Table 1. Optimal thresholds for presenteeism measures and patients correctly classified for unacceptable work status and adverse work outcome during 12 months.

	Optimal threshold (SE/SP)	Correctly classi- fied for unaccept- able work status n (%)	Correctly classified for AWO during 12 months n (%)
WPAI presenteeism (0-100)	≥30 (89/70)	66 (73)	57 (69)
	≥40 (78/82)	77 (82)	62 (75)
QQ method (0-10)	≥2 (67/55)	53 (56)	49 (59)
	≥3 (56/64)	59 (63)	57 (69)
WALS (0-3)	≥0.61 (89/59)	51 (62)	44 (61)
	≥0.75 (67/68)	56 (68)	49 (68)
WLQ 25 (0-100)	≥27 (89/77)	53 (57)	45 (55)
	≥29 (77/80)	57 (61)	46 (56)
Pain (0-10)	≥4 (67/68)	64 (68)	61 (73)

The final thresholds are colored in green and correspond to the one's derived from axSpA. For pain measurement there was no axSpA derived threshold.



Figure 1. ROC curves for presenteeism (4 different measurement instruments) and for pain according to unacceptable work status

Acknowledgements: RA-PROSE study was funded by AbbVie.

Disclosure of Interests: Dafne Capelusnik: None declared, Sofia Ramiro Consultant of: AbbVie, Eli Lilly, MSD, Novartis, Pfizer, Sanofi, UCB, Grant/research support from: AbbVie, Galapagos, MSD, Novartis, Pfizer, UCB, Elena Nikiphorou Speakers bureau: Celltrion, Pfizer, Sanofi, Gilead, Galapagos, AbbVie, Lilly, Fresenius, Consultant of: Celltrion, Pfizer, Sanofi, Gilead, Galapagos, AbbVie, Lilly, Fresenius, Grant/research support from: Pfizer and Lilly, Walter P Maksymowych Consultant of: Abbvie, BMS, Boehringer, Celgene, Eli-Lilly, Galapagos, Janssen, Merck, Novartis, Parexel, Pfizer, UCB, Grant/research support from: Abbvie, Novartis, Pfizer, UCB, Marina Magrey Consultant of: Novartis, Abbvie, UCB, Eli-Lilly, Janssen, Pfizer, Grant/research support from: BMS and Amgen, Helena Marzo-Ortega Speakers bureau: Abbvie, Biogen, Eli-Lilly, Janssen, Moonlake, Novartis, Pfizer and UCB, Consultant of: Abbvie, Biogen, Eli-Lilly, Janssen, Moonlake, Novartis, Pfizer and UCB, Grant/research support from: Janssen, Novartis and UCB, Annelies Boonen Consultant of: AbbVie, Galapagos, Novartis, and Pfizer, Grant/research support from: Abbvie. DOI: 10.1136/annrheumdis-2023-eular.2823

AB0199 THE PROGNOSTIC VALUE OF IGA ANTI-CITRULLINATED PROTEIN ANTIBODY AND RHEUMATOID FACTOR IN AN EARLY ARTHRITIS COHORT WITH A TREAT-TO-TARGET APPROACH

Keywords: Prognostic factors, Rheumatoid arthritis, Autoantibodies

J. Heutz¹, M. W. Schreurs², A. Van der Helm – van Mil³, P. De Jong¹. ¹Erasmus MC, Rheumatology, Rotterdam, Netherlands; ²Erasmus MC, Immunology,

Rotterdam, Netherlands; ³Leiden University Medical Center (LUMC), Rheumatology, Leiden, Netherlands

Background: The EULAR research agenda states that new biomarkers are needed to stratify patients and to predict therapeutic response or lack of response in rheumatoid arthritis. Currently, IgG anti-citrullinated protein antibody (ACPA) and IgM rheumatoid factor (RF) are used as poor prognostic factors for treatment decisions in RA. The mucosal origin hypothesis of RA renewed the interest in the role of IgA isotype autoantibodies for disease pathogenesis. However, the value of IgA ACPA and RF for prognostication of treatment response under a treat-to-target approach is not clear to date.

