patients. The duration of the disease, high ESR and DAS28 score, NSAIDs treatment and hyperlipidemia were risk factors for CKD in RA (Fig 1). We also found negative correlation between the DAS28 and eGFR (Fig. 2).

Amyloidosis was the most common histologic pattern (51.52%), followed by chronic glomerulonephritis (CGN) (24.24%) and tubulo-interstitial nephritis (24.24%). Among CGN mesangial glomerulonephritis was the most frequent (Table 1). Renal amyloidosis was associated with a duration of RA, presence of systemic symptoms and CRP level.

The levels of PU were lower, and eGFR levels were higher in patients treated with BT than in patients treated with synthetic disease-modifying anti-rheumatic drugs (DMARDs) (Fig 3).

Conclusion: CKD is often developed in patients with high RA activity. Treatment with biological agents is associated with a lower PU and higher GFR levels.

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Abstract AB1302B Table 1. Renal histopathologic findings in RA patients (n=33)

Histological forms	n	%
Amyloidosis:	21	63.7
Chronic glomerulonephritis:	12	36.3
- Mesangial GN:	7	21.2
- IgA nephropathy	4	12.1
- IgM nephropathy	1	3.0
- Membranoproliferative GN	2	6.0
- Minimal change disease	1	3.0
- Membranous nephropathy	3	9.1
- Diffuse nephrosclerosis		

Figure 1. Laboratory data in RA patients

Figure 1

Figure 2. Correlation between eGFR and DSA28

Figure 1

Figure 3. eGFR in RA patients treated with synthetic and biological DMARDs

Figure 1

Disclosure of Interests: None declared
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AB1302C SERUM IMMUNOGLOBULIN G4 LEVEL IN DIFFERENT TYPES OF MALIGNANCY WITHOUT IMMUNOGLOBULIN G4 RELATED DISEASE

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Background: High levels of serum immunoglobulin G4 (IgG4) would comprise a useful diagnostic tool in IgG4-related disease (IgG4-RD), but little information is available about IgG4 in conditions other than IgG4-RD such as malignancies. Previous studies indicate that IgG4-RD is a strong risk factor for malignancy development.

Objectives: The aim of this study is to evaluate the level of serum IgG4 in different malignancy without IgG4-RD.

Methods: 90 patients with malignancy were enrolled between March 1st and August 30th, which have been excluded with IgG4-RD. All samples were collected before treatment. Diagnosis of malignancy was determined by histological result. The levels of serum IgG4 were determined by

nephelometric assay. The cut-off value of serum IgG4 was 201 mg/dl. We compared the levels of serum IgG4 among patients with different types of malignancy.

Results: (1) Among the 90 patients, 18 patients were gallbladder carcinoma, 6 patients were lung carcinoma, 34 patients were liver carcinoma, 6 patients were gastrointestinal carcinoma, and 19 patients were pancreatic carcinoma. 68 (75.56%) patients were male and mean age was 52.8 ± 15.5 yrs. The mean value of serum IgG4 was 146.7 ± 147.6 mg/dl, and 21 (23.3%) of patients have elevated serum IgG4. (2) Serum IgG4 level in gastrointestinal carcinoma is the highest (237.8 ± 50.92 mg/dl), but the sample is too small. Serum IgG4 level in liver carcinoma was higher than other types of malignancy (180.5 ± 32.04 mg/dl. vs gallbladder carcinoma 114.4 ± 15.01 mg/dl, $p < 0.01$. vs pancreatic carcinoma 91.63 ± 19.89 mg/dl, $p < 0.01$. vs lung carcinoma 67.47 ± 11.75 mg/dl, $P < 0.01$).

Conclusion: Elevated serum IgG4 level is common in patients with malignancies, while patients with liver carcinoma have significant higher serum IgG4 level than those with gallbladder carcinoma, pancreatic carcinoma and lung carcinoma. This suggests that IgG4 may have different role in different types of tumor.

Figure 1

Disclosure of Interests: None declared

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Validation of outcome measures and biomarkers

AB1303 FUNCTIONAL AND PROFESSIONAL OUTCOMES IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is the most common chronic inflammatory rheumatism in adults. It affects the synovial membrane, evolves by outbreaks and can lead to joint destruction. It generates a physical disability that causes an impairment of quality of life and professional activity.

Objectives: To study the socio-demographic, clinical and professional characteristics of patients and to assess the impact of RA on quality of life and professional activity.

