of MTX withdrawal in patients achieving good clinical response to TCZ+MTX (COMBO) has not been evaluated.

Objectives: To evaluate whether TCZ-MONO is non-inferior to TCZ-COMBO in maintaining clinical response in patients who achieve low disease activity with TCZ-COMBO.

Methods: US patients with RA who were inadequate responders to MTX were enrolled: initial combination therapy included MTX (15 mg/week orally) plus TCZ 162 mg subcutaneous (SC) either weekly (qw; for patients ≥100 kg) or every 2 weeks (q2w; for patients <100 kg). Dose escalation from q2w to qw was allowed at week 12 in patients who had not achieved low disease activity (DAS28 ≤3.2). If patients achieved DAS28-ESR ≤3.2 at week 24, they were randomized (double-blind) 1:1 to receive either TCZ-MONO or continue TCZ-COMBO until week 52. Patients who did not achieve DAS28 ≤3.2 were assigned to an open-label arm and continued TCZ-COMBO until week 52. The primary outcome measured was the comparison of mean change in DAS28-ESR score in the randomized cohort between weeks 24 and 40, between the TCZ-MONO or TCZ-COMBO arms (noninferiority margin of 0.6). Secondary outcomes included the proportion of patients achieving DAS28 <2.6, DAS28 ≤3.2 and American College of Rheumatology 20%/50%/70% (ACR20/50/70) responses at weeks 40 and 52, and safety. Trial registration number: NCT01855789.

Results: Of 718 patients enrolled, 296 were randomized at week 24 (TCZ-MONO, n=148; TCZ-COMBO, n=148). Early discontinuation in the randomized cohort occurred in 12.2% of patients in the TCZ-MONO group and 10.2% in the TCZ-COMBO group. Baseline characteristics were balanced between treatment groups (mean age 55.5 years; 74.8% female; mean RA duration 6.8 years; mean DAS28-ESR 6.3). At week 24, DAS28 scores were similar in both groups, but ACR responses were ~8–11% lower in the TCZ-MONO group prior to MTX withdrawal (randomization). The mean change in DAS28 was similar between the randomized treatment groups (Table 1). For the primary efficacy analysis, the mean changes in DAS28 from week 24 to week 40 were 0.46 and 0.14 in the TCZ-MONO and TCZ-COMBO groups, respectively (95% CI: 0.045–0.592). This study met the primary endpoint by demonstrating that discontinuing MTX in TCZ responders was noninferior to continuing MTX. The safety of TCZ-SC in this study was consistent with the known safety profile with no new safety signals observed (Table 2). The most common SAE was infection, occurring in 4.1% of patients. TCZ-COMBO had greater frequency of AEs, SAEs and serious infections than TCZ-MONO.

Table 1. Efficacy of TCZ as Monotherapy and in Combination With MTX

	TCZ-MONO n = 147	TCZ-COMBO n = 147	Difference (95% CI) (TCZ-MONO minus TCZ-COMBO)
ΔDAS28-ESR, Mean (SEM)*			
Week 24 to week 40	0.46 (0.123)	0.14 (0.126)	0.318 (0.045, 0.592)
Week 24 to week 52	0.43 (0.136)	0.20 (0.139)	0.232 (−0.068, 0.532)
Response at Week 40, n (%)			
DAS28 ≤ 3.2	94 (63.9)	113 (76.9)	−12.9 (−23.3, −2.6)
DAS28 < 2.6	74 (50.3)	87 (59.2)	−8.8 (−20.2, 2.5)
ACR20	103 (70.1)	116 (78.9)	−8.8 (−18.8, 1.1)
ACR50	76 (51.7)	94 (63.9)	−12.2 (−23.4, −1.0)
ACR70	51 (34.7)	62 (42.2)	−7.5 (−18.6, 3.6)
DAS28 Worsening ≥ 1.2, n (%)			
Week 24 to week 40	42 (28.6)	31 (21.1)	7.5 (−2.4, 17.3)

ACR, American College of Rheumatology criteria; AE, adverse event; ΔDAS28-ESR, change in Disease Activity Score-28 joints erythrocyte sedimentation rate; MTX, methotrexate; SAE, serious adverse events; SEM, standard error of the mean; TCZ-COMBO, tocilizumab plus MTX; TCZ-MONO, TCZ monotherapy.

* Adjusted means from ANCOVA model include week 24 DAS28 as a covariate, treatment group and the randomization stratification factors: DAS28 remission status at week 24 (< 2.6; ≥ 2.6 to ≤ 3.2), patient anti-TNF exposure (Yes/No), baseline weight-by-dosing group (< 80 kg q2w; < 80 kg qw; 80 to < 100 kg q2w; 80 to < 100 kg qw, ≥ 100 kg qw). Last observation carried forward (LOCF) was used to impute missing data at week 40 only.

