**Results:** RA patients had significantly higher serum level of YKL-40 than HC (92,1; 68,5-153,1 pg/ml vs 54,0; 41,7-83,2 pg/ml, p<0.01). Serum YKL-40 concentration was positively correlated with DAS 28 (r=0,5; p<0,05), erythrocyte sedimentation rate (ESR) (r=0,5; p<0,05), CRP (r=0,8; p<0,05), SAA (r=0,6; p<0,05) and MMP-3 (r = 0,6; p<0,05). We found no relationship between the level of YKL-40 and articular radiographic changes.
**Conclusion:** Elevated serum concentration of YKL-40 in early RA is associated with clinical and laboratory indicators of disease inflammatory activity and increased level of MMP-3 - an immunological marker of joint destruction.
**Disclosure of Interests:** Elena Aleksandrova: None declared, Alexander Novikov: None declared, Elena Luchikhina Speakers bureau: Abbvie, Roche, Pfizer, Biocad, MSD, Sanofi, Johnson & Johnson, Glaxo, UCB, Celgene, Novartis, Consultant of: Abbvie, Biocad, Sanofi, Celgene, Dmitriy Karateev Speakers bureau: Abbvie, Roche, Pfizer, Biocad, MSD, Sanofi, Johnson & Johnson, Glaxo, UCB, Celgene, Novartis, Lilly, Bayer, Paid instructor for: Abbvie, Pfizer, Biocad, Sanofi, Novartis, Lilly, Galina Lukina Speakers bureau: Abbvie, Roche, Pfizer, Biocad, MSD, Sanofi, Johnson & Johnson, Glaxo, UCB, Celgene, Novartis, Paid instructor for: Abbvie, Biocad, Sanofi, Celgene
**DOI:** 10.1136/annrheumdis-2021-eular.2069

## AB0838 ADHERENCE TO TREATMENT IN PATIENTS WITH RHEUMATIC PROFILE DEPENDING ON THE OPTION OF BASIC THERAPY

O. Malyshenko[1], M. Koroleva[1], M. Letaeva[1], J. Averkieva[1], T. Raskina[1]. *[1]Kemerovo State Medical University, Department of Propedeutics of Internal Medicine, Kemerovo, Russian Federation*

**Background:** Treatment adherence is an important issue in actual clinical practice. As defined by the WHO, adherence to treatment is seen as the degree to which a patient's actions - taking medications, adhering to diet and other lifestyle interventions - correlate with following the doctor's recommendations. Treatment of patients with rheumatic diseases continues for many years, and often for life. The identification of factors associated with adherence to therapy will justify the implementation of a number of measures in order to increase the effectiveness of treatment of patients. Biological disease modifying antirheumatic drugs (bDMARDs) therapy involves more frequent visits of patients to a doctor with close monitoring of their condition, which may have an impact on adherence to treatment in this group of patients.
**Objectives:** to assess adherence to treatment of patients with rheumatological profile, depending on the basic therapy option.
**Methods:** A survey of 84 patients was conducted: 48 (57.1%) women and 36 (42.9%) men, mean age 51 years (36.8; 60.3). Most patients are observed with a diagnosis of rheumatoid arthritis - 48 (57.1%) people, with psoriatic arthritis - 26 (30.9%) and with ankylosing spondyloarthritis - 10 (12.0%) people.
The patients were divided into 2 groups depending on the type of basic therapy: Group 1 (40 people) - patients receiving combined therapy with bDMARDs and methotrexate; Group 2 (44 people) - patients with methotrexate monotherapy.
Patients in group 1 received the following bDMARDs: 18 patients received sarilumab (200 mg sc once every 2 weeks), 22 people received secukinumab (150 mg sc once a month). All patients took methotrexate at an average dose of 17.5 (15.0; 20.0) mg / week and NSAIDs.
Adherence to treatment was assessed using the Morisky-Green scale. Each of the 4 points is evaluated according to the principle of answers to the question "yes-no", while the answer "yes" is estimated at 0 points, and the answer "no" - at 1 point. Patients who score 4 points are considered compliant (adherent); insufficiently committed and those at risk for the development of non-commitment - 3 points; not committed - 2 points or less.
**Results:** The majority of patients are seen by a doctor monthly - 45.2% (38) and once a quarter - 33.3% (28). Only 7.1% (6) people are observed once every 6 months and 4.8% (4) once a year, and 9.6% (8) are not observed at all.
The frequency of medical observations in the 1st group of patients was higher than in the 2nd: monthly - 60.0% (24) and 40.9% (18), every 3 months - 40.0% (16) and 45.5% (20), respectively (p = 0.072 and p = 0.089), and only patients of the 2nd group were observed once every 6 months (4.5% - 2 people) and once a year (9.1% - 4 people). There were no statistically significant differences in adherence indicators.
When assessing adherence to treatment according to the Morisky-Green scale: only 37.5% (15) of patients in group 1 and 29.6% (13) in group 2 (p = 0.12) adhere to therapy, 30.0% are not adherent enough (12) and 22.7% (10) patients (p = 0.31), not adhering to treatment - 32.5% (13) and 47.7% (21) people, respectively (p = 0.39).
**Conclusion:** Thus, basic therapy bDMARDs with more frequent medical supervision does not affect adherence to treatment. Only about a third of patients are adherent to bDMARDs therapy.
**Disclosure of Interests:** None declared
**DOI:** 10.1136/annrheumdis-2021-eular.3127

