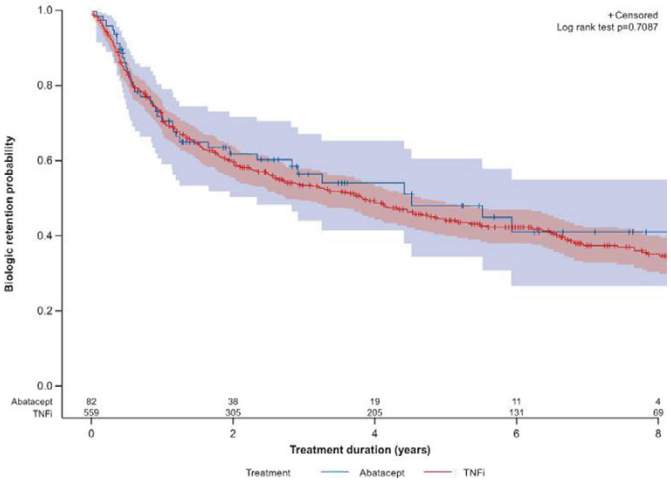
Figure. Retention Rates of Abatacept and TNFi Groups



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FRI0231 THE FIRST REPORT OF SIGNIFICANT INCREASE OF BODY MASS INDEX IN RHEUMATOID ARTHRITIS PATIENTS TREATED WITH TOFACITINIB DURING 12-MONTH FOLLOW-UP

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Objectives: to evaluate the effects of tofacitinib (TOFA) on cardiovascular risk factors (CVRF) in rheumatoid arthritis (RA) patients (pts).
Methods: After 12-m follow-up the CVRF dynamic was assessed in 28 RA pts treated with TOFA (22 women, median age 54 [40; 62] years, disease duration 39.5 [16.5; 60.0] m, moderate to high activity (DAS28 - 5.1 [4.6; 6.0], SDAI – 26 [21; 34]), positive for ACCP (75%)/RF (79%), who were non-responders to MTX at least 15 mg/week and/or other synthetic DMARDs and biologic DMARDs. TOFA therapy was started in all pts with dose 5 mg BID per os followed by the dose escalation to 10 mg BID in 8 (29%) pts. TOFA used in combination with MTX in 27 (96%) pts, leflunomide in 1 (4%). Low-dose oral corticosteroids (<10 mg/day prednisone or equivalent) were received by 9 (35%) pts. Remission or low disease activity was achieved in 55% pts (DAS28), 77% (SDAI). At baseline the most of pts had multiple CVRF and subclinical organ damage. Cardioprotective therapy received 16 (57%) pts (beta-blockers – 7, angiotensin II receptor type 2/ACE inhibitors – 11, statins – 11, dihydropyridine calcium channel blockers – 7).
Results: The incidence rate of arterial hypertension (67% vs 70%), overweight (57% vs 72%), abdominal obesity (61% vs 68%), physical inactivity (64% vs 47%), smokers/ex-smokers (25%/21% vs 21%/25%), menopausal status (59% vs 59%), DM type 2 (7% vs 7%), mSCORE≥5% (21% vs 28%), subclinical carotid atherosclerosis (64% vs 64%), cardiac heart failure with preserved ejection fraction (7% vs 7%) did not change significantly. Blood pressure remained stable over time except 1 pt. An increase in body mass index (BMI) was observed from 26.2 [22.9; 28.9] to 26.7 [24.0; 30.1], p<0.001, waist circumference from 86 [76;97] to 91 [80; 103], p=0,001. The increase of BMI <5% was observed in 11 (39%) pts, 5% - 10% - 7 (25%), >10% - 6 (21%). The normal BMI remained in 7 (25%) pts, overweight – 9 (32%), obese class I – 3 (11%), the rest of pts passed to a higher category of BMI (from normal BMI to overweight – 4 (14%), from overweight to obese class I – 1 (4%), from obese class I to obese class II – 1 (4%)) and only 1 pt went from underweight to normal BMI (4%). The change in BMI correlated negatively with DAS 28, SDAI at baseline (r=-0.6, p<0.001). BMI dynamic was independent of TOFA dose, achieving RA activity, dynamic of DAS 28, SDAI, use of cardioprotective therapy. Dynamic of lipid levels depended on statins treatment. An increase in HDL-C level from 1.35 [0.88; 1.91] to 1.90 [1.64; 2.17], p<0.05, a decrease in LDL-C level from 3.75 [3.11; 4.40] to 2.60 [2.55; 2.93], p<0.03 was observed in pts treated with statins (n=11). An increase in total cholesterol level from 4.60 [4.14; 6.41] to 5.45 [4.56; 6.64], p=0,001 was observed in pts who didn't receive statins (n=17). The change in HDL-C level correlated negatively with dynamic of DAS 28, SDAI (r=-0.4, p<0.05).
Conclusions: TOFA therapy of RA pts contributes to dramatical increase of BMI. Greater BMI dynamic associated with higher disease activity at baseline. BMI dynamic was independent of achieving RA activity and dynamic of DAS 28, SDAI. Co-administration TOFA and statins resulted in significant favorable changes of LDL-and HDL-cholesterol levels.
Disclosure of Interest: None declared
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FRI0232 TREATMENT EFFECTS OF ABATACEPT AND ANTI-TNF IN PATIENTS WITH RA WITH POOR PROGNOSTIC FACTORS: DATA FROM COMMUNITY RHEUMATOLOGY CLINICS