Objectives: To evaluate the prognostic value of IgA ACPA and RF by considering 'guick-attained and persistent remission', DMARD-free remission (DFR) and biological use in an early (rheumatoid) arthritis population.

Methods: All patients from the treatment in the Rotterdam Early Arthritis Cohort (tREACH) trial with available baseline sera were included. The tREACH trial is a multicentre, stratified, single-blinded trial with a treat-to-target approach. IgA ACPA and RF isotypes were measured by automated fluorescence enzyme-immuno assay (FEIA) in baseline sera. The prognostic value of positivity for IgA ACPA and RF was evaluated for three outcome measures: (1) quick-attained (at 6 months) and persistent (to 2 years) remission, analysed with logistic regression analysis; (2) achievement of DFR for at least 6 months over a 2 year follow-up period, analysed with survival analysis; and (3) incident biological use over 2 years, analysed with mixed effects logistic regression analysis. Results were stratified for IgG ACPA, since it is known that IgG ACPA is related to lower (DMARD-free) remission rates and more biological use.

Results: IgA isotypes of ACPA and RF were measured in baseline sera of 480 tREACH patients. 66% was female, mean age was 53 years, median symptom duration 21 weeks, and median swollen joint count 5. A positive IgA ACPA titre was present in 109 (23%) patients and most of them also had a IgG ACPA result above the cut-off value for positivity (n=102, overlap of 94%). Positive IgA RF on the other hand was present in 172 (36%) of patients, which overlapped with IgM RF for 90% (n=154). Double positivity for IgA and IgG ACPA (n=102) revealed lower DFR rates after 2 years compared to IgG ACPA positivity alone (6% and 11%, respectively, Figure 1A), although this finding was not significant (p=0.09). No differences were observed in 'quick-attained and persistent remission' and biological use for both IgA ACPA and RF, after stratification for IgG ACPA.

Conclusion: IgA isotypes of ACPA and RF almost completely overlap with the commonly measured isotypes (IgG ACPA and IgM RF, respectively). In addition, both an IgA ACPA and IgA RF response do not predict persistent remission, DFR and biological use in this treat-to-target population. Based on these results, there is no rationale for measuring these isotypes in newly diagnosed (rheumatoid) arthritis patients in daily clinical practice.



Figure 1. Quick-persistent (6-24 months) remission, DMARD-free remission and biological use over 2 years in (A) IgA/IgG ACPA positive patients vs. IgG ACPA positive patients, with IgA/IgG ACPA negative patients as a reference group; and in (B) IgA RF/IgG ACPA positive

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patients vs. IgA RF negative/IgG ACPA positive patients, with IgA RF/IgG ACPA negative patients as a reference group.

REFERENCES: NIL. Acknowledgements: NIL. Disclosure of Interests: None Declared. DOI: 10.1136/annrheumdis-2023-eular.3090

AB0200 IMPROVEMENT OF SLEEP IMPAIRMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS ACHIEVING REMISSION OR PAIN RELIEVE WITH UPADACITINIB. **RESULTS FROM THE POST-MARKETING OBSERVATIONAL SLEERA STUDY**

Keywords: Rheumatoid arthritis, Quality of life, Real-world evidence

T. Hügle¹, H. Prillwitz², B. Moeller³, D. Kyburz⁴, J. Dudler⁵, K. Schmiedeberg⁶, M. Harrer Kuster⁷, P. Roulin⁷, A. Rubbert-Roth⁶. ¹Lausanne University Hospital, Department of Rheumatology, Lausanne, Switzerland; ²Rheumatologisches Versorgungszentrum Weinfelden, Rheumatology, Weinfelden, Switzerland; ³Inselspital, Department of Rheumatology, Immunology and Allergology, Bern, Switzerland; ⁴University Hospital of Basel, Department of Rheumatology, Basel, Switzerland; ⁵HFR Fribourg, Department of Rheumatology, Fribourg, Switzerland; ⁶Cantonal Clinic St Gallen, Division of Rheumatology, St Gallen, Switzerland; ⁷AbbVie AG, Immunology, Cham, Switzerland