Table 2. Safety of TCZ as Monotherapy and in Combination With MTX

Rate, per 100 PY (95%CI)	Total* N = 713 700.60 PY	TCZ-MONO† n = 144 92.44 PY	TCZ-COMBO† n = 139 90.56 PY
AEs	377.1 (362.9, 391.8)	238.0 (207.6, 271.6)	308.1 (273.0, 346.4)
SAEs	17.0 (14.1, 20.3)	8.7 (3.7, 17.1)	14.4 (7.6, 24.6)
Serious infections	5.0 (3.5, 7.0)	3.3 (0.7, 9.5)	4.4 (1.2, 11.3)

AE, adverse event; PY, patient-year; SAE, serious adverse event.

* Safety population from baseline to end of study.

† Includes all randomized patients who received TCZ+MTX or TCZ+PBO from week 24 to end of study.

Conclusions: These results demonstrate that patients receiving TCZ-COMBO who achieve low disease activity can discontinue MTX and maintain disease control.

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FRI0223 ANTI-CCP IS AN INDEPENDENT PREDICTOR OF 12-MONTH EULAR RESPONSE IN PATIENTS WITH RA TREATED WITH ABATACEPT

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Background: Although anti-cyclic citrullinated peptide (anti-CCP) positivity is regarded as a strong prognostic factor for untreated RA outcome, the benefit of anti-CCP tests for personalized medicine is controversial.[1] Illustratively, anti-CCP was not predictive for response to anti-TNF in RA, as shown in meta-analyses, although some predictive value was shown for rituximab.[2–4] There are, however, indications that better response to abatacept (ABA) is predicted by anti-CCP positivity.[5–7]

Objectives: To test whether anti-CCP level at baseline (BL) is an independent predictor for treatment response (DAS28 [CRP]-based EULAR response criteria) at 12 months (M) in patients (pts) with RA treated with ABA.

Methods: Consenting pts with RA from Radboud UMC and Sint Maartenskliniek were consecutively included if they started treatment with ABA (BL). The anti-CCP values closest before BL were used. DAS28 (CRP) was assessed at BL and at 12M by trained rheumatology nurses or rheumatologists. Demographic and disease-related variables, treatment history and co-morbidity were also assessed. Primary outcome was response to treatment based on DAS28 (CRP) EULAR response criteria at M12. Therapy cessation was regarded as non-response. Multiple imputation with 20 repetitions was used to replace missing predictors. Multivariate logistic regression was used to examine whether anti-CCP positivity was an independent predictor for treatment response, taking confounding BL covariates (Table variables) into account.

Results: Data were available for 200 pts with RA starting ABA. Mean (SD) age was 58 (13) years, 165 (83%) were female and median (p25–p75) disease duration was 12 (7–19) years (Table). Overall, 121 (61%) pts were anti-CCP positive at BL. At 12M, 86 (43%) pts remained on ABA. In the univariate model, anti-CCP was a predictor for treatment response (odds ratio 2.51; 95% CI 1.1, 6.0; p=0.038). No relevant confounding was present.

Table 1. Baseline Characteristics

	Abatacept (n=200)
Age, years, mean (SD)	58 (13)
Female, n (%)	165 (83)
RF+, n (%)	128 (64)
Anti-CCP+, n (%)	121 (61)
No. of previous bDMARDs*	3 (3–4)
No. of previous csDMARDs*	3 (2–4)
Oral glucocorticoids, n (%)	79 (40)
Disease duration, years*	12 (7–19)
Treatment duration, months*	8 (4–28)
NSAID, n (%)	117 (59)
Concomitant DMARD, n (%)	117 (59)
Overweight (BMI >25.0 kg/m^2), n (%)	98 (48)

*Median (p25–p75). RF+: IgM-Rheumatoid factor positivity. b/csDMARD=biologic/conventional synthetic DMARD.

Conclusions: Anti-CCP positivity was confirmed as an independent predictor for treatment response at 12M in pts with RA treated with abatacept. As indicated by meta-analysis and systematic reviews, anti-CCP is not predictive for the response to anti-TNFs.[2–4] Additional studies are needed to evaluate whether abatacept could be a preferable treatment in anti-CCP-positive pts.

References:

[1] Taylor P, et al. Autoimmune Dis 2011;2011:815038.
[2] Lv Q, et al. PLoS ONE 2014;9:e89442.
[3] Isaacs JD, et al. Ann Rheum Dis 2013;72:329–36.
[4] Cuppen BV, et al. Rheumatology (Oxford) 2016;55:826–39.
[5] Gottenberg JE, et al. Ann Rheum Dis 2012;71:1815–19.
[6] Sokolove J, et al. Ann Rheum Dis 2015;74(Suppl 2):675.
[7] Huizinga TWJ, et al. Ann Rheum Dis 2015;74(Suppl 2):234–5.

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