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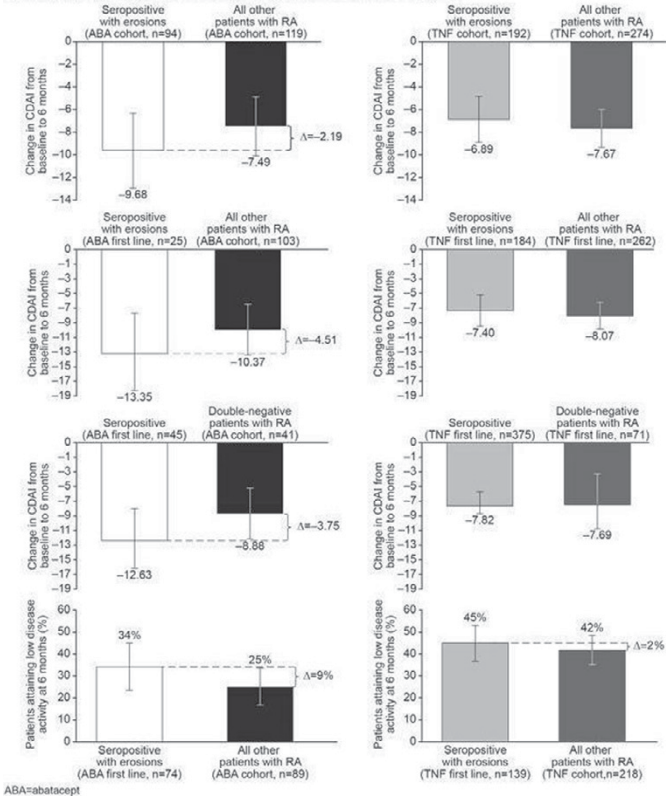
Background: Poor prognostic factors (PPFs; e.g. elevated anti-citrullinated protein antibody/RF levels and erosions) are associated with higher disability and mortality in RA.[1–2] In addition, high seropositivity or CRP/ESR levels are correlated with erosive disease.[3]
Objectives: To evaluate if the presence of specific PPFs of seropositivity with erosions (PPF+) in patients (pts) with RA have an effect on treatment with abatacept (ABA) and anti-TNFs.
Methods: This retrospective study was based on electronic medical record data. This database includes >6500 pts with RA from 50+ rheumatologists. At each visit, data on diagnosis, medications and test results were collected. A homunculus was used to record joint tenderness, swelling, deformity or decreased range of motion. Disease activity was measured by DAS28 (ESR/CRP), SDAI, CDAI, RAPID3 and Vectra DA blood tests. For this analysis, pts aged ≥18 yrs with an RA diagnosis from 1 Jan 2009 to 3 Mar 2016 were followed until lost to follow-up, death or end of study period. Date of first ABA/anti-TNF prescription was designated as index date, preceded by the baseline (BL) period. The ABA cohort comprised pts with a record of ABA in the study period, while the anti-TNF cohort comprised pts with a record of anti-TNF and no record of ABA in the study period. Primary outcome was change (Δ) in CDAI at 6 months (M); other outcomes were SDAI, DAS28 (CRP), pain, RAPID3 and Patient Global Assessment. Descriptive statistics were used for BL characteristics. Univariate and multivariate regression analyses were

