



197 (92%) and 185 (88%) entered the OL period, of whom 165 (84%) and 162 (88%) completed. At W44, ACR responses at W24 were maintained for pts who continued ABA, and improved for those who switched from PBO to ABA (Figure). Continued improvements in DAS28 (CRP) and HAQ-DI after W24 were seen for ABA and PBO/ABA groups, with mean (SE) changes from BL to W44 of -1.81 (0.09) and -1.84 (0.10) in DAS28 (CRP) (changes to W24 were -1.35 [0.10] and -0.94 [0.11]) and -0.37 (0.04) and -0.38 (0.04) in HAQ-DI (changes to W24 were -0.33 [0.04] and -0.20 [0.05]), respectively. There was minimal progression based on mean (SE) change from BL in PsA-modified total SHS at W44/52 in the ABA and PBO/ABA groups: 0.18 (0.12) vs 0.30 (0.12). Complete resolution of BL enthesitis occurred in 48.6% and 43.9% and BL dactylitis in 68.9% and 60.0% of pts with ABA and ABA/PBO, respectively, at W44/52. At W44, for ABA and PBO/ABA, PASI 50 responses were 30.1% and 34.5%; PASI 75 responses were 19.9% and 16.9%. There were no new safety signals.

**Conclusions:** Responses were maintained across musculoskeletal endpoints up to 1 year in a relatively refractory population of pts continuing on SC abatacept. Abatacept was well tolerated.

#### References:

[1] Mease P, et al. *Arthritis Rheumatol* 2016;68(Suppl 10):Abstract 1041.

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## From classics to new: synthetic DMARDs in RA

### OP0224 SIMILAR SHORT TERM CLINICAL RESPONSE TO INITIAL TREATMENT WITH HIGH VERSUS LOW DOSE METHOTREXATE IN MONO- AND COMBINATION THERAPY IN EARLY RHEUMATOID ARTHRITIS PATIENTS

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**Background:** Aiming at rapid decrease of disease activity, there has been a trend to start with higher doses of methotrexate (MTX) in newly diagnosed rheumatoid arthritis (RA) patients, both as monotherapy and in combination with other antirheumatic drugs (DMARDs). We hypothesized that in combination with other very effective medication, there might be no additional benefit of high over low doses of MTX.

**Objectives:** To compare early clinical response to high versus low doses of MTX in mono- and combination therapy in DMARD naive early RA patients.

**Methods:** RA patients included in the observational international METEOR cohort with symptom duration  $\leq 5$  years, time between diagnosis and first visit  $\leq 2$  months, MTX prescribed as (part of) first treatment, no medication change within 3 to 6 months after treatment start and available outcome data on disease activity, were selected. Patients were divided into 4 medication groups: MTX monotherapy, MTX + synthetic (cs)DMARDs, MTX + oral glucocorticoid (possibly csDMARDs) or MTX + biologic (b)DMARDs (+ possibly csDMARDs). Missing data were imputed using multivariate normal imputation. MTX dose was dichotomized: low dose  $\leq 10$  mg/week; high dose  $\geq 15$  mg/week. A propensity score (PS) was calculated to adjust the relationship between MTX dose and outcome for potential confounding by indication. Linear mixed model analyses for DAS, DAS28, and HAQ were performed for each medication group, with MTX-dose and time (days between assessment visit and baseline assessment) as co-variables. Associations were adjusted for the PS. Random intercept and slope were used to account for irregular time intervals between visits.

**Results:** Patients who started on MTX monotherapy had lower baseline disease activity and fewer were erosive and autoantibody positive; other baseline characteristics were comparable between medication groups. The number of patients on combination therapy with bDMARDs was too small to perform analyses (26 visits in 11 patients). For patients starting on MTX monotherapy, MTX+csDMARDs or MTX+glucocorticoids, the PS-adjusted effects of MTX-dose (high vs low) on DAS, DAS28 and HAQ were small and not clinically meaningful. The unadjusted main associations between MTX-dose and outcomes were often in opposite direction and/or much larger than the PS adjusted associations, suggesting that confounding by indication indeed plays a role and that (at least some) correction was achieved by adjusting for the PS (table 1).

Table 1: Unadjusted and propensity score adjusted results of the linear mixed model analyses to investigate the effectiveness of high versus low methotrexate dose on disease activity (DAS and DAS28) and physical functioning (HAQ), stratified per medication group.

