Conclusions: Draft classification criteria for GPA, MPA and EGPA have been created which reflect current practice and have good sensitivity and specificity. Acknowledgements: DCVAS sites and expert panel members Disclosure of Interest: None declared DOI: 10.1136/annrheumdis-2018-eular.2892

## WEDNESDAY, 13 JUNE 2018

## From NSAIDs to bDMARDs in SpA: what is new?\_\_\_\_\_

## OP0022 IS A PRIMARY GOOD RESPONSE TO NSAIDS PREDICTIVE OF THE SUBSEQUENT RESPONSE TO THE FIRST TNF INHIBITOR IN PATIENTS WITH RECENT AXIAL SPONDYLOARTHRITIS?

L. Couvaras<sup>1</sup>, D. Wendling<sup>2</sup>, V. Pauly<sup>3</sup>, V. Pradel<sup>3</sup>, A. Moltó<sup>4</sup>, P. Lafforgue<sup>1</sup>, T. Pham<sup>5</sup>. <sup>1</sup>Aix-Marseille University, APHM, Marseille; <sup>2</sup>Bourgogne-Franche-Comté University, CHRU Besançon, Besançon; <sup>3</sup>APHM, Marseille; <sup>4</sup>Cochin Hospital, Paris; <sup>5</sup>Aix-Marseille University, APHM, Marseille, France

**Background:** Good response to NSAIDs is a SpA feature included in classification criteria for axial spondyloarthritis (axSpA). Among patients eligible for a TNF inhibitor (TNFi), some patients may have never responded to NSAIDs (non-responders to NSAIDs) while others initially responded (responders to NSAIDs) but have secondly escaped and need to be treated with biologics.

**Objectives:** Our aim was to determine if the initial response to NSAIDs is an independent predictive factor of a subsequent good response to the first TNFi in axSpA.

**Methods:** *Patients*: Patients from the prospective observational DESIR cohort of early axSpA cohort who started a TNFi over the 5 years of follow-up.

NSAIDs response and TNFi response definitions

NSAIDs response was defined by the item 'good response to NSAIDs according to Amor's criteria' at the inclusion visit. TNFi response was defined by the BAS-DAI50 response between the 'baseline' visit (last cohort visit before TNFi initiation) and the 'follow-up' visit (visit taking place after at least 8 weeks of TNFi treatment).

Analysis: We compared the characteristics of the NSAIDs responder to the nonresponders and their response to the first TNFi.

We performed a multivariate logistic regression modelling the impact of an NSAID response to the TNFi response. We included known predictive factors of TNFi response in this model (age, gender, HLAB-B27, activity of the disease [ASDAS-CRP], CRP, X-ray and MRI sacroiliitis). To account for selection bias and for confirmation purpose, we applied a propensity score with Inverse Probability Weighting (IPW) method to predict TNFi response (SAS, version 9.2).

**Results:** Among the 708 patients of the cohort, 236 were included in the analysis. At the inclusion, the main characteristics were the following: 106 (44.7%) males, mean age 33.8±3.9 years, mean BASDAI 54.5±17.3 and 202 (85.6%) were NSAIDs responders.

The NSAIDs responder and non-responder groups were comparable at M0 except for HLA-B27 positive status: 59.9% vs 40.1%, p=0,041, CRP level:  $13.4 \pm 20.3$  mg/L vs  $6.3\pm 6.6$  mg/L, p=0,027, history of psoriasis: 17.8% vs 35.3%, p=0.001 and BASDAI:  $53.0\pm 18.1$  vs  $61.8\pm 13.2$ , p=0,001, in responder and non-responder patients, respectively.

The percentage of TNFi responders was 32.2% (65/202) and 23.5% (8/34) in the NSAIDs responder and non-responder groups, respectively (univariate analysis [OR 1.54 [95% CI: 0.7 to 3.6], p=0.313.

The multivariate logistic regression found the following independent factors of the TNFi response: gender [adjusted OR (aOR)=2.9 [Cl95%: 1.4–6.0], p=0.004], age [aOR=0.9 [95% Cl: 0.91 to 0.99], p=0.026], HLA-B27 status [aOR=2.5 [Cl95%: 1.2–5.3], p=0.02], ASDAS-CRP score [aOR=1.6 [95% Cl: 1.1 to 2.4], p=0.016], and MRI sacrolilitis [aOR=2.0 [Cl95%: 1.0–4.2], p=0.054]. Response to NSAIDs was not significantly associated to the response to the TNFi [aOR=1.93 [95% Cl: 0.6 to 6.3], p=0.275]. The IPW aOR confirmed the non-association between NSAIDs good response and TNFi good response: 1.60 [Cl95%: 0.7–3.3], p=0.20. **Conclusions:** The good response to NSAIDs according to the Amor's criteria does not seem to be an independent predictive factor of a good response to the first TNFi in early axSpA patients.