Figure. Changes in CDAI in Base Case Abatacept and TNF Cohorts and in Subgroups



used to evaluate ΔCDAI. Subgroup analyses were conducted by line of therapy, after excluding switch pts.
Results: Overall, 3959 pts met inclusion criteria and 2045 had data on PPF; 344 and 814 pts received ABA and anti-TNF. Mean (SD) age of ABA pts was 60.3 (12.5) yrs and median (interquartile range; IQR) CDAI was 25.5 (18.1). Mean (SD) age of anti-TNF pts was 56.4 (13.3) yrs and median CDAI (IQR) was 19.8 (18.1). PPF+ pts treated with ABA (vs all other ABA pts) had a better CDAI outcome at 6M (–9.7 [16.1] vs –7.5 [14.4]). In sensitivity analyses, the difference persisted (–10.4 vs –8.4; Fig). PPF+ pts treated with ABA as first-line therapy (vs all other ABA pts) had a better CDAI outcome (–13.4 vs –10.3). Similar trends were not observed in the anti-TNF cohort (Fig). Adjusted mean (SE) ΔCDAI in PPF+ vs PPF– pts treated with ABA was –12.1 (2.01) vs –9.5 (0.79); covariates included in the model were age, sex and BL CDAI (p=0.24). During follow-up, more PPF+ pts treated with ABA changed from high/medium to LDA or remission vs all other pts (34% vs 25%), while this was not seen in anti-TNF pts (45 vs 42%).
Conclusions: Pts with RA treated with abatacept had higher disease activity at BL and a greater reduction in disease activity was observed in seropositive pts with RA and erosions compared with all other abatacept pts. Similar trends were not observed in anti-TNF pts. No direct comparisons between treatments were conducted in these cohorts.
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Disclosure of Interest: E. Alemao Shareholder of: Bristol-Myers Squibb, Employee of: Bristol-Myers Squibb, K. Knapp Employee of: Discus Analytics, V. Anupindi: None declared, S. Annamalai: None declared, G. Craig Shareholder of: Discus Analytics, Grant/research support from: Bristol-Myers Squibb, Consultant for: Premera Blue Cross/Blue Shield of Washington and Alaska, Employee of: Arthritis Northwest, Speakers bureau: Bristol-Myers Squibb, UCB, Genentech, Celgene, Novartis
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FRI0233 THE RETENTION RATES OF ABATACEPT IN ELDERLY RA PATIENTS (65 YEARS AND ABOVE) WHO CANNOT BE TREATED WITH METHOTREXATE: COMPARISON WITH ETANERCEPT AND TOCILIZUMAB; A SINGLE-CENTER, RETROSPECTIVE, CASE-CONTROL STUDY

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Background: There are many elderly rheumatoid arthritis (RA) patients who cannot be treated with methotrexate (MTX) for many reasons, but data about the therapeutic strategies by biologic agents for the patients are insufficient.
Objectives: To analyze the retention rate of abatacept in elderly patients with RA who cannot be treated with MTX.
Methods: Data were retrospectively collected from the medical records of patients with rheumatoid arthritis at our center. Abatacept (ABT), etanercept (ETN), or tocilizumab (TCZ) was administered to 68 elderly RA patients who could not be treated with MTX. We analyzed the retention rate of each group by Kaplan–Meier curves and the log-rank test. The primary end point was the 24-month retention rate of the biologics without discontinuation due to adverse events, loss or primary lack of effectiveness.
Results: In the ABT group (26 cases: a mean age of 77.8±6.3 years, ACPA positive 92.3%, oral steroid use 34.6%), the cumulative retention rates for both 12 and 24 months were 0.699. In the ETN group (26 cases: a mean age of 75.8±5.1 years, ACPA positive 92.0%, oral steroid use 73.1%), the cumulative retention rates for 12 and 24 months were 0.450 and 0.315, respectively. In the TCZ group (16 cases: a mean age of 73.7±5.6 years, ACPA positive 87.5%, oral steroid use 56.3%), the cumulative retention rates for 12 and 24 months were 0.433 and 0.325, respectively.
There was a significant difference in the retention rates between ABT groups and the other two groups [log-rank test, *p*=0.018 (ABT vs. ETN), 0.047 (ABT vs. TCZ)]. There are no significant retention rates between ETN groups and TCZ groups.
Three cases (11.5%) in the ABT group were discontinued the biologic agents by hospitalization for severe infection within 24 months. Five cases (19.2%) in the ETN group, six cases (37.5%) in TCZ group were hospitalized for severe infection, respectively.
Conclusions: Our data suggested that abatacept can be used for a period longer than etanercept or tocilizumab for elderly RA patients who cannot be treated with methotrexate.
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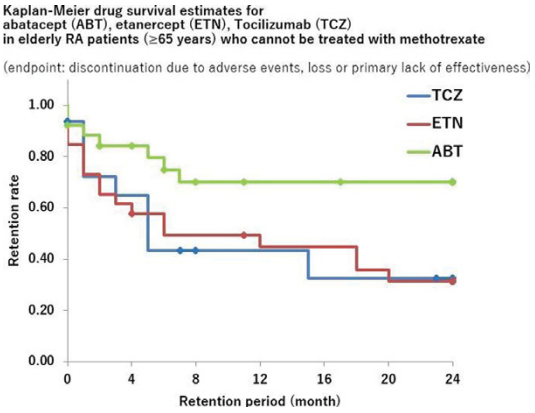
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.6045



