duration was 156 (48–420) months. DAS 28 score was 2.86 (0.68–5.70) and 54.5% of the patients were in remission. BMOD synovitis, erosion and PDUS synovitis total scores were 20 (6–36); 6 (0–17); 1 (0–14) respectively. Although US findings were not correlated with DAS 28 and grip strength; there was poor correlation between US findings and DASH, RAAD and disease duration (Table 1). Signs of synovitis indicated with PDUS in 63.3% of the joints assessed. High-grade PDUS signal (grade 3) was found in 10 (22.7%) of the patients. Duration of morning stiffness, HDI and DASH scores were worse in the patients with high-grade PDUS signals (p=0.01, 0.04, 0.01 respectively)

Table 1. Correlation coefficients between clinical, ultrasound and functional variables

	BMOD synovitis Total		BMOD erosions Total		PDUS synovitis Total	
	r	p	r	p	r	P
DASH	0.37	0.02*	0.19	0.20	0.13	0.38
HDI	0.21	0.17	0.17	0.28	0.21	0.17
RAAD	0.33	0.02*	0.41	0.00*	0.22	0.15
DAS 28	-0.04	0.78	0.01	0.95	-0.05	0.75
MS	0.24	0.12	-0.10	0.51	0.20	0.19
Disease duration	0.13	0.38	0.46	0.00*	-0.31	0.03*
Lateral GS	0.07	0.64	-0.06	0.69	-0.06	0.70
Tip GS	0.11	0.49	-0.27	0.08	0.09	0.56
Three fingered GS	0.21	0.89	-0.17	0.27	0.05	0.76
Mass grasp	-0.08	0.59	-0.078	0.61	-0.12	0.43

BMOD: B mode ultrasound, PDUS: Power Doppler ultrasound, DASH: Disabilities of the Arm, Shoulder and Hand, HDI: Hand disability index, RAAD: Rheumatoid Arthritis Articular Damage, DAS 28: Disease activity score, MS: Morning stiffness, GS: Grip strength. *P<0.05.

Conclusions: US scores in established RA patients are usually high because of synovial hypertrophy. It is considered that the high grade PDUS signals are more appropriate for evaluation of long-standing RA patients. Furthermore in this study, grade 3 PDUS signals were found to be a good indicator of synovial inflammation, morning stiffness, and disability.

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AB0214 METHOTREXATE IN EARLY RHEUMATOID ARTHRITIS: A SINGLE-CENTER EVALUATION OF CLINICAL OUTCOME COMPARING TWO STARTING TREATMENT STRATEGIES

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Background: methotrexate (MTX) is considered the 'anchor drug' in the treatment of rheumatoid arthritis (RA) and it should be part of the first treatment strategy: there are many indications about the correct way to optimize the dosage, depending on clinical response and tolerability, but currently there is no shared evidence about the optimal starting dosage.

Objectives: to compare two different starting treatment strategies with MTX in patients with early RA evaluated at our Early Arthritis Clinic (EAC) in order to assess the rate of patients who reaches the target (remission/low disease activity) at 6 months, according with EULAR guidelines.

Methods: patients with RA (disease duration <12 months) evaluated at our EAC between 2005 and 2016 and treated with MTX parenterally and glucocorticoids (GC) were included. Patients followed a treat-to-target strategy to reach low disease activity with bimonthly tight control. Patients evaluated between 2005 and 2009 were initially treated with MTX 10 mg/week + GC (group A) with increase of MTX to 15 and then 20 mg/week in case of failure to reach the target; patients evaluated between 2010 and 2016 were initially treated with MTX 15 mg/week + GC (group B) with possible increase to 20 and 25 mg/week. The DAS28 response was assessed after 6 months.

Results: 260 patients were analyzed: 123 in group A vs 137 in group B. At baseline patients showed differences in DAS28 (5.2±1.15 vs 4.6±1.16, p<0.0001) and HAQ (1,125 vs 1 IQR IQR 0.75–1.875 0.375–1.5, p=0.006); there were no differences in terms of autoimmunity. After 6 months of therapy there were no differences in clinical response: 32% of patients in the group A reached the DAS28 remission vs 40% of the group B (p= ns), 27% in the group A reached the DAS28 low disease activity vs 24% of the group B (p= ns), 41% of the group A was in moderate disease activity vs 36% in the group B (p= ns). The need to increase the dosage of MTX during the first 6 months was similar: 27.6% of the group A vs 29.9% of the group B (p= ns), conversely, the need to reduce the dosage of MTX due to intolerance and/or adverse event was significantly higher in the group B (group A: 1.6% vs group B: 9.5%, p=0.014).

Conclusions: the use of higher dose of MTX is associated with a higher rate of side effects but does not provide, at short term, a significant improvement in term of clinical outcome. Conversely, the initial use of MTX 10 mg/week, with a quick dose titration in case of persistent disease activity, seems to be an appropriate option for many patients with early RA, as also recently suggested by the Utrecht Arthritis Cohort Study Group; in spite of this, there is an amount of patients who do not achieve the clinical target at short term regardless of the initial dose of MTX. Our experience suggests that in the early phase of RA treatment, in a context based on early diagnosis, tight control and treat to target, the clinical outcome seems to be linked more to the treatment strategy than to the drug dosage used.

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AB0215 A LONGER MEAN SURVIVAL OF BIOLOGIC TREATMENTS IS ASSOCIATED WITH DAS28 REMISSION IN RHEUMATOID ARTHRITIS PATIENTS

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Objectives: To determine factors associated with remission (DAS28<2.6). We specifically considered the association of biologic treatment duration, number of biologic switches and survival of biologic treatment with remission.

