receiving tumour necrosis factor inhibitors (TNFi) while 40% were on corticosteroids (mean daily dose: 4.7 mg). Despite these therapies, 43% of patients had active disease (DAS28-ERS>3.2); 34% moderate (MDA, DAS28-ESR=3.2–5.1) and 9% high (HDA, DAS28-ESR>5.1) disease activity. During the 1 year observation period, among the group of patients with MDA who were only on csDMARDs, 15% started a bDMARD while among those on bDMARDs, 11% switched to another bDMARD. The respective rates of starting a bDMARD (in those on csDMARDs) or switching to another bDMARD (in those on bDMARDs), were much higher for patients in the HDA group (41% and 32% respectively, p<0.001 for both groups). At the end of the 1st year, the proportion of patients on TNFi and corticosteroids was 57% and 32%, respectively. Overall, despite a decrease in the DAS28-ESR score (from 3.2±1.2 to 2.9±1.3, p<0.001), 37% of patients had still active disease (6% improvement after 1 year; MDA: 30%, HDA: 7%).

Conclusions: In a large, real life, RA cohort with almost half of patients on bDMARD-based therapies, more than one third of patients had still active disease at the end of the 1st year of follow-up. These findings could be explained in part by the low rate of bDMARD initiation or switching in this cohort or they could indicate the limitations of current therapeutic approaches in RA patients with longstanding disease in Greece.

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Disclosure of Interest: None declared

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THU0103 EVALUATION OF SERUM B-2 MICROGLOBULIN LEVELS AND ITS RELATIONSHIP WITH DISEASE ACTIVITY IN RHEUMATOID ARTHRITIS

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Background: β−2 microglobulin (β2MG) is produced and secreted from T and B lymphocytes. In autoimmune diseases, due to lymphocyte activation and proliferation, serum β2MG level is expected to be higher than normal. In a few studies, increased serum and synovial fluid β2MG levels in rheumatoid arthritis (RA) were reported.

Objectives: The aim of this study was to evaluate the concentration of β2MG in peripheral blood in RA patients and to show its relationship with disease activity.

Methods: In this study, 121 RA patients and 50 sex and age matched healthy controls were enrolled. Patients who had other inflammatory diseases or any kind of malignancy were excluded.

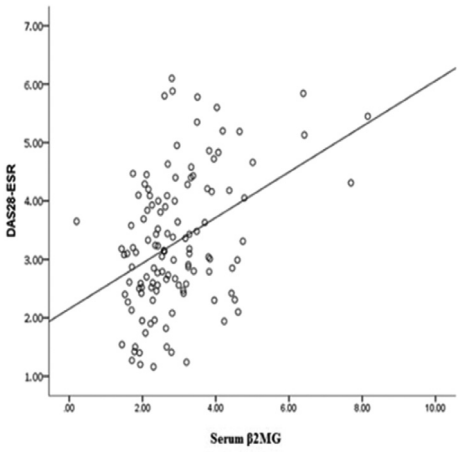
Results: The mean age of RA patients (97 female and 24 male) were 55 years (±10.9 years) and mean disease duration was 9 years (min: 6 months, max: 42 years). The demographic data of patients and healthy controls are shown in table 1. There was a statistically significant difference between haemoglobin, erythrocyte sedimentation rate and C-reactive protein levels between two groups (p<0.001, p<0.001,p=0.001 respectively). Serum β2MG levels were higher in RA group than healthy controls.(p<0.001) When RA patients were grouped according to disease activity as remission to low disease activity(DAS28-ESR<3.2) (n=65) and moderate to severe disease activity(DAS28-ESR≥3.2) (n=56), the serum β2MG levels were higher in DAS28-ESR≥3.2 group than in DAS28-ESR<3.2 group (p=0.003). The difference between serum β2MG levels were statistically significant in low and high disease activity groups when grouped both according to DAS-ESR and DAS-CRP (p=0.003 and p=0.006, respectively). The seropositivity between two groups were similiar (p=0.385), although serum ESR, CRP levels and the rate of morning stiffness were significantly higher in high disease activity group. The results were shown in table 2. According to Spearmann correlation test, the serum β2MG level and DAS-ESR and DAS-CRP were positively correlated which were both statistically significant. (r=0.378, p<0.001 and r=0.324, p<0.001 respectively).