FRI0234 CHOICE OF BIOLOGIC THERAPY FOLLOWING RITUXIMAB: INFLUENCING FACTORS IN A FRENCH MULTICENTER COHORT OF RHEUMATOID ARTHRITIS

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Background: In rheumatoid arthritis (RA), the long lasting effect of rituximab (RTX) on B lymphocyte depletion may influence the choice of biologic after RTX failure but there is currently no specific recommendation about the optimal strategy.
Objectives: We assessed factors which may have influenced the choice of biologic following failure to RTX in RA patients and analysed the effectiveness of these biologics.
Methods: A retrospective study of RA patients, who had started a new biologic during the year after RTX discontinuation, was conducted between 2009 and 2016 in 5 French rheumatology centers. We collected at baseline (at the time the biologic was introduced after RTX) and during follow-up (3, 6 and 12 months), data about patients and disease. Characteristics of the patients receiving tocilizumab (TCZ), abatacept (ABA) or anti-TNF following RTX, the EULAR response and retention rate were compared using univariate and multivariate analyses.
Results: 152 RA patients (117 women, mean age 56.9±13 years) were analysed. RA duration was 14.3 years [IQR 7.8–19.8], mean DAS28 ESR at baseline 4.8±1.3. 57 patients (37.5%) received TCZ, 47 (31%) anti-TNF and 48 (31.2%) ABA following RTX. 87% had received anti-TNF prior to RTX. No significant difference in the biologics prescription profile was noted across centers. At baseline, sex, disease characteristics and activity, use of concomitant DMARDs or prednisone were not different between the 3 groups. There was no difference in the number of cycles or dose of RTX received and the number of previous anti-TNF treatment. Patients receiving ABA were slightly older (59.8 years vs 54 years for TCZ and 57.8 years for anti-TNF, p=0.06). Multimorbidity index (MMI) assessing the number of comorbidities was higher in the group ABA but not significantly (MMI count 2±1.7 for ABA, 1.6±1.5 for TCZ, 1.7±1.4 for anti-TNF, p=0.5). At 3, 6 and 12 months, DAS28ESR was lower in patients with TCZ as compared to those with anti-TNF or ABA (Table) but tender and swollen joint counts did not differ. The EULAR good-or-moderate response rates were similar across groups (Table). After adjustment on age, sex, disease duration, MMI count,

Table 1. Change in DAS28-ESR score and EULAR response at 3, 6, 12 months according to the biologic following RTX treatment

	TCZ (n=57)	Anti TNF (n=47)	ABA (n=48)	p
DAS28 ESR (mean±SD)				
M3	2,7±1,2	3,5±1,7	3,7±1,3	0.002
M6	2,6±1,5	3,5±1,7	3,5±1,2	0.01
M12	2,5±1,2	3,1±1,7	3,3±1,3	0.04
EULAR Good-Moderate response n (%)				
M3	29 (76)	12 (63)	17 (52)	0.09
M6	22 (79)	8 (57)	19 (73)	0.34
M12	21 (75)	7 (70)	16 (73)	0.95

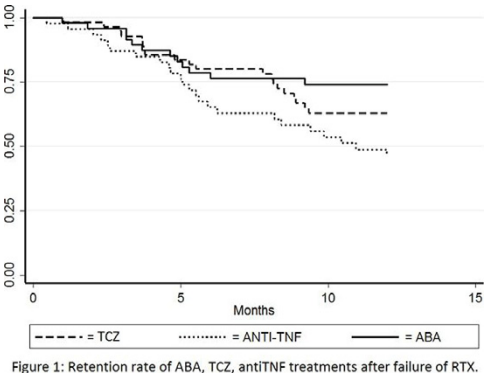

Figure 1: Retention rate of ABA, TCZ, antiTNF treatments after failure of RTX.