downregulated in ERA patients with erosions, with 6 (3.9%) downregulated more than twofold. A total of 15 miRNAs were differentially expressed (P<0.05) and 4 were possibly differentially expressed (P ≤0.1) between ERA patients with and without erosions. At baseline, expressions of miR-143–3p, miR-145–5p and miR-99b–5p were significantly higher in ERA patients with erosions than those without erosions (P<0.05 for all). After 12 months of csDMARDs treatment, 31.7%, 47.7%, and 20.6% of the ERA patients had erosion progression, stable erosion and partial erosion repair respectively. Logistic regression analysis revealed baseline expression of miR-99b–5p to be an independent predictor of erosion progression at 12 months (Exp [B] = 4.203, 95% CI 1.165–15.147, P=0.028) (table 1).

Conclusions: Increased level of cell-free circulating miR-99b–5p was associated with erosions at presentation in ERA patients and could predict erosion progression as assessed by HR-qQCT over a period of 12 months, indicating that it may well serve as a biomarker of poor response to csDMARDs. Whether early biological DMARDs use in these miR-99b–5p positive patients could reduce or prevent progression of erosion needs to be addressed in future studies.

Acknowledgements: This study was partly supported by the Health and Medical Research Fund (project no 10110071).

Disclosure of Interest: None declared


FR10667 DEVELOPMENT AND VALIDATION OF A RHEUMATOLOGIST SATISFACTION WITH PRACTICE SCALE—‘THE RHEUMATOLOGIST SATISFACTION SCALE’ (RSS)

K. Sheth1, A. Valenzuela1, S. Shoor1, P. Ritter1, K. Logi1, Stanford University, Palo Alto, United States

Background: Rheumatology practice improvement research routinely measures patient satisfaction and disease-specific outcomes but seldom considers the satisfaction of physicians who deliver the care. Studies suggest that physician dissatisfaction may pose a barrier to implementing quality improvement efforts. There is a paucity of succinct measures of physician satisfaction.

Objectives: As part of a Performance Improvement Project, in an academic rheumatology practice, we developed and piloted a simple questionnaire to study physician satisfaction in Rheumatology.

Methods: Thirty-five rheumatologists in the academic or private setting were approached for the study. From the responses we formed 14 questions on a 0 to 10 scale centering on satisfaction and dissatisfaction with respect to their rheumatology practice. Among the respondents, 13% were fellows, 53% were faculty, and 34% were in private practice. The median age was 52 years (range 35–72) and median years in practice was 12 (range 1–41). Spearman’s correlation coefficients were calculated to assess the content validity of the questionnaire. The final version was piloted on 243 respondents from the US and Latin American countries. Analysis is in progress.

Conclusions: Simple and practical questionnaire to measure physician satisfaction was developed and successfully piloted on a predominately academic sample of rheumatologists. The strongest correlates of physician satisfaction were the “ability to make a difference in a patient’s life” and “to work with great colleagues” whereas the greatest correlates of dissatisfaction were “time spent on documentation” and “inappropriate referrals.” Further testing on a larger sample from the US and Latin American countries, we aim to gain a deeper understanding of how the cultural differences and practice of medicine may affect physician satisfaction. It is hoped that, this scale will serve as a means of determining aids and barriers to improving rheumatology practice for both patients and physicians and become a useful tool in rheumatology performance practice implementations and studies.

Disclosure of Interest: None declared


FR10668 ITEM RESPONSE THEORY TO STANDARDIZE PATIENT REPORTED PHYSICAL FUNCTION OUTCOMES; LINKING 10 COMMONLY USED QUESTIONNAIRES TO A COMMON METRIC

M. Oude Voshaar1, H. Vonkeman1,2, D. Counoviser2, A. Finck3, L. Gossec4, K. Leung Ying Ying5, K. Michaud6, G. Pinheiro7, E. Soriaño7, N. Wulfraat8, A. Zink9, M. van de Laar10,11, Psychology, Health & Technology and Arthritis center Twente, University of Twente, 2Department of Rheumatology and Clinical Immunology, Medisch Spectrum Twente, Enschede, Netherlands, 3Division of Rheumatology, University Hospitals of Geneva, geneva, switzerland, 4Rheumatology department, Pitit Salpétrière hospital, Paris, France, 5Dept of Rheumatology & Immunology, Singapore General Hospital, Singapore, 6University of Nebraska Medical Center, Omaha, United States, 7Rheumatology Unit, Internal Medical Services, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina, 8Wihelmina Children’s Hospital, Utrecht, Netherlands, 9Rheumatology and Clinical Immunology, Chanté University Medicine Berlin, Berlin, Germany, 10Department of Health and Technology, University of Twente, Enschede, Netherlands

