Results: Baseline characteristics was as below. Mean age was 71.4 years old (yo) in MONO-G, 58.3 yo in MTX-G, 70.1 yo in CSD-G, and 58.7 yo in BIO-G. RA duration was 10.2 years in MONO-G, 8.9 years in MTX-G, 11.2 years in CSD-G, and 15.1 years in BIO-G. SDAI at initiation of IGU was 14.2 in MONO-G, 12.8 in MTX-G, 21.3 in CSD-G, and 18.4 in BIO-G. SDAI was significantly improved over time in all four groups (Fig. 1). There were no significant differences in Δ SDAI from baseline to 1 year between groups by one-way ANOVA (Bonferroni). Continuation rates of IGU at one year and three years were 66.6% and 21.2% in MONO-G, 77.8% and 57.1% in MTX-G, 69.2% and 39.7% in CSD-G and 75.0% and 75.0% in BIO-G. Continuation rate in MTX-G was significantly favorable compared with that in MONO-G and CSD-G by Log-rank test (Fig. 2). Most frequent reason for stopping IGU was liver damage (10 cases). Second frequent reason was intermittent pneumonia in 4 cases and infectious pneumonia in 4 cases.

Conclusion: IGU seemed to be the most tolerant in MTX-G and the second most tolerant in BIO-G. Although higher aged population who might have several comorbidities was included in MONO-G and CSD-G, moderate efficacy of IGU was seen in those groups. Although biological DMARDs is effective in RA patients, the cost is very expensive. IGU is comparative cheap (¥9,200/month) and suitable for RA patients with economic difficulties. As IGU decreased TNF-alpha production via inhibition of NF-kB, MTX+IGU may have similar mode of action with MTX+TNF inhibitor. Although small cases were included in BIO-G, Continuation rate of IGU in BIO-G was good.

Fig 1. Δ SDAI from baseline
Only patients in whom iguratimod was continued over 3 months were included. Last observation carried forward.

Fig 2. Continuation rates of iguratimod
All patients in whom iguratimod was prescribed were included. Kaplan-Meier.

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AB0427

DIFFERENCES IN DRUG USAGE BETWEEN EORA AND YORA PATIENTS WITH TARGET OF LOW DISEASE ACTIVITY

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Background: Along with the present aging population, development of new therapies such as biological disease-modifying anti-rheumatic drugs for rheumatoid arthritis (RA) has resulted in an increasing number of elderly patients with RA seeking treatment. Furthermore, the onset age of RA has been reported to be trending higher. Elderly onset RA (EORA) is defined as that which develops after 60 years of age, and shown to differ from young onset rheumatoid arthritis (YORA) in regard to background and drug treatment.¹ Although many EORA cases have acute onset, cases with polymyalgia rheumatica (PMR)-like symptoms and negative for rheumatoid factor (RF) have recently been observed at a relatively high rate.² In fact, we have found it occasionally difficult to distinguish between EORA and PMR in clinical settings. For both EORA and YORA patients, treat-to-target (T2T) is necessary, though it is considered that EORA should be treated with the goal of acquiring low disease activity (LDA) from the viewpoint of side-effects of administered therapeutic drugs.

Objectives: In this study, we examined the number of drugs given to EORA and YORA patients treated for RA at our hospital who achieved LDA.

Methods: We enrolled 260 patients into the EORA (n=70) and YORA (n=190) groups, and investigated background and treatment protocols.

Results: As for background, there was a significant difference between the EORA and YORA groups for mean age, mean disease duration, and female ratio, whereas the difference was not significant in regard to anti-body positive rate, SDAI, or DAS28-CRP. In those groups, average age was 73.8 and 57.8 years, disease duration was 6.66 and 14.7 years, and female ratio was 62.9% and 83.7%, respectively. Furthermore, RF positivity was 85.3% and 80.7%, and ACPA positivity was 86.5% and 87.7%, respectively, while SDAI was 4.28 and 4.59, and DAS28-CRP was 1.99 and 2.04, respectively (Table 1). As for treatments given to the patients, the rates of prednisolone (PSL) use (37.1% vs. 36.3%), and dosage of methotrexate (MTX) (1.45 vs. 1.41 mg) and its usage rate (55.7% vs. 65.3%) were not significantly different between the groups. On the other hand, MTX weekly administration (2.89 vs. 4.09 mg, p=0.009) and biologics usage rate (32.9% vs. 56.3%, p=0.0012) were significantly lower in the EORA group (Table 2).