Disclosure of Interest: None declared

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## OP0023 EFFECT OF ANTERIOR UVEITIS, PSORIASIS AND INFLAMMATORY BOWEL DISEASE ON DRUG-SURVIVAL FOR TNF-INHIBITORS IN ANKYLOSING SPONDYLITIS

<u>U. Lindström</u><sup>1</sup>, T. Olofsson<sup>2</sup>, S. Wedrén<sup>1</sup>, I. Qirjazo<sup>3</sup>, J. Askling<sup>1</sup>, on behalf of ARTIS. <sup>1</sup>*Rheumatology Unit and Clinical Epidemiology Unit, Department of Medicine, Karolinska Institutet, Stockholm;* <sup>2</sup>*Department of Clinical Sciences, Lund Univeristy, Lund;* <sup>3</sup>*Rheumatology Department, Linköping Univeristy Hospital, Linköping, Sweden* 

**Background:** Tumour necrosis factor inhibition (TNFi) is the mainstay treatment for ankylosing spondylitis (AS) with a high disease activity. Whereas disease activity and sex have been shown to affect drug-survival for TNFi in AS, the impact of typical AS-comorbidities, such as anterior uveitis, psoriasis and inflammatory bowel disease (IBD), on the drug-survival of TNFi in AS is less well understood.

**Objectives:** To determine the impact of comorbidity with anterior uveitis, psoriasis and IBD on drug-survival in patients with AS starting treatment with a first TNFi.

**Methods:** Swedish biologics-naïve patients with AS starting a 1 st TNFi July 1 2006 – December 31 2015, were identified in the Rheumatology Quality Register, and followed from treatment start until treatment discontinuation. Censoring occurred at the first of: December 31 2015, death, emigration, or loss of follow-up. Comorbidities, and potential confounders, were identified through linkage to six other national registers.

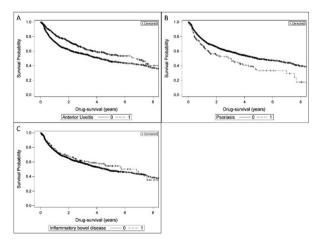
We calculated survival curves and hazard ratios (HRs) for each comorbidity and the risk of TNFi discontinuation. HRs were adjusted for sex, age, CRP, peripheral arthritis, type of TNFi and BASDAI at baseline. Additional models were also adjusted for other chronic morbidities (cardiovascular disease, affective disease, diabetes, malignancies, chronic lung disease and chronic kidney failure), and for socioeconomic status (length of education, household income, sick-leave, country of birth and civil status), respectively.

**Results:** 2577 patients (71% men) were identified, 27% had a previous history of anterior uveitis, 7% IBD and 6% psoriasis. A history of anterior uveitis was associated with a lower risk of TNFi discontinuation (HR 0.72; 0.62–0.83), whereas presence of psoriasis was associated with an increased risk (HR 1.48; 1.18–1.86). No association was found between presence of IBD and risk of TNFi discontinuation. Models adjusting for disease activity, morbidities, and socioeconomic status resulted in an attenuated association for psoriasis (table 1). The impact of each comorbidity on drug-survival is visualised in figure 1.

Abstract OP0023 – Table 1. HR for association between inflammatory comorbidities and risk of discontinuation of TNFi treatment in AS

Comorbidity	А	В	С	D
Anterior uveitis	````	0.71 (0.60–0.84)	0.72 (0.61-0.85)	0.75 (0.62-0.90)
Psoriasis IBD	1.48 (1.18–1.86) 0.91 (0.71–1.16)	1.35 (1.04–1.76) 0.84 (0.65–1.09)	1.28 (0.98–1.67) 0.82 (0.63–1.07)	1.33 (0.99–1.78) 0.83 (0.62–1.10)

A)univariable; B-D) adjusted for baseline measures; C) also adjusted for other morbidity and D) also adjusted for socioeconomic status.



Abstract OP0023 – Figure 1 Survival probability (Kaplan-Meier plots) for persisting on a first-line TNFi, for patients with ankylosing spondylitis, dependant on having a history of (A) anterior uveitis, (B) psoriasis or (C) inflammatory bowel disease.