($p<0.001$), older age of onset ($p=0.019$), higher levels of RF IgM ($p=0.027$) and anti-CCP ($p<0.001$). Development of persistent spontaneous remission negatively correlated with polyarthritis ($p=0.033$), PF-positivity ($p=0.034$), anti-CCP-positivity ($p=0.001$). Positive seroconversion was observed: of RF in 10 (4.7%) patients, 8 developed RA, of anti-CCP – in 3 (1.4%) patients, all developed RA.

Conclusion: Seronegative oligoarticular disease and highly seropositive disease are different subtypes of UIA. Combination of seronegativity and oligoarticular disease ($n=52$) associated with relatively rare development of RA (36.2%) and high proportion of spontaneous remission (22.4%). Patients who were highly positive (>3 ULN) for both RF and anti-CCP developed RA in 97% of cases and never remitted spontaneously.

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FRI0542

OBTAINING HIGH POSITIVE PREDICTIVE VALUES FOR THE DEVELOPMENT OF CLINICALLY APPARENT ARTHRITIS IN PATIENTS PRESENTING WITH CLINICALLY SUSPECT ARTHRALGIA; IS IT FEASIBLE?

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Background: The hypothesis that initiation of DMARD-treatment before arthritis becomes apparent could permanently modulate the disease process, such that persistent RA is prevented, is being studied in several ongoing trials. Essential for such studies is the ability to accurately predict clinically apparent inflammatory arthritis (IA). However there are two hurdles: first, it is insufficiently known whether it is possible to obtain high positive predictive values (PPV) in patients presenting with clinically suspect arthralgia (CSA). Second, none of current predictive models is validated in independent cohorts. We here aimed to evaluate the first question, incorporating improved markers of MRI-detected subclinical inflammation that were recently identified but have not yet been combined with other known predictors.[1]

Objectives: To assess the feasibility of achieving high PPVs in prediction of IA-development in patients with CSA by combining clinical, laboratory and imaging parameters.

Methods: 580 patients with CSA were consecutively included in the Clinically Suspect Arthralgia (CSA)-cohort and followed on the development of IA, determined by physical examination of joints. Unilateral contrast-enhanced 1.5 Tesla MRIs were made of MCP(2-5), wrist and MTP(1-5)-joints at baseline and scored in line with the RAMRIS. The number of locations with sub-clinical inflammation (0/1-2/ ≥ 3) and the presence of MCP peritendinitis were defined as described previously.[1] Other studied clinical and laboratory variables were based on the literature: initial localisation of complaints (small/large joints), functional disability (health assessment questionnaire (HAQ) ≥ 1), ACPA-positivity (Anti-CCP2), RF-positivity (IgM-RF) and elevated CRP. [2,3] LASSO Cox regression with a 10-fold cross-validated shrinkage parameter was used for predictor selection. Regression coefficients were rounded to the nearest number ending in .5 or .0 and multiplied by two, resulting in a weighted score. Kaplan Meijer curves were used to obtain PPVs of this weighted score and the area under the curve (AUC) was determined at 2-year follow-up.

Results: Mean age was 44, 78% was female, and 18% progressed to IA within 2 years. The following parameters were selected with LASSO: RF-positivity, ACPA-positivity, HAQ ≥ 1 , >2 locations of subclinical inflammation and presence of MCP-extensor peritendinitis. Based on the beta of LASSO-regression, patients were assigned 2 points for the risk-factors ACPA-positivity and >2 locations of subclinical inflammation, 1 point for RF-positivity and presence of MCP-extensor peritendinitis and 0 points for HAQ ≥ 1 . Kaplan Meijer curves show PPVs of 8%, 9%, 30%, 54%, 73%, 79% and 86% at two years (Figure 1). This model yielded an AUC of 0.79.

Conclusion: High PPVs for IA-development can be achieved in patients with CSA by weighting a combination of known predictors. Although encouraging,

Figure 1. Kaplan Meijer curves on inflammatory arthritis development stratified for number of points based on LASSO regression. Legend: Points were based on the regression coefficients yielded by Cox LASSO-regression. 2 points were assigned for the risk factors ACPA-positivity and >2 locations of subclinical inflammation and 1 point was assigned for RF-positivity and presence of MCP-extensor peritendinitis.

these data are based on one observational cohort study and have not been validated in independent cohorts, limiting the relevance. To support future research in the field of arthralgia, it is needed that different research groups work together to come to risk estimations that are validated and accepted.

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FRI0543

BIRTH REGISTRY OF WOMEN WITH SYSTEMATIC LUPUS ERYTHEMATOSUS AND COURSE OF THE DISEASE DURING FIRST YEARS POST-PARTUM-THE GREEK EXPERIENCE

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Background: Pregnancy in women with SLE Systematic Lupus Erythematosus (SLE) has been related with adverse events both in the mother and the foetus. 1 Many studies have reported relapse of the disease during the pregnancy and post-labour, while others have not confirmed this finding. 2 To this end, most of these results originate from retrospective studies with patients of diverge ethnicities.

Objectives: To record the Greek experience with pregnancies in mothers with SLE and their outcomes, as well as the course of the disease during first year post labor.

Methods: This is a prospective, multicentre, observation study lasting three years. Women diagnosed with SLE who became pregnant consented to be monitored by their treating Rheumatologist. A structured questionnaire is used for monitoring at the beginning of pregnancy (positive pregnancy test) and at least every 3 months thereafter, depending on the course of the disease and pregnancy, until one year after childbirth.

Results: A total 64 women and 81 pregnancies were recorded (1.27 pregnancies per patient). Patient's age at conception was 32.8 ± 5.9 years (mean $\pm$ standard deviation). Thirteen patients (20.3%) had past history of nephritis. Regarding pregnancy outcomes, 62 (76.5%) pregnancies ended in live births, miscarriages during 1st, 2nd and 3rd trimester occurred in 13 (16%). Six pregnancies were lost to followup. Prematurity occurred in 28 live births (45.1% in total), 26-32w (3.2%), 32-36w (22.5%), $<37w$ (19.3%). No cases of preeclampsia occurred. Mean age of birth **36.9 weeks** and mean birth weight **2750gr**. The majority (72.5%) of deliveries were performed by caesarean section. In terms of disease activity, most of the women had mild disease at conception, (SLEDAI-2K: 2.67 ± 2.69) that