GC group than in the N group. The patients in both groups equally recognized the reduction in arthritis, morning stiffness, fatigue and the recovery of activities of daily living (ADL). Anxiety regarding adverse events was eliminated in the GC group as GC administration was restricted to a low dose for a short term. Almost identical results were obtained from the two groups.

Figure 2. questionnaire results

Conclusions: The treatment of early RA patients with low and short GC enables earlier improvement of disease activity, particularly VAS and CRP. Patients also reported that low and short GC were an improvement effect from the early stage, particularly regarding pain and anxiety about adverse events. These data confirm that the treatment with low and short GC in RA patients leads to improved patient satisfaction.

REFERENCE:

- 1) Vibeke Strand, et al. J Rheumatol 2015.

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SAT0228

STEP-DOWN METHOTREXATE THERAPY IN RHEUMATOID ARTHRITIS (STEMETRA): A PILOT STUDY TO ASSESS THE SAFETY AND THE TOLERABILITY OF HIGH-DOSE METHOTREXATE.

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Background: Methotrexate (MTX) remains the cornerstone of the treatment of rheumatoid arthritis (RA). However, MTX is frequently underutilized in terms of suboptimal dosage, insufficient duration of treatment, and route of administration.

Objectives: To evaluate the tolerability and the safety of higher-dose, subcutaneous methotrexate (MTX) in patients with rheumatoid arthritis (RA).

Methods: The STEP-down Methotrexate Therapy in Rheumatoid Arthritis (STEMETRA) was an open-label, monocentric, pilot study of 12-week duration. The protocol treatment schedule consisted of subcutaneous (SC) MTX 50 mg/week for 4 consecutive weeks, followed by 25 mg/week for 4 weeks and then 15 mg/week for 4 weeks. All patients received oral supplementation of folic acid (leucovorin) 12 mg, administered twelve hours after the injection of SC-MTX.

Results: Ten patients (7 females and 3 males), with a mean age of 58.1 (±12.1), were enrolled in this study; one of them withdrew consent before taking study drug. Therefore, nine patients were treated. MTX was well tolerated: a total of 5 adverse events (AEs) occurred in 4 patients, none of which was severe. AEs consisted in: transient elevation of alanine aminotransferase (<2 ULN), which resolved spontaneously, and vertigo, in the same patient; moderate fatigue in one patient; one case of urinary tract infection; low back pain in one patient. At week 12, four patients (44.4%) achieved DAS28(ESR) remission, two (22.2%) reached

low disease activity, one (11.1%) patient showed moderate disease activity, and two (22.2%) had still had high disease activity. Overall, 8 out of 9 patients (88.8%) showed a reduction in DAS28>1.2 from baseline.

Table 1 Adverse events in patients who received study drug. MTX: methotrexate; ALT: alanine aminotransferase; ULN: upper limit of normal; UTI: urinary tract infection. *: this adverse event resolved by the time of the next visit. +: at week 12, this patient decided to withdraw MTX. §: this patient was taking MTX 20 mg/week instead of 15 mg/week as an escape treatment for insufficient disease control (see main text).

	Baseline	Week 2	Week 4	Week 8	Week 12
MTX dose	-	50 mg/week	50 mg/week	25 mg/week	15 mg/week
Patient #1	none	none	none	none	none
Patient #2	none	none	none	none	none
Patient #3	none	none	none	none	none
Patient #4	none	none	none	none	none
Patient #5	none	none	none	none	none
Patient #6	none	none	Increased ALT (<2 ULN)*	Vertigo	Vertigo+
Patient #7	none	none	none	Fatigue*	none
Patient #8	none	none	none	none	UTI§
Patient #9	none	none	none	Low back pain*	none

Conclusions: In this study, short-term higher dose MTX was well tolerated. Based on the tolerability observed in this preliminary study, a randomized controlled study of higher dose induction therapy versus traditional dosing will be conducted.

Disclosure of Interest: None declared

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SAT0229

RHEUMATOID ARTHRITIS TREATMENT WITH COMBINATION OF THREE CONVENTIONAL SYNTHETIC DISEASE MODIFYING ANTI-RHEUMATIC DRUGS (CSDMARDS) AND ITS EFFECTIVENESS ON DISEASE CONTROL IN A SHORT TERM COMPARED TO BIOLOGIC DMARDS TREATMENT AFTER PROPENSITY SCORE MATCHING PROCEDURE IMPLEMENTED

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Background: Rheumatoid arthritis (RA) treatment has now many variations with use of biologic or targeted synthetic disease modifying anti-rheumatic drugs (b/tsDMARDs) and conventional synthetic disease modifying anti-rheumatic drugs (csDMARDs). In these, triple csDMARD combination therapy (tri-TX), that has comparable disease activity control effectiveness compared to anti-TNF therapy is one of alternative [1].

Objectives: Aim of this study is to evaluate the effectiveness of tri-TX compared to bDMARD with methotrexate treatment (bm-TX) for RA statistically, with the use of propensity score matching (PSM) technique.

Methods: Five hundred and fifty RA patient had been treated for more than one year in our clinic. In these, 74 patients had been treated with tri-TX and 135 had been treated with bm-TX, were recruited. Their sex distribution (Sex), anti-cyclic citrullinated peptide antibodies (ACPA), age, 28-joints disease activity score with C-reactive protein (DAS28-CRP), Health Assessment Questionnaire Disability Index (HAQ-DI), Sharp/van der Heijde Score (SvdHS), and pain score measured with visual analog scale (PS-VAS) at start of the treatment were measured for each patient, and their values were compared for each group. Thus, sample selection was performed with PSM technique in order to reduce bias on each of treatment groups. After selection, change of DAS28-CRP, HAQ-DI, PS-VAS for every three months until one year since start, and SvdHS at one year after were compared statistically with Mann-Whitney U test.

Results: After selection, twenty-three patients for each treatment group were harvested, and there demonstrated no significant difference in Sex, ACPA, DAS28-CRP, HAQ-DI, PS-VAS, and SvdHS at start of the treatment (table 1). Average DAS28-CRP demonstrated 2.76, 1.88, 1.91, 1.77, and 1.67 in bm-TX, while 2.71, 2.03, 2.41, 2.56, and 2.39 in tri-TX, at start, 3 month, 6 month, 9 month, and 1 year, respectively. There is no statistical significant difference between the two groups, but bm-TX demonstrated more significant improvement at every time after six month than tri-TX (<0.05), while no significant difference demonstrated in PS-VAS. Average HAQ-DI demonstrated 0.603, 0.579, 0.598, 0.609, and 0.625 in bm-TX, while 0.707, 0.654, 0.619, 0.594, and 0.567 in tri-TX, respectively. HAQ-DI showed tendency that improved more in tri-TX compared to bm-TX, whereas significant more improvement for tri-TX than for bm-TX had demonstrated at one-year (<0.05), however until then there demonstrated no statistical significance for both of absolute value and improvement. SvdHS demonstrated 62.4 to 61.6 from