## AB0839 A STUDY OF SERUM COMPLEMENT AND SERUM CALPROTECTIN LEVEL IN SYSTEMIC LUPUS ERYTHEMATOSUS

H. Goswami[1], S. Kakati[1]. *[1]Assam Medical College & Hospital, Dibrugarh, General Medicine, Dibrugarh, India*

**Background:** Serum calprotectin, also known as MRP8/14 or S100A8/A9, has gained attention in recent years as a candidate biomarker in inflammatory diseases like SLE.[1] Proteins of the complement pathway (serum C3 and C4) are linked to the pathogenesis of SLE and their levels have been measured as a means to assess the disease activity.[2]
**Objectives:**
[1] To study the relation of serum complement and serum calprotectin levels to disease activity in SLE
[2] To study the relation between serum complement and serum calprotectin level in SLE
**Methods:** Our study was a hospital based observational study conducted in a tertiary care centre in North-East India during the period of June 2019 to May 2020. A total of 102 patients of SLE were taken up for the study. Disease activity was assessed using SLEDAI-2K scores and serum calprotectin level was measured by ELISA. Serum C3 level was assessed by Nephelometric and C4 level by Turbidimetric immunoassay. The statistical significance was fixed at 5% level of significance (p<0.05) for all analysis.
**Results:** Our study found a predominantly female population (Female: Male ratio 24.5: 1) with majority of the patients (49.02%) in the 30-39 years age group. Higher calprotectin levels were seen in patients with higher disease activity (SLEDAI) and this relation was statistically significant (r=0.84, p<0.001). There was significant negative correlation between disease activity (SLEDAI) and serum C3 (r=-0.35, p<0.001) and serum C4 (r=-0.4, p<0.001) level. There was a significant negative correlation between complement levels and serum calprotectin levels (r=-0.53, p<0.001).
**Conclusion:** We found a significant positive correlation between serum calprotectin level and disease activity with a significant negative correlation between complement level and disease activity in SLE patients. There was a significant negative correlation between serum complement and serum calprotectin levels. These findings suggest serum calprotectin levels could be a substantial addition in the existing diagnostic array of tools in assessing lupus disease activity.
**REFERENCES:**
[1] García-Arias M, Pascual-Salcedo D, Ramiro S, Ueberschlag ME, Jermann TM, Cara C, et al. Calprotectin in rheumatoid arthritis: Association with disease activity in a cross-sectional and a longitudinal cohort. Mol Diagnosis Ther. 2013;17(1):49–56.
[2] Walport MJ. Complement and systemic lupus erythematosus. Arthritis Res. 2002;4(Suppl 3):S279-293.
**Disclosure of Interests:** None declared
**DOI:** 10.1136/annrheumdis-2021-eular.3531

## AB0840 DIAGNOSIS VALUE OF INTERLEUKIN 23 IN SPONDYLOARTHRITIS

L. Kharrat[1], M. Slouma[1], A. Tezeghdenti[2], W. Dkhili[2], R. Dhahri[1], E. Ghazouani[2], I. Gharsallah[1], L. Metoui[1], B. Louzir[1]. *[1]The Military Hospital of Tunis, Rheumatology, Tunis, Tunisia*; *[2]The Military Hospital of Tunis, Immunology, Tunis, Tunisia*

**Background:** Interleukin 23 (IL-23) is a pivotal pro-inflammatory cytokine in the Th17/IL-23 axis which became the center of attention in researches during these last decades, especially during spondyloarthritis (1).
**Objectives:** We aimed to study the diagnosis value of IL-23 serum in spondyloarthritis.
**Methods:** We conducted a case-control study, including 144 subjects divided into 2 groups:
-G1: 72 patients meeting the Assessment of SpondyloArthritis International Society (ASAS) criteria for spondyloarthritis (SA)
-G2: 72 healthy controls matched for age and sex.
For each SA patient we collected the following parameters: BASDAI (Bath Ankylosing Spondylitis Disease Activity Index), ASDAS (Ankylosing Spondylitis Disease Activity Score), BASFI (Bath Ankylosing Spondylitis Functional Index), and BASRI (Bath Ankylosing Spondylitis Radiology Index).
The IL-23 level was measured using Enzyme-linked immunosorbent assay (ELISA).
Erythrocyte Sedimentation rate (ESR) and C-reactive protein (CRP) were also measured.
We performed a ROC analysis and computed the air under the curve (AUC) at IL-23 to diagnose SA patients.
Statistical analysis was performed using "IBM SPSS Statistics" software version 25.

Ann Rheum Dis: first published as 10.1136/annrheumdis-2021-eular.3531 on 19 May 2021. Downloaded from http://ard.bmj.com/ on April 16, 2024 by guest. Protected by copyright.