Methods: We conducted a retrospective, descriptive study on patients' files, followed at the rheumatology department of LA RABTA university hospital, for RA over a period of ten years. The target population was patients having a professional activity at the time of the discovery of the disease. We assessed disease activity by the Disease Activity Score DAS28-CRP, work impact by the "Work Productivity and Activity Impairment" questionnaire (WPAI:RA) and quality of life by the Health Assessment Questionnaire (HAQ). The data was entered into an excel table and analyzed using SPSS software version 19.0. In all statistical tests, the significance level was set at 0.05.

Results: We collected 25 cases of RA. Mean age was 50.36 ± 8.28 years with a sex ratio of 1.08. The mean age of RA was 9.8 years and the mean age of onset was 40.56 ± 9.84 years. The study population occupied a manual job in 84% of cases. The average professional seniority was 21.76 ± 12.83 years. Patients reported having stopped work because of their illness in 44% of cases. The mean of DAS28-CRP was 4.32 ± 1.57 , 72% of the study population had moderate to severe RA activity. The mean HAQ was 1.38 ± 0.69 with 76% of cases suffering from "moderate to severe" or "severe to very severe disability". The evaluation of the work productivity and activity impairment by the WPAI:RA questionnaire objectified an absenteeism of $30.7 \pm 9.4\%$, a presenteeism of $46.7 \pm 26.4\%$, a work productivity loss of $60.4 \pm 33.8\%$ and an activity impairment of $57.2 \pm 25.4\%$. A positive and statistically significant correlation was noted between the results of WPAI and HAQ, between the results of WPAI (except absenteeism) and DAS28CRP and between HAQ and DAS28-CRP.

Conclusion: RA causes a significant functional disability that affects the professional activity and quality of life of patients. Early diagnosis and treatment of this disease can slow the progression of the disease. Occupational medicine plays an important role in the early detection and maintenance of employees with RA at work.

Disclosure of Interests: None declared

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AB1304 THE RHEUMATOID ARTHRITIS FLARE QUESTIONNAIRE (RA-FQ) IS AN EASY TO ADMINISTER PATIENT-REPORTED OUTCOME MEASURE THAT TRACKS WELL WITH THE CLINICAL DISEASE ACTIVITY INDEX (CDAI) OVER TIME IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS (ERA) IN 2 DIFFERENT HEALTH SETTINGS

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Background: RA patients may cancel scheduled visits with their rheumatologist. In clinical practice, a validated patient-reported disease activity measure that tracks well with traditional clinical indices could address an important gap by providing real-time information on RA disease activity when a visit to the rheumatologist is not possible.

Objectives: To assess concordance between the 5-item patient-reported Rheumatoid Arthritis Flare Questionnaire (RA-FQ) (^{1,2}) and the Clinical Disease Activity Index (CDAI) in patients with early RA (ERA) treated in rheumatology clinics in 2 countries with different health systems.

Methods: Data were analyzed from patients enrolled in the Canadian early Arthritis Cohort (CATCH) between Nov 2011 and March 2017 and in the Consortium of early Arthritis Cohorts- USA (CATCH-US) from Dec 2014 to Dec 2018. Both observational studies had a similar design; enrolled patients diagnosed with EIA (< 1 year of persistent symptoms) by a rheumatologist who completed similar regular protocolized clinical assessments, laboratory investigations and PROMs. The RA-FQ, designed to assess worsening of RA Inflammation, is a short composite PROM (total score 0-50) that sums 5 single items (NRS 0-10) querying pain, fatigue, stiffness, function and participation. The present analysis includes patients meeting ACR 1987 or 2010 ACR/EULAR criteria, with RA-FQ and CDAI at baseline and at least 1 other follow up (FU) over 12-months. We compared mean scores of the RA-FQ and CDAI over time and calculated intraclass correlation coefficients (ICC) to assess concordance between measures in the 2 cohorts.

Results: The study included 818 Canadian and 75 American early RA patients. Age, male sex, and disease activity was higher in the Canadian cohort, while post-secondary education was higher in the US cohort (Table1). RA-FQ and CDAI scores tracked closely with one another over time in both cohorts (Canada ICC: 0.76; US ICC: 0.80)

Conclusion: There was high concordance between the RA-FQ and CDAI measures over the 1st year of follow up in 2 early RA samples recruited in 2 countries. The RA-FQ may help patients and clinicians track patient disease activity between clinic visits.