	Methotrexate monotherapy (n patients=449, n visits=975)					
	DAS		DAS28		HAQ	
	$\beta$	95% CI	$\beta$	95% CI	$\beta$	95% CI
MTX-dose group PS adjusted	0.052	-0.17; 0.28	0.085	-0.24; 0.41	0.043	-0.11; 0.20
MTX-dose group unadjusted	-0.55	-0.71; -0.39	-0.19	-0.45; 0.071	0.17	0.059; 0.28
	Methotrexate + csDMARDs (n patients=265, n visits=674)					
	DAS		DAS28		HAQ	
	$\beta$	95% CI	$\beta$	95% CI	$\beta$	95% CI
MTX-dose group PS adjusted	0.036	-0.26; 0.33	0.0066	-0.39; 0.41	-0.014	-0.21; 0.18
MTX-dose group unadjusted	-0.19	-0.45; 0.071	-0.29	-0.65; 0.065	0.080	0.009; 0.25
	Methotrexate + oral glucocorticoid (+/-csDMARDs) (n patients=485, n visits=1075)					
	DAS		DAS28		HAQ	
	$\beta$	95% CI	$\beta$	95% CI	$\beta$	95% CI
MTX-dose group PS adjusted	-0.017	-0.26; 0.22	-0.14	-0.45; 0.17	-0.023	-0.17; 0.12
MTX-dose group unadjusted	-0.33	-0.50; -0.15	-0.64	-0.86; -0.41	0.14	0.040; 0.25

DAS=disease activity score, HAQ=health assessment questionnaire, PS=propensity score, 95% CI=95% confidence interval, MTX=methotrexate. MTX-dose group is a binary variable with low dose =10 mg/week and high dose =15 mg/week. Low dose is the reference category.

**Conclusions:** In a daily practice derived database in DMARD-naive early RA patients, we found no early clinical benefit of high over low initial MTX doses, neither for MTX monotherapy nor for combination therapy with MTX and csDMARDs or glucocorticoids. This seems to contradict a general trend over time to start higher MTX-doses.

**Disclosure of Interest:** None declared

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### OP0225 THE EFFECT OF A LOW VERSUS HIGH FIRST PRESCRIBED DOSE OF METHOTREXATE ON EULAR RESPONSE AT SIX MONTHS USING DATA FROM THE RAMS STUDY

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**Background:** Methotrexate (MTX) is one of the most commonly used drugs for the treatment of rheumatoid arthritis (RA). Recommendations by an international panel state that oral MTX should be started at 10–15mg/week, with escalation of 5mg every 2–4 weeks up to 20–30mg/week (1). In the UK, practice varies in terms of the starting dose prescribed for MTX, likely because of a lack of published evidence on the importance of MTX dose on its efficacy and safety.

**Objectives:** To compare 6 month response to MTX in RA patients starting 7.5mg/wk versus those starting a 15mg/wk.

**Methods:** Patients were recruited to the national, UK, multi-centre (n=35) longitudinal observational Rheumatoid Arthritis Medication Study (RAMS), including patients starting MTX for the first time with complete DAS28 at baseline and six months were included in this analysis. Patients were categorized into EULAR non-responders, moderate responders or good responders. Patients were categorised into those starting a low dose of MTX ( $\leq 7.5$ mg/wk) (LM-group) or a high

Table 1

	LM-group (n=171)	HM-group (n=639)	P
Age, years	58 (47–69)	61 (51–69)	0.13
Gender, % female	70	60	0.03
Disease duration, months	6 (3–11)	6 (3–11)	0.65
Tender joint count	7 (3–13)	5 (2–11)	0.05
Swollen joint count	5 (2–9)	5 (2–10)	0.62
Physician VAS, mm	47 (27–67)	33 (18–50)	0.0001
Patient VAS, mm	50 (26–70)	35 (20–55)	0.0001
DAS28 score at baseline	4.2 (3.4–5.2)	4.1 (3.2–5.1)	0.24
DAS28 score at 6 months	3.5 (2.7, 4.1)	3.0 (2.2, 4.1)	0.004
HAQ score	1.3 (0.6–1.8)	0.9 (0.4–1.5)	0.001
Other nbDMARD use, n (%)	30 (17)	61 (10)	0.003
EULAR response at 6 months, n (%)			0.09
Non-responders	50 (45)	184 (42)	
Moderate responders	36 (32)	108 (25)	
Good responders	26 (23)	145 (33)	
Fully adjusted RRR (95% CI)*			
Non-responders	–	ref	
Moderate responders	–	1.01 (0.56, 1.82)	0.97
Good responders	–	2.65 (1.37, 5.14)	0.004

Scores are median [IQR].