Table 1

	EORA	YORA
Average age (yrs)	73.8±0.75	57.8±0.91
Average Disease Duration (yrs)	6.7±0.57	14.7±0.81
Female rate (%)	62.9	83.7
RF positive rate (%)	85.3	80.7
ACPA positive rate (%)	86.5	87.7
SDAI	4.28±0.38	4.59±0.22
DAS28CRP	1.99±0.08	2.04±0.05

Table 2

	EORA	YORA
Rate of PSL use (%)	37.1	36.3
PSL amount (mg)	1.45±0.29	14.1±0.21
Rate of MTX use (%)	55.7	65.3
MTX amount (mg/W)	2.89±0.36**	4.09±0.25
Rate of bio use (%)	32.9**	56.3

** p < 0.01

Conclusion: Age of onset of RA has been increasing with the aging of society. Therefore, it is important to consider the features of EORA and YORA when considering therapy. For the present investigation, we considered the goal of treatment to be acquisition of LDA rather than

remission, and our findings indicate that EORA patients may be better able to achieve that goal with lower MTX dosage and biological product usage as compared to YORA patients. In addition, EORA patients might achieve LDA with a lower amount of drugs.

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AB0428

PATIENT-PHYSICIAN INTERACTION AS A PREDICTOR OF METHOTREXATE ADHERENCE IN RHEUMATOID ARTHRITIS PATIENTS

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Background: Recent years have seen numerous encouraging developments in the treatment of patients with rheumatoid arthritis (RA) with significant improvement in disease control. However, methotrexate (MTX) remains a cornerstone therapy and first-line drug for majority of patients with RA, commonly associated with prolonged or even lifelong treatment, which takes the risk for decreasing medication adherence over time. Therefore, prompt recognition of predictive factors for MTX non-adherence is one of the most important challenges related to treatment of patients with RA.

Objectives: The aims of this study were to assess patients' self-reported adherence to MTX, as well as to investigate predictive role of physician-patient interaction satisfaction for MTX adherence. Namely, it could be hypothesized that patients' perceptions of multiple specific components of relationship with their physician are associated with patient trust in their physician, which is strongly related to treatment adherence.

Methods: In the period between May 1 and September 15, 2018, 98 consecutive RA patients who were treated in Clinical center of Montenegro and private clinic "Merkur Nera" were enrolled in this multi-centric cross-sectional study. Non-adherence to MTX was defined as ≥ 1 dose missed against medical advice. Patients field in the questionnaire consisted of MTX-specific queries, including the questions related to therapy-related communication with their physician. Possible interaction of the investigated confounders and their joint effect on the MTX adherence were analyzed using ordered logistic regression analysis. A multivariate logistic regression analysis was performed including all covariates that appeared to be associated with the endpoint in the univariate models ($p < 0.1$). Odds ratio was used to express the strength of the association between independent predictors and MTX non-adherence as a dependent variable.

Results: Study population was predominantly female (87.8%), and the average age was 56.4 ± 12.1 years. The median duration of RA was 8 years (range 0-34 years), while the median duration of MTX treatment was 6 years (range 0-26 years). The median current dose of MTX which responders received was 15 mg per week. The overall prevalence of non-adherence to MTX was 32.7%. According to the results of univariate regression analysis the following factors are significantly associated with adherence to MTX: younger age ($OR=0.942$; $p=0.065$), employment ($OR=0.956$; $p=0.095$), working capacity ($OR=0.342$; $p=0.057$), marital status ($OR=0.342$; $p=0.001$) and expressed need for more communication with the doctor regarding RA treatment ($OR=1.410$; $p=0.021$). Finally, in the multivariate regression model the following variables remained statistically significant: marital status ($OR=0.406$; $p=0.007$) and expressed need for more communication with the doctor related to RA treatment ($OR=1.303$ $p=0.044$). Namely, married RA patients were 2.46 times less likely to MTX non-adherence compared to others, while the patients who stated the need for more communication with the doctor regarding RA treatment has 1.30 times greater chances to MTX non-adherence.

