis, IDxD, UCB Pharma, Thomas Rath Grant/research support from: AbbVie, Bristol-Myers Squibb, Chugai, Eli Lilly, MSD, Novartis, Pfizer, Roche, UCB Pharma, James Rosenbaum Consultant of: AbbVie, Corvus, Eyevevsys, Gilead, Novartis, Janssen, Roche, UCB Pharma; royalties from UpToDate, Maria Misterska-Skora: None declared, Bengt Hoepken Employee of: UCB Pharma, Oscar Irvin-Sellers Employee of: UCB Pharma, Brenda VanLunen Employee of: UCB Pharma, Lars Bauer Employee of: UCB Pharma, Martin Rudwaleit Consultant of: AbbVie, BMS, Celgene, Janssen, Eli Lilly, MSD, Novartis, Pfizer, Roche, UCB Pharma  
**DOI:** 10.1136/annrheumdis-2020-eular.3747

THU0380

### SECUKINUMAB IS FREQUENTLY PREFERRED IN MULTI ANTI-TNF RESISTANCE SPONDYLOARTHRITIS PATIENTS: HUR-BIO REAL LIFE RESULTS

B. Armagan<sup>1</sup>, L. Kılıç<sup>1</sup>, G. K. Yardımcı<sup>1</sup>, E. Bilgin<sup>1</sup>, B. Farisoğulları<sup>1</sup>, E. C. Bolek<sup>1</sup>, E. Duran<sup>1</sup>, O. Karadağ<sup>1</sup>, A. Akdoğan<sup>1</sup>, Ş. A. Bilgen<sup>1</sup>, A. İ. Ertenli<sup>1</sup>, U. Kalyoncu<sup>1</sup>, S. Kirazlı<sup>1</sup>. <sup>1</sup>Hacettepe University, Faculty of Medicine, Rheumatology, Ankara, Turkey

**Background:** Anti-TNF agents have been used for the last two decades. However, targeting interleukin-17 (secukinumab (SEC)) is a relatively novel treatment