Abstract THU0103 – Table 1. Baseline characteristics of RA patients and healthy controls

Characteristics	RA(n=121)	Control (n=50)	p value
Female Sex,n (%)	97 (80.2)	35 (70.0)	0.150
Age, years	55.0±10.9	52.6±10.6	0.183
WBC	7736 ±3177	7170±1759	0.139
Hb	12.6±1.5	14.1±1.7	***<0.001***
Thrombocyte	290.4 ±88.9	279.7±65.2	0.441
ESR	24.3±17.0	12.2±8.2	***<0.001***
CRP (IQR)	2.5 (4.7)	6.1 (10.7)	***0.001***
β2-microglobulin	2.93±1.20	2.21±0.54	***<0.001***
DAS28-ESR	3.30±1.16		
DAS28-CRP	3.60±1.39		

Abstract THU0103 – Table 2. Baseline characteristics of RA patients

	DAS28-ESR≤3.2 (n=65)	DAS28-ESR>3.2 (n=56)	p value
Female Sex, n (%)	48 (73.8)	29 (87.5)	0.060
Age, years	53.4±11.3	56.9±10.1	0.079
ESR	17.8±12.3	31.9±18.6	***<0.001***
CRP (IQR)	4.0 (7.9)	10.2 (12.6)	***<0.001***
B2-microglobulin	2.62±0.87	3.29±1.42	***0.003***
DAS28-ESR	2.42±0.59	4.31±0.78	***<0.001***
DAS28-CRP	2.67±0.61	4.67±2.26	***<0.001***
Morning stiffness, n (%)	13 (20)	24 (42.9)	***0.007***



Abstract THU0103 – Figure 1. The figüre that shows the relationship of serum β2MG with DAS28-ESR

Conclusions: Our results show that serum β2MG concentration increase in RA and is higher in active patients. It can be concluded that serum β2MG may be an appropriate parametre to monitor disease activity in rheumatoid arthritis.

Disclosure of Interest: None declared

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THU0104 THE TEMPORAL PROFILE OF ANTIBODIES DIRECTED AGAINST POST-TRANSLATIONAL MODIFICATIONS VARIES ACCORDING TO ISOTYPE AND TARGET IN PATIENTS WITH NEW-ONSET RHEUMATOID ARTHRITIS

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Background: Autoantibodies directed against antigens with post-translational modifications (PTMs), such as citrullination (ACPA), are a hallmark of rheumatoid arthritis (RA)[1]. ACPA titres increase prior to disease onset, but are thought to be relatively stable after symptomatic inflammation is established[2]. The temporal profile of antibodies against acetylated (AAPA) and carbamylated (ACarPA) peptides has not been so comprehensively characterised following the onset of joint swelling[3].

Objectives: We aimed to track serum levels of anti-PTM antibodies over 18 months in patients with newly-presenting RA in our prospective observational cohort.

Methods: Patients with treatment-naïve inflammatory arthritis donated serum at baseline, 6 and 18 months. 103 patients satisfying ACR/EULAR 2010 criteria for RA underwent testing for IgG and IgA antibodies against peptides with citrulline (ACPA), carbamylated lysine (ACarPA), and acetylated lysine (AAPA) PTMs using ELISA as previously described[4].

Results: 57% of participants were female, and 48% and 50% patients were anti-CCP2 or rheumatoid factor positive respectively. Mean age was 56 years (s.d. 15.2), symptom duration 55 days (s.d 22.4), and DAS28CRP 4.4 (s.d. 1.3) at enrolment.

Comparing baseline and 18 month median antibody levels measured by optical density, a decrease was observed over time for IgG (0.26 vs 0.17, p<0.0001) and IgA AAPA (0.23 vs 0.09, p<0.0001), as well as both IgG and IgA antibodies against citrullinated peptides (0.47 vs 0.40, p<0.0001 and 0.16 vs 0.12, p<0.0001 respectively). Significant reductions occurred between baseline and 6 months for both IgG (p<0.0001) and IgA (p<0.0001) AAPA antibodies, but not between 6 and

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