Methods: We conducted a retrospective analysis on a monocentric cohort of rheumatoid arthritis patients. We included patients who were on biologic drugs at the time of the analysis (31st December 2016). We considered patients starting the first biologic treatment since January 2000 and with a follow-up ≥12 months. We considered the following variables: demographics, positive rheumatoid factor (RF)/ anti-citrullinated peptides (ACPA), disease duration at the start of the first biologic treatment, number of biologic switches, clinical assessment at the last follow-up, concomitant DMARDs, prednisone dose, current biologic treatment. We also considered the mean survival of biologic treatments, defined as the duration of the biologic treatment of each patient divided by the number of biologics undergone by the patient.

Mann-Whitney test and chi-square test were used to assess the association of continuous and categorical variables with the outcome. Continuous measures are reported as medians and interquartile range. Multivariate regression analysis included all variables reaching a p value <0.2 in univariate analysis

Results: We collected data of 330 patients. All patients had complete data. One hundred thirty-five patients (40.9%) were in DAS28 remission. Characteristics of the patients are reported in Table I. We considered 609 biologic treatments (abatacept n=61; anti-TNF alpha n=445; anakinra n=43; tocilizumab n=56; rituximab n=5). Total biologic treatment duration in all patients was 9.62 years (5.68–12.53), in patients in remission 8.95 (4.70–12.53) and in patients not in remission 10.12 (6.28–12.62) (p=0.248). Median number of previous biologic switches was 1.00 (0–1.00) in patients in remission and not in remission (p=0.436). Survival of biologic treatments was 5.33 years (2.89–7.72) in all patients, 4.57 (2.54–7.28) in patients in remission and 5.81 (3.49–7.93) in patients not in remission (p=0.013).

All clinical assessments at the last follow-up were significantly associated with DAS28 remission. Mean prednisone dose was significantly lower in patients in DAS28 remission but was considered as a consequence of remission rather than a predictor (Table I). The type of current biologic treatment was not significantly associated with DAS28 remission.

Variables included in the multivariate regression analysis were: BMI, age, disease duration, positive RF/ACPA mean survival of each biologic treatment. All variables included in the model were independently associated with DAS28 remission. A higher BMI, older age, longer disease duration and positive RF/ACPA were negatively associated with remission. A longer mean survival of biologic

Table I. Characteristics of the patients according to the achievement of DAS28 remission at the last follow-up: results of univariate and multivariate analysis.

		Univariate analysis			Multivariate regression analysis		
	All Patients	Patients not in DAS28 Remission	Patients in DAS28 Remission	p value*		OR (95% C.I.)	p value
Number	330	195	135				
Females, n (%)	58 (17.6)	34 (17.4)	24 (17.8)	0.936			
Age, median (IQR), years	62.14 (51.11-70.04)	63.62 (54.14-71.64)	60.69 (47.61-68.03)	0.009	per 10-year increase	0.83 (0.69-0.99)	0.037
BMI, median (IQR)	23.52 (21.29-27.22)	24.54 (22.09-27.68)	22.95 (20.45-26.17)	0.001		0.91 (0.86-0.96)	0.001
Disease duration, median (IQR), years	8.63 (3.83-14.43)	9.33 (4.92-15.17)	7.33 (2.92-12.08)	0.017	per 5-year increase	0.86 (0.75-0.99)	0.038
Positive rheumatoid factor or anti-citrullinated peptides, n(%)	189 (57.4)	123 (63.1)	66 (49.3)	0.013		0.58 (0.36-0.92)	0.022
Combined DMARD, n (%)	117 (35.5)	75 (38.5)	42 (31.1)	0.262			
Daily prednisone dose, median (IQR), grams	2.50 (0.00-5.00)	0.00 (0.00-5.00)	0.00 (0.00-5.00)	<0.001†			
Current anti-TNF use, n(%)	95 (28.8)	60 (30.8)	35 (25.9)	0.339			
Subcutaneous administration, n(%)	292 (88.5)	175 (89.7)	117 (86.7)	0.369			
Biologic treatment duration, median (IQR) (years)	9.62 (5.68-12.53)	8.95 (4.70-12.53)	10.12 (6.28-12.62)	0.248			
Mean survival of biologic treatments, median (IQR), years	5.33 (2.89-7.72)	4.57 (2.54-7.28)	5.81 (3.49-7.93)	0.013	per year increase	1.11 (1.03-1.18)	0.003
Biologic switches, median (IQR)	1.00 (0.00-1.00)	1.00 (0.00-1.00)	1.00 (0.00-1.00)	0.436			
Tender joints, median (IQR)	0.00 (0.00-2.00)	2.00 (0.00-2.00)	0.00 (0.00-0.00)	<0.001¶			
Swollen joints, median (IQR)	2.00 (0.00-3.00)	3.00 (2.00-5.00)	0.00 (0.00-1.00)	<0.001¶			
Patient VAS, median (IQR)	30.00 (20.00-40.00)	35.00 (30.00-50.00)	20.00 (10.00-25.00)	<0.001¶			
C-reactive protein, median (IQR)	4.00 (1.74-8.00)	5.00 (3.49-8.90)	2.00 (0.40-3.90)	<0.001¶			
DAS28, median (IQR)	2.82 (2.59-3.44)	3.28 (2.96-3.91)	1.80 (1.52-2.23)	<0.001			

*Continuous variables are presented as medians and the respective interquartile range IQR, and were tested with the Mann-Whitney test. Categorical variables are presented as frequencies and were tested with the chi-square test. † Not included in multivariate analysis. ¶ Not included in multivariate analysis as they are components of the DAS28.