Background: Physical function is a core outcome domain in clinical trials in various inflammatory rheumatic diseases. It is also included in the recently developed International Consortium for Health Outcomes Measurement (ICHOM) standard set for patients with inflammatory arthritis. However, patient reported outcome measures (PROMs) are commonly collected in patient registries and are used by decision makers in ways that require outcomes to be aggregated across different data sources. A major barrier to such initiatives is that many different physical function PROMs are in widespread use, and results cannot be meaningfully compared across them, if the traditional scoring procedures based on summing of the individual item scores are used. This is because summed scores depend on both patient- and item characteristics. To facilitate standardization of physical function outcome measurements, we developed a common metric for ten commonly used physical function PROMs using item response theory (IRT), that can be used to adjust PROM scores for item characteristics.

Methods: A data of 16,386 patients with inflammatory arthritis from the United States National Databank of Rheumatic Disease, the Swiss Clinical Quality Management Registry, the National Database of the German Collaborative Arthritis Centres, the Dutch Rheumatoid Arthritis Monitoring Study, and several smaller observational studies were used to map the items of 10 commonly used physical function PROMs on a continuous latent physical function variable. The resulting common metric was cross-validated in an independent dataset of 243 patients with gout, osteoarthritis or polymyalgia rheumatica, in which four of the linked PROMs were administered.

Results: Our analyses supported that all 97 items of the 10 included PROMs relate to a single underlying physical function variable and that responses to each item could be described by the generalized partial credit IRT model. In the cross-validation analyses we found congruent mean scores for four different PROMs when the IRT based scoring procedures were used.

Conclusions: We showed that scores obtained using the IRT based common metric developed in this study can be used to make physical function outcomes obtained using different physical function PROMs comparable.

Disclosure of Interest: None declared


FR10669 PHYSICIAN GLOBAL ASSESSMENTS FOR DISEASE ACTIVITY IN RHEUMATOID ARTHRITIS ARE ALL OVER THE MAP!

M. A. Turk1, J. Pope2, 1Biochemistry, 2Rheumatology, Schulich School of Medicine and Dentistry, London, Canada

Background: Assessments of disease activity in rheumatoid arthritis (RA) determine the course of the disease. Physician global assessments of disease activity (MD globalis) are important outcomes in trials as they are part of the CDAI and...
Validation of the ERS-RA Risk Score in the Dutch CARRÉ Study.

M. Baniaamam, M. Nurmoehamed, Amsterdam Rheumatology immunology Center, Reade and VU University Medical Center, Amsterdam, Netherlands.

Background: The most frequent cause of death in patients with chronic rheumatoid arthritis (RA) is of cardiovascular (CV) origin. CV risk prediction scores in the normal population do not predict the CV risk in RA patients adequately due to the additional systemic inflammatory burden which is pathogenic for CV disease. Recently, Solomon et al developed the ERS-RA Risk Score, a newly and expanded CV risk score predicting the 10 year CV event risk in RA patients. This is based on a cohort from the Consortium of Rheumatology Researchers of North America registry. In this abstract we present the results of a validation test performed with the ERS-RA Risk Score in the Dutch CARRÉ study.

Objectives: To perform a validation test of the ERS-RA Risk Score in the Dutch CARRÉ study.

Methods: We validated the ERS-RA Risk Score in the CARRÉ cohort by performing a ROC curve analysis. The CARRÉ study is a Dutch cohort study investigating CVD and its risk factors in RA-patients who have been followed prospectively for at least five years. RA patients registered at Reade (location Jan van Breemen institute in Amsterdam, the Netherlands) participated if they fulfilled the 1987 ACR classification criteria, were diagnosed between 1989 and 2001, and were aged between 50 and 75 years. In contrast to the cohort used in study of Solomon et al, the CARRÉ study used the HAQ instead of the m-HAQ and the CARRÉ lacks the Predictor’s Global Assessment to calculate the CDAI. However, to proximate the true outcome of the m-HAQ and the CDAI we conducted the following modifications of the CARRÉ cohort data. To calculate the CDAI we estimated the Predictor’s Global Assessment as 70%, 80%, 100%, 110%, 120% and 130% of the Predictor’s Global Assessment. Furthermore, we approximated the m-HAQ score 50% lower than the HAQ score as described in a recent published article.

Results: The CARRÉ study included 352 RA patients with 60 CV events over a 10 year follow up period. The mean age was 63.3 years of which 121 (34%) male participants. The ROC curve analysis shows an area under the curve of 0.630–0.612 depending on the predicted predictor’s Global Assessment (see figure 1).

Conclusions: In conclusion, the ERS-RA Risk Score has a limited validity in the CARRÉ study, a Dutch RA cohort and can therefore not be used for risk prediction in Dutch RA patients.

REFERENCES:

Disclosure of Interest: None declared