Conclusion: The results of our study have shown that about one third of RA patients met the criteria for non-adherence to MTX. Identification of the patient's need for more communication related to RA therapy as independent predictor for MTX non-adherence suggests that physician-patient relationship quality is an important point of intervention for efforts to improve patients' medication adherence.

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AB0429

THE EFFICACY OF TOFACITINIB TREATMENT IN RHEUMATOID ARTHRITIS PATIENTSWITH HIGH DISEASE ACTIVITY IN REAL-WORLD PRACTICE

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Background: JAK-kinase inhibitors are the promising option for patients with severe rheumatoid arthritis (RA). Evaluation of the effectiveness and results of long-term use of tofacitinib (TOFA) seems relevant for clinical practice.

Objectives: To evaluate the efficacy of TOFA in achievement of remission or low disease activity (LDA) in RA patients after 12 months of treatment and follow-up in real-world practice.

Methods: In this open study 30 patients (22 women and 8 men) with severe RA (average DAS28 >5.8) with inadequate response to methotrexate in effective dose were enrolled and started TOFA 5 mg BID. Average age was 57 (29-71), average disease history – 6.2 (1.5-12.5) years. Patients evaluated at baseline, after 3, 6 and 12 months of treatment: number of painful and swollen joints, ESR, CRP, RF, anti-MCV, DAS28, SDAI. The joints ultrasound (US) with Power Doppler (PD) (German US7 score) helped to estimate synovial inflammation. After 12 months of treatment the patients were under follow-up in real-world practice.

Results: By 3rd month of treatment the average mean of ESR and CRP returned to normal range, the number of painful and swollen joints decreased to 2 times, DAS28 - from 5.8 to 3.8, SDAI - from 41.0 to 18.0. 6 patients achieved remission, 3 - LDA, 2 had high activity (DAS28 >5.1) and the rest - moderate activity. We achieve the aim of T2T strategy by 12th month: average ESR and CRP normalized, DAS28 - 2.92 (1.39; 6.21) and SDAI - 7.0 (1.57; 36.4). 33% of patients achieved remission according to DAS28 and SDAI. RF decreased by 37%, anti-MCV stayed high during the year. There was temporary increase of AST, ALT in 4 patients (13.3%), but did not require TOFA discontinuation. By 12th month of treatment in PDUS mode number of joints with hypervascularized synovium decreased from 3 (2; 7) to 0 (0; 1), number of bone erosions has not changed. 1 patient (3.3%) had severe herpes zoster infection, no other infections occurred. In 1 patient (3.3%) TOFA showed no efficacy (DAS28 >6.21).

22 patients have finished 12-months course of TOFA at the moment and moved to follow-up period. 13 of them (59%) continue the same dose of TOFA: 8 have remission and 5 - LDA, 2 patients continued TOFA 5 mg/day for 1 year, then stopped and are in remission for 8 months. 1 patient had temporary withdrawal of treatment due to surgery without exacerbation of RA. 4 patients have stopped TOFA for non-medical reasons: 1 is still in remission and 1 - LDA for 12 months, 2 had worsening of RA and treated by low doses of glucocorticoids. At the moment 3 patients (13.6%) have long-term remission for 18 months after the end of TOFA treatment.

Conclusion: TOFA is effective and safe treatment option for severe RA in real-world practice. The effect develops by 3 months and continues to grow to 12 months. When remission is achieved, we recommend a reduced dose before withdrawal. Exacerbation of RA is effectively solved by retreatment with TOFA.

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