established coronary heart disease. In RA it has been investigated by carotid artery ultrasound and carotid atherosclerotic plaques are more prevalent in RA patients than controls. EULAR recommendations for cardiovascular disease risk management consider that carotid ultrasound may be part of the risk evaluation in patients with RA. Recent studies in general population have shown that plaques in femoral arteries are more common and are associated with higher cardiovascular risk.

Objectives: To study the usefulness of femoral artery ultrasound for the detection of subclinical atherosclerosis and its ability to improve cardiovascular risk assessment in RA patients.

Methods: Cross-sectional observational study of prevalence in 140 RA patients aged 40 to 65 years. Subclinical atherosclerosis was evaluated by carotid and femoral artery ultrasound.

Results: Atherosclerotic plaques were found in 86.4% of RA patients (60.7% in carotid arteries and 78.6% in femoral arteries). Patients with plaques were older and more frequently past or present tobacco users. Femoral plaques were larger and more numerous than the carotid plaques and people with plaques in both locations had more extensive subclinical atherosclerotic disease (table). Only 7.9% of RA patients were considered as having very high cardiovascular risk by clinical factors, after carotid ultrasound this increased to 57.1% and after femoral ultrasound to 86.4%.

Conclusion: Ultrasound examinations of the femoral artery in addition to the carotid artery increased the detection of subclinical atherosclerosis and determine a group of patients with higher intensity of atherosclerotic disease. Examinations of both arteries allowed a greater number of RA patients previously considered to have low to moderate cardiovascular risk to be classified as very high cardiovascular risk.

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Table

	Only carotid plaques n= 11	Only femoral plaques n= 36	Femoral and carotid plaques n= 74
Number of carotid plaques per patient	1,3 ± 0,5	-	2,5 ± 2,0*
Carotid plaques size (mm)	1,63 ± 0,20	-	2,08 ± 0,69*
Number of femoral plaques per patient	-	2,3 ± 1,7	3,7 ± 2,9**
Femoral plaque size (mm)	-	2,20 ± 0,59	3,10 ± 1,10**
Total number of plaques per patient	1,3 ± 0,5	2,3 ± 1,7*	6,2 ± 4,3***

†Results in mean ± sd. *p<0,05 vs only carotid plaques. **p<0,05 vs only femoral plaques. ***p<0,05 vs only carotid plaques and only femoral plaques.

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OP0123

RISK OF BREAST CANCER BEFORE AND AFTER RHEUMATOID ARTHRITIS, AND THE IMPACT OF HORMONAL FACTORS

H. Wadström¹, A. Pettersson¹, K. Ekström Smedby¹, J. Askling¹. ¹Karolinska Institutet, Department of Medicine, Solna, Stockholm, Sweden

Background: Large cohort studies have consistently reported decreased occurrence of breast cancer among women with RA. However, both the reasons behind this decreased risk and if it is present already before RA diagnosis, is unclear. The occurrence of RA following breast cancer is clinically and etiologically important also for other reasons. Long-term adjuvant anti-hormonal treatment with tamoxifen or aromatase inhibitors has become mainstay for estrogen receptor positive breast cancer, but are often associated with arthralgia as a side effect. Some studies have suggested that these therapies not only induce arthralgia, but also inflammatory arthritis.

Objectives: To examine the risk of incident breast cancer in women with RA, and the risk of RA in women with a history of breast cancer, taking anti-hormonal treatment for breast cancer into account.

Methods: Using nationwide Swedish registers, women with new-onset RA diagnosed 2006-2016 were identified. Each RA patient was matched on age, sex, and place of residence to 5 randomly selected control subjects from the general population. Through register linkages, we collected information on breast cancer, breast cancer risk factors (age at childbirth, number of children, hormone replacement therapy), and socio-economy. The relative risk of breast cancer after RA was assessed using Cox regression, and the relative risk of RA in women with a history of breast was assessed using conditional logistic regression.

Results: The risk of incident breast cancer in women with RA was reduced and the association was not attenuated by adjustment for breast cancer risk factors (HR=0.80, 95%CI 0.68-0.93)(Table 1). The risk was similar among seronegative RA, (HR=0.77, 95%CI 0.58-1.02), and seropositive RA, (HR=0.81, 95%CI, 0.67-0.98), and for all age groups. We noted reduced risks for all TNM stages, and for both pre- and postmenopausal breast cancer (assessed with age cutoff 50 years). The risk of RA in women with a history of breast cancer was similarly reduced (OR=0.87, 95%CI, 0.79-0.95). Odds ratios (OR) stratified by serostatus and age at RA diagnosis yielded similar results. There was no clear trend in the level of risk reduction when examining the risk by menopausal status, or cancer stage at breast cancer diagnosis. Women with breast cancer treated with tamoxifen (OR=0.86, 95%CI 0.62-1.20), or aromatase inhibitors (OR=0.97, 95%CI 0.69-1.37), did not have an increased risk of RA compared to women with breast cancer treated differently.

Table 1. Risk of breast cancer in women with RA, overall and by serostatus (events and hazard ratios), and risk of RA in women with a history of breast cancer, overall and by serostatus (events and odds ratios)

	No. of breast cancers, patients with RA	No. of breast can- cers, comparators/ controls	RR (95% CI)
Risk of breast cancer in women with RA	190	1191	0.80 (0.68-0.93)
Seronegative RA	55	346	0.77 (0.58-1.02)
Seropositive RA	124	772	0.81 (0.67-0.98)
Risk of RA in women with breast cancer	555	3193	0.87 (0.79-0.95)
Seronegative RA	157	921	0.85 (0.71-1.01)
Seropositive RA	367	2088	0.88 (0.78-0.98)

Conclusion: There is a decreased risk of breast cancer in patients with RA, and a similar decrease in risk of breast cancer before RA diagnosis. We did not find evidence to support that the decreased risk of breast cancer was due to known risk determinants. Furthermore, adjuvant anti-hormonal therapy as used in secondary breast cancer pharmacoprevention did not seem to increase the risk of RA.

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OP0124

RISK OF MALIGNANCIES ACROSS BIOLOGIC CLASSES IN RHEUMATOID ARTHRITIS: ANALYSIS OF A NATIONAL CLAIM DATABASE

R. Seror¹, B. Fautrel², A. Lafourcade², Y. De-Rycke², X. Mariette¹, F. Tubach².

¹Hopitaux Universitaires Paris-Saclay, Rheumatology, Le Kremlin-Bicêtre, France; ²Pitié-Salpêtrière Hospital, Paris, France

Background:

Objectives: To estimate the incidence rate of malignancies in biologic-treated RA patients, and to compared it to the general population and across different classes of biologics

Methods: We conducted an historical cohort study within the French the national claim database, named SNDS. This database prospectively records individual health resource of 86% of the entire French population (65 million inhabitants) since 2007. RA adult patients were identified based on ICD-10 code (M05 or M06). Patients with cancer history were excluded. Treatment exposures focused on incident first use of biologics including all anti-TNF, rituximab, abatacept, tocilizumab, ustekinumab, anakinra. To identify incident treatment periods, only patients who did not receive any biologics in the 1-year period before the index date were