Conclusions: There is a direct correlation between the markers of inflammation and the evolution of carotid atheromatosis in patients with rheumatoid arthritis. The intima-medium thickness index is a paraclinical feature useful in assessing cardiovascular risk in patients with rheumatoid arthritis.

Biological therapy, by controlling the underlying disease, also improves cardiovascular prognosis. Treatment with anti-TNF- α makes good control, together with lipid-lowering and antihypertensive medication of associated cardiovascular pathology, in patients with rheumatoid arthritis.

Disclosure of Interest: None declared

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THU0108 **PATIENT REPORTED OUTCOME MEASURES FOLLOWING KNEE AND HIP REPLACEMENT FOR INDIVIDUALS WITH RHEUMATOID ARTHRITIS: EVIDENCE FROM ROUTINELY-COLLECTED DATA**

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Background: Most estimates of patient-reported outcome measures (PROMs) following total knee replacement (TKR) and total hip replacement (THR) are from individuals with osteoarthritis (OA). It is not well-known whether individuals with rheumatoid arthritis (RA) achieve similar results.

Objectives: To assess the association between RA, relative to OA, with 1) post-operative PROMs and 2) the change between pre- and post-operative PROMs for TKR and THR.

Methods: PROMs for TKR and THR between 2009 and 2015 identified using Hospital Episode Statistics (HES), with diagnosis of RA or OA identified in the Clinical Practice Research Datalink (CPRD). The condition-specific Oxford Knee Score/Oxford Hip Score (OKS/OHS), with pain and function subscales, and Euro-Qol 5-dimension (EQ-5D) overall quality of life were collected prior to and six months following surgery. OKS/OHS ranges from 0 to 48, OKS/OHS function from 0 to 20, OKS/OHS pain from 0 to 28, and EQ-5D from -0.5 to 1, with higher scores being better for each. The effect of RA, relative to OA, on post-operative PROMs was estimated using multivariable linear regressions, which adjusted for age, gender, comorbidities (measured by the Charlson score) and socioeconomic status (measured by IMD Quintile). The effect of RA, relative to OA, on change in PROMs was assessed by adding pre-operative scores as an explanatory factor in the models.

Results: 2212 (2,070 OA and 142 RA) and 2128 (2,030 OA and 98 RA) individuals informed the analyses of TKR and THR, respectively. A diagnosis of RA, relative to OA, was associated with a one-point lower post-operative OKS and a 3-point lower OHS, although only the latter difference was significant. These lower estimates of post-operative OKS/OHS were primarily due to significantly lower scores on the function subscales. The estimated change in OKS/OHS, after accounting for pre-operative scores, was similar for those with RA and OA. RA was also associated with a 0.1 lower post-operative EQ-5D, which was significant for both TKR and THR. The expected change in EQ-5D remained significantly lower for those with RA. The effect of diagnosis from the models is summarised in table 1, with estimated change in OKS/OHS shown in figure 1.

Abstract THU0108 – Table 1. Effect of RA, relative to OA, on 1) total post-operative scores and 2) change in scores. Estimated coefficients with 95% confidence intervals. Significant differences in bold.

	TKR		THR	
	Total	Change	Total	Change
OKS/OHS (0 to 48)	-1.33 (-2.92 to 0.27)	-0.07 (-1.59 to 1.46)	-2.80 (-4.43 to -1.18)	-1.57 (-3.15 to 0.01)
OKS/OHS function (0 to 20)	-1.22 (-1.90 to -0.54)	-0.50 (-1.13 to 0.14)	-1.91 (-2.75 to -1.07)	-0.97 (-1.76 to -0.18)
OKS/OHS pain (0 to 28)	-0.13 (-1.12 to 0.87)	0.34 (-0.63 to 1.30)	-0.89 (-1.80 to 0.02)	-0.66 (-1.56 to 0.25)
EQ-5D (-0.5 to 1)	-0.12 (-0.16 to -0.08)	-0.09 (-0.13 to -0.06)	-0.12 (-0.17 to -0.08)	-0.08 (-0.13 to -0.04)

Abstract THU0108 – Figure 1. Estimated effect of diagnosis on expected change in OKS/OHS by pre-operative score

Conclusions: Individuals with RA undergoing TKR and THR appear to achieve similar improvements in condition-specific scores as those with OA, although the gain in function may be slightly less. The gain in overall quality of life is less for those with RA, however, which is likely due to the systemic nature of the disease.

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THU0109 **AUTOANTIBODY PROFILING FOR RESPONSE TO BARICITINIB IN PATIENTS WITH RHEUMATOID ARTHRITIS AND NO OR LIMITED EXPOSURE TO METHOTREXATE**

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Background: Posttranslational antigen modification plays a role in the pathogenesis of rheumatoid arthritis (RA). The associated autoantibodies are considered unfavourable prognostic factors with respect to disease severity and radiographic outcome. Limited information is available for different serotypes and prediction of treatment response to Janus kinase inhibitors including baricitinib (BARI).

Objectives: To clarify whether fine profiling of baseline autoantibodies against different modified isoforms of vimentin correlate with clinical or radiographic outcome in patients (pts) with active RA and no or limited prior DMARD treatment who initiate treatment with BARI.

Methods: Baseline sera samples from DMARD-naïve pts participating in the randomised, active comparator-controlled Ph3 trial RA-BEGIN¹ [methotrexate (MTX) n=210, BARI 4 mg (mono) n=159 and BARI 4-mg+MTX (combo) n=215] were investigated for autoantibody class (IgG, IgM and IgA) reactivity towards vimentin (V), modified by citrullination (MCV), carbamylation (Carb) or acetylation (Acct), using enzyme-linked immunosorbent assay. Pts were stratified according to negative (<20 U/ml), low-positive (20–60 U/ml) and high-positive (>60 U/ml, 3-fold above the ULN) antibody titre or with respect to the antibody titre tertiles. Change in clinical outcomes (DAS28-CRP, CDAI) and radiographic progression (modified Total Sharp Score) were analysed from baseline to Week 24 using modified last observation carried forward and linear extrapolation, respectively, by baseline autoantibody subclass and titre.