Background: Sleep impairment is a common clinical condition in the rheumatoid arthritis (RA) population, which has been reported in over 60% of patients[1]. Although few longitudinal studies demonstrated change from baseline on sleep quality with advanced therapies[2,3], none of them described the clinical meaningfulness of these changes by subjective and objective measures.

Objectives: The SLEERA study aims to investigate the impact of upadacitinib (UPA), a selective and reversible JAK inhibitor, on sleep quality in a real-world RA population in Switzerland, by using a validated patient-reported measure, the Pittsburgh Sleep Quality Index (PSQI)[4], and an actigraphy-based objective measure with the GT9x wearable.

Methods: SLEERA is a sub-study of UPHOLD, an international, multicenter, prospective, non-interventional, open-label, observational cohort study (NCT04497597) that assesses sleep quality in a real-world population of adult Swiss patients with moderate-to-severe active RA, initiating treatment with UPA 15 mg once daily according to the product label and with the treatment decision made prior to study participation. This primary interim analysis reports data for all enrolled patients up to 3 months after treatment start. Results are presented for the total sample using descriptive measures reflecting sample size (N), average values (standard deviation) for each visit and average change scores (standard deviation) for follow-up visit at month 3. All data were analyzed as observed, with no imputation of missing data.

Results: Of the 39 patients (87% female) included in this study, 35 completed the follow-up visit at month 3. The mean age and disease duration were 59.5 (13.9) years and 7.0 (8.3) years, respectively. The mean initial DAS28-CRP was 4.1 (1.0). At baseline, 76% of patients showed subjective sleep impairment (defined by PSQI >5) and 51% had objective poor sleep efficiency (defined by actigraphy sleep efficiency <85%) (Table 1). At month 3, upadacitinib showed significant improvement in the PSQI total score with a decrease of 2.26 (2.92, p value <0.001), as well as other subjective outcomes. The proportion of objective poor sleepers decreased to 38%, while sleep efficiency and physical activity outcomes in total remained unchanged. However, patients achieving DAS28-CRP remission or absence of pain after 3 months of treatment showed higher improvements in both subjective and objective measures compared to those who did not achieve DAS28-CRP remission or have residual pain (Figure 1).

Table 1.

PSQI	BL Visit N = 37	Visit at Month 3 N = 33	Change from BL N = 31
Sleep impairment (PSQI >5), n (%)	28 (76%)	18 (55%)	
PSQI total score	7.84 (3.12)	6.06 (4.26)	-2.26 (2.92)
PSQI sleep efficiency (%)	78.5% (18.5%)	84.2% (16.0%)	5.0% (17.7%)
PSQI sleep duration (hours)	6.8 (1.0)	6.9 (1.2)	0.2 (0.9)
Actigraphy	N = 39	N = 26	N = 26
Poor sleep efficiency (SE <85%),	20 (51%)	10 (38%)	
Sleep efficiency (%)	84.2% (6.8%)	84.5% (7.9%)	0.5% (3.9%)
Total sleep time (hours)	6.7 (0.9)	6.8 (1.0)	-0.1 (1.4)
Total awake time (minutes)	74 (37)	73 (49)	-7 (36)
Physical Activity	N = 32	N = 17	N = 17
Steps count	4,272 (2,270)	4,509 (2721)	-68 (1157)
MVPA (minutes)	177 (98)	181 (95)	-2 (37)

Conclusion: In this Swiss cohort, a high proportion of RA patients exhibited sleep impairment as shown by subjective and objective measures. Patients treated with upadacitinib significantly improved their subjective sleep quality after 3 months. Higher improvements for both subjective and objective sleep measures were observed in patients achieving remission or absence of pain. This research provides evidence of sleep impairment in RA patients which can be improved following a treatment, and further supports the importance of remission when assessing disease treatment goals.

