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Table 1. – NHL risk predictors for pSS patients without lymphoma at Visit 1

NHL Risk predictors	Likelihood ratio	ChiSquare Value	Prob>ChiSq
IgA	6.6459		0.0360*
IgM	12.065		0.0024*
Disease duration	5.4365		0.0660
Age	18.546		<.0001*
Log [White blood cell count]	6.1494		0.0462*
Log [CXCL13 c(pg/mL)]	8.3463		0.0154*

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FRI0653

IMPROVING AND VALIDATING THE PREDICTIVE ACCURACY OF MRI DETECTED SUBCLINICAL INFLAMMATION FOR RHEUMATOID ARTHRITIS DEVELOPMENT IN CLINICALLY SUSPECT ARTHRALGIA

Xanthe Matthijssen¹, Fenne Wouters¹, Debbie Boeters¹, Aleid Boer¹, Yousra Dakkak¹, Ellis Niemantsverdriet¹, Saskia Le Cessie¹, Annette van der Helm - van Mil^{1,2}, ¹Leiden University Medical Center (LUMC), Leiden, Netherlands; ²Erasmus University Medical Center, Rheumatology, Rotterdam, Netherlands

Background: Presence of MRI-detected subclinical joint inflammation in clinically suspect arthralgia (CSA) is predictive for progression to Rheumatoid Arthritis. Despite high negative predictive values (94%); its positive predictive value (PPV) is moderate (31%).

Objectives: We studied if, in addition to the presence of inflammation, incorporating information on severity, number and combinations of MRI-inflammatory locations improves the predictive accuracy.

Methods: In the discovery cohort, 225 CSA-patients were followed on clinical arthritis development. Contrast-enhanced 1.5T MRIs were made of unilateral MCP(2-5), wrist and MTP(1-5)-joints at baseline and scored for synovitis, tenosynovitis and bone marrow edema. Severity, number and combination of locations (joint/tendon/bone) with subclinical inflammation were determined, with symptom-free controls of similar age category as reference. Cox regression was used for predictor selection. Predictive values were determined at 1-year follow-up. Results were validated in 266 CSA-patients.

Results: In both cohorts 15% developed arthritis <1-year. The number of locations with subclinical inflammation (1-2 locations HR 2.54 (1.11-5.82); ≥3 locations HR 3.75 (1.49-9.48)) and presence of MCP-extensor peritendinitis (HR 4.38 (2.07-9.25)) were independently predictive. Severity and combinations of inflammatory lesions were not. Based on these variables, five risk categories were defined: no subclinical inflammation, 1-2/≥3 locations, with/without

MCP-extensor peritendinitis. PPVs ranged 5% (lowest category; NPV 95%) - 67% (highest category). Similar findings were obtained in the validation cohort; PPVs ranged 4% (lowest category; NPV 96%) - 63% (highest category).

Conclusion: Incorporation of the number of locations with subclinical inflammation and MCP-extensor peritendinitis in MRI-evaluation improved risk stratification, yielding PPVs up to 63-67%. This promotes optimal use of MRI-data in an evidence-based way.

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Observed. percentage of patients that developed clinical arthritis in the first year (PPVs in black) per risk category in the discovery and validation cohorts.

FRI0654

DECREASING INCIDENCE OF CARDIOVASCULAR DISEASE IN PATIENTS WITH INCIDENT RHEUMATOID ARTHRITIS IN RECENT YEARS

Elena Myasoedova¹, John Davis¹, Veronique Roger², Sara Achenbach³, Cynthia S. Crowson¹, ¹Mayo Clinic, Rheumatology, Rochester, MN, United States of America; ²Mayo Clinic, Cardiovascular Disease, Rochester, MN, United States of America; ³Mayo Clinic, Health Sciences Research, Rochester, MN, United States of America

Background: There is a recognized excess burden of cardiovascular disease (CVD) in patients with rheumatoid arthritis (RA) as compared to the general population. Several studies suggested reduced CVD mortality in RA in recent decades [1-3]. Longitudinal studies on trends in occurrence of CVD events in RA patients over time, and studies comparing trends in CVD events in RA vs general population are lacking.

Objectives: 1) To assess trends in incidence of CVD in patients with incident RA in 1980-2009; and 2) To compare incidence of CVD in RA patients vs non-RA subjects with RA incidence/index date in 2000-09.

Methods: The study population comprised Olmsted County, Minnesota residents with incident RA (age ≥18 years, 1987 ACR criteria met in 1980-2009) and non-RA subjects from the same underlying population with similar age, sex and calendar year of index. All subjects were followed until death, migration, or 12/31/2016. Follow-up was truncated for comparability. Incident CVD events included myocardial infarction (MI), stroke (ischemic or hemorrhagic), coronary heart disease (CHD) death and first occurrence of any of these. Patients with CVD events prior to RA incidence/index date were excluded. Cox proportional hazards models were used to compare incident CVD events by decade, adjusting for age and sex. Cumulative incidence of CVD events adjusted for death from other causes was also computed.

Results: The study included 906 patients with RA (mean age 55.9 years; 69% female). There were 201, 299 and 406 patients with incident RA in 1980-89, 1990-99 and 2000-09, respectively. During median follow-up of 10.6, 10.4 and 10.2 years per decade, CVD events occurred in 31, 38,