Abstract OP0211 – Table 1

	Baseline (n=161) Mean (SD)	3 months (n=124) Mean (SD)	6 months (n=115) Mean (SD)	12 months (n=88) Mean (SD)
Double Contour score	4.2 (3.4)	3.1 (2.8)**	2.3 (2.7)**	1.2 (1.9)**
Tophi score	6.5 (6.6)	6.3 (5.7)	5.4 (6.1)**	4.2 (5.3)**
Aggregates score	9.1 (5.3)	8.8 (4.9)*	7.9 (5.2)**	6.7 (4.9)**
Double Contour, tophi and aggregates sum score	19.8 (13.6)	18.1 (12.0)**	15.6 (12.8)**	12.1 (10.9)**

Conclusions: During a treat-to-target approach with ULT all deposits decreased, and most extensively for DC. This study shows that reduction of the uric acid load in gout during treat-to-target ULT can be visualised by US, and that DC may be the most sensitive to change.

Disclosure of Interest: None declared

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OP0212 MOBILE PHONE TEXT MESSAGES FOR IMPROVING ALLOPURINOL ADHERENCE: A RANDOMISED CONTROLLED TRIAL OF TEXT MESSAGE REMINDERS

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Background: Medication adherence is important to treatment success, particularly in gout where the target level achievement is critical. However, there is no evidence that mobile phone text message reminder is effective in improving treatment adherence and clinical outcomes for gout.

Objectives: To evaluate the effect of mobile phone text messaging on the adherence to allopurinol treatment and serum uric acid (SUA) level of patient with gout in a randomized-controlled trial.

Methods: Adult patients who were diagnosed of gout by 1977 ARA classification criteria for gout, receiving at least 1 month of allopurinol, and had estimated glomerular filtration rate greater than 30 mL/min/1.73 m² were enrolled and randomly assigned to 2 groups by block randomization. Patients in the intervention group received a daily short message reminder to take allopurinol for 90 days. Patients in the control group received a weekly short message information about non-pharmacologic treatment for gout in plain language. The primary outcomes were allopurinol adherence, defined as the Medication Taking Behaviour for Thai patient (MTB-Thai) score >21, and SUA level at 12 weeks. The primary analysis was by intention-to-treat. This trial is registered with Thai Clinical Trials Registry, TCTR20171229004.

Results: Eighty-two patients were randomised, with 42 in the intervention group and 40 in the control group. No significant different of baseline characteristic, SUA (7.66±1.24 vs 7.78±1.17 mg/dL) and MTB-Thai score (18.38±0.73 vs 18.37±0.95) between two groups. At week 12, 37 patients (88.1%) in the intervention group achieved adherence compared with none of patient in the control group (RR for adherence 71.5, 95% CI: 4.54 to 1126.80; p=0.002). SUA level was decreased significantly from baseline in both study groups, however, the reduction in the intervention group was significantly greater than in the control group (-1.47±0.86 vs -0.28±0.39 mg/dL, p<0.001). Serum creatinine was significantly decreased in the intervention group (-0.03±0.09 mg/dL, p<0.031), while serum creatinine was unchanged in the control group (0.01±0.08 mg/dL, p=0.84).

Conclusions: Patients who received daily short message reminder had significantly improved adherence and reduction in SUA compared with the control

individuals. Mobile phones text reminders may be an important tool to enhance allopurinol adherence and help in controlling SUA level in gout patients.

Disclosure of Interest: None declared

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'Why does BMI matter?'

OP0213 WHAT IS THE IMPACT OF POOR PROGNOSTIC FACTORS ON THE ACHIEVEMENT OF LOW DISEASE ACTIVITY OR REMISSION IN PATIENTS WITH RHEUMATOID ARTHRITIS?

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Background: Poor prognostic factors were initially developed using radiologic progression as outcome. In the 2016 update of the EULAR recommendations it is proposed to use these factors for decision whether or not a biologic should be started.¹ However, the treatment target is not radiologic progression but low disease activity (LDA) or remission.

Objectives: To investigate the impact of indicators of unfavourable prognosis on the achievement of LDA and remission in patients with RA.

Methods: Patients from the German biologics register RABBIT switching from 1 st to 2nd csDMARD were studied. High disease activity (DAS28 >5.1), autoantibodies (RF/ACPA positive), prevalent erosions, functional limitation (HAQ ≥1.2), comorbidities (≥2), obesity (BMI >30kg/m²), and smoking were evaluated as prognostic factors. Generalised regression analyses were applied to investigate the role of prognostic factors regarding the achievement of LDA (DAS28 <3.2) or remission (DAS28 <2.6). Receiver operating characteristic (ROC) curves were calculated to compare the ability of the prognostic factors (baseline values) to discriminate patients achieving LDA from those maintaining moderate or high disease activity within six months. The prognostic value of all factors was determined by the area under the ROC curve (AUC).

Results: A total of 1613 patients were studied (mean age 58.9 years, mean disease duration 4.8 years). 35% had DAS28 >5.1, 60% were RF/ACPA positive, 27% had erosions, 44% functional limitation, 37% ≥2 comorbidities, 32% were obese, and 26% current smokers. LDA was achieved by 33% of patients with DAS28 >5.1, by 30% if also autoantibodies and erosions were present, and by 20% if DAS28 >5.1, HAQ ≥1.2, ≥2 comorbidities and obesity were present. DAS28 >5.1 (OR 0.41 [95% CI: 0.32 to 0.52]), HAQ ≥1.2 (0.58 [0.46;0.74]), ≥2 comorbidities (0.66 [0.47 to 0.90]) and obesity (0.72 [0.57;0.91]) independently decreased the probability of LDA within six months. Current smoking (0.67 [0.48;0.93]) was negatively associated with remission. RF/ACPA and erosions were not associated. The ROC curves for achieving LDA for the significant factors (DAS28 >5.1, HAQ ≥1.2, ≥2 comorbidities and obesity) and a model containing only these four factors are shown in figure 1(a). The AUC of the model is higher than the one of the single curves. The AUC for the full model (figure 1(b)) which was additionally adjusted for age, sex, autoantibodies, erosions, current smoking, therapy and time is similar to the one of the reduced model.

Conclusions: High disease activity, functional limitation, comorbidities and obesity had significant negative impact on LDA and remission. They should be considered as poor prognostic factors in csDMARD-treated patients. It appears that a combination of the factors is better than using single ones.