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Acknowledgements: AbbVie and the authors thank the patients, study sites, investigators who participated in this study, Dr. Francesca Siclari and Jacinthe Cataldi from the Center for Investigation and Research in Sleep, and Dr. Imma Fischer from Biostatistik Tübingen. AbbVie funded this study and participated in the study design, research, analysis, data collection, interpretation of data. No honoraria or payments were made for authorship.

Disclosure of Interests: Thomas Hügle Speakers bureau: Abbvie, Eli Lilly, Fresenius Kabi, MSD and Pfizer, Consultant of: Abbvie, Eli Lilly, Fresenius Kabi, MSD and Pfizer, Heino Prillwitz Speakers bureau: AbbVie, Amgen, Novartis, Pfizer, Roche, Consultant of: AbbVie, Amgen, Novartis, Pfizer, Roche, Burkhard Moeller Speakers bureau: Abbvie, Janssen, Eli Lilly, Novartis and Pfizer., Consultant of: Abbvie, Janssen, Eli Lilly, Novartis and Pfizer., Diego Kyburz Speakers bureau: AbbVie, Janssen, Eli Lilly, Novartis, Takeda and Pfizer., Consultant of: bureau: AbbVie, Janssen, Eli Lilly, Novartis, Takeda and Pfizer., Consultant of: AbbVie, Janssen, Eli Lilly, Novartis, Takeda and Pfizer., Jean Dudler Speakers bureau: AbbVie, Janssen, Eli Lilly and Novartis., Consultant of: AbbVie, Jans-sen, Eli Lilly and Novartis., Kristin Schmiedeberg: None declared, Melanie Harrer Kuster Shareholder of: AbbVie, Employee of: AbbVie, Pascal Roulin Shareholder of: AbbVie, Employee of: AbbVie, Andrea Rubbert-Roth Speakers bureau: Abb-Vie, Amgen, BMS, Chugai, Eli Lilly, Gilead, Janssen, Novartis, Roche, Sanofi, Consultant of: AbbVie, Amgen, BMS, Chugai, Eli Lilly, Gilead, Janssen, Novartis, Roche, Sanofi.

DOI: 10.1136/annrheumdis-2023-eular.3146

AB0201 "IT SURPRISED ME A LOT THAT THERE IS A LINK": A QUALITATIVE STUDY OF THE ACCEPTABILITY OF PREVENTIVE PERIODONTAL TREATMENT FOR INDIVIDUALS AT-RISK OF RHEUMATOID ARTHRITIS

Keywords: Qualitative research methods, Rheumatoid arthritis, Patient information and education

L. Chapman¹, K. Vinall-Collier², H. J. Siddle3, Z. Mustufvi², K. Mankia^{3,4}, S. Serban². ¹University of Leeds, Leeds Institute of Rheumatic and Musculoskeletal Medicine, Leeds, United Kingdom; ²University of Leeds, School of Dentistry, Leeds, United Kingdom; ¹University of Leeds, Leeds Institute of Rheumatic and Musculoskeletal Medicine, Leeds, United Kingdom; ⁴Leeds Teaching Hospitals NHS Trust, NIHR Leeds Biomedical Research Centre, Leeds, United Kingdom

Background: Current evidence suggests that periodontitis could be a causal risk factor for rheumatoid arthritis (RA) onset and progression, and periodontal treatment may improve disease activity in patients with established RA [1, 2]. Earlier periodontal intervention in individuals at-risk of RA could provide a unique opportunity to delay progression or prevent RA entirely.

Objectives: To explore the acceptability of preventive periodontal treatment among individuals at-risk of RA and healthcare professionals from dental and medical backgrounds.