articles describing sex differences in TAK patients were obtained^{3,4,5}. A global analysis of these 3 cohorts plus ours (for a total of 578 patients, 108 men and 470 women) was performed.

Results: In our TAK cohort, age at disease onset and age at diagnosis were not significantly different between men and women. Diagnostic delay was slightly higher in men. Male patients showed higher involvement of iliac arteries (right, $p=0.016$; left, $p=0.021$); female patients suffered more frequently from upper limbs claudication ($p=0.026$). In the overall analysis, men had higher prevalence of arterial hypertension ($p=0.007$) and more frequent involvement of abdominal aorta ($p=0.026$), renal arteries (right, $p<0.001$; left, $p<0.001$) and iliac arteries (right, $p=0.009$; left, $p=0.002$). Women more frequently exhibited upper limb claudication ($p=0.042$) and involvement of left subclavian artery ($p=0.005$), carotid arteries (right, $p<0.001$; left, $p<0.001$) and supradiaphragmatic aorta (ascending, $p=0.050$; arch, $p<0.001$; descending, $p=0.003$). Inflammatory markers were more frequently raised in women ($p=0.005$).

Conclusion: In TAK patients, gender has a strong influence on pattern of vascular involvement and consequently on clinical presentation. Specifically, women have higher involvement of the supradiaphragmatic vessels, whereas in men the abdominal vessels are more frequently affected.

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Figure 1. Vessels affected at disease onset in 578 patients with TAK (108 male, 470 female) from 4 different cohorts, according to gender. Red: higher involvement in women, with statistical significance. Blue: higher involvement in men, with statistical significance. Yellow: no statistically significant difference between women and men.

Disclosure of Interests: Alessandro Tomelleri: None declared, Corrado Campochiaro Consultant for: Dr Corrado Campochiaro received consultation honoraria from Pfizer., Silvia Sartorelli: None declared, Giulio Cavalli

Consultant for: Dr Giulio Cavalli received consultation honoraria from Pfizer, Novartis and SOBI., Giacomo De Luca Speakers bureau: Pfizer, Sobi, Elena Baldissera Consultant for: Consultation honoraria from Novartis and Rottapharm, Speakers bureau: Pfizer, Sobi, Novartis, Lorenzo Dagna Consultant for: Prof Lorenzo Dagna received consultation honoraria from Abbvie, Amgen, Biogen, Bristol-Myers Squibb, Celltrion, Novartis, Pfizer, Sanofi-Genzyme, and SOBI.

DOI: 10.1136/annrheumdis-2019-eular.2407

AB0622

THE EFFICACY OF ADDITIONAL TOCILIZUMAB IN PATIENTS WITH SEVERE POLYMYALGIA RHEUMATICA WHO WERE RESISTANT TO OR INTOLERANT OF CONVENTIONAL THERAPY

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Background: Polymyalgia rheumatica (PMR) is the most common inflammatory disease in the elderly. The 2015 EULAR/ACR recommendations indicate that the management of PMR should be started with glucocorticoids (GCs) and if needed, followed by addition of methotrexate (MTX). The anti-interleukin-6 (IL-6) receptor antibody, tocilizumab (TCZ), has been shown to be effective for PMR.

Objectives: To determine the efficacy and safety of TCZ in patients with refractory PMR who were resistant to or intolerant of GCs plus MTX and characterize the clinical profile of patients who need TCZ.

Methods: Patients were diagnosed with PMR by the 2012 EULAR/ACR provisional classification criteria and treated according to the 2015 ACR/EULAR recommendations for the management of PMR. TCZ was further added to the patients who were GC plus MTX (GC/MTX)-resistant or -intolerant. The efficacy of treatment was determined by measuring the disease activity with PMR activity score (PMR-AS). We statistically analyzed the differences in clinical indicators between GC-responders, GC/MTX-responders, and GC/MTX-non-responders who need TCZ therapy.

Results: Ninety-three patients (53 females and 40 males) were the average of 72.1 ± 9.4 years old, serum CRP 63 ± 42 mg/L, ESR 84 ± 34 mm/hr and blood platelet counts $331 \pm 86 \times 10^3/\mu\text{L}$, at the first visit, and had been followed up for 25.4 ± 19.6 months. All of them were treated first with prednisolone (PSL) (15.7 ± 4.3 mg/day). Relapses occurred in 43 patients (46.2%), at the PSL dose of 6.0 ± 5.6 mg/day, after 8.8 ± 6.7 month-GC treatment. GC was increased in 7 patients, and MTX (8.6 ± 2.9 mg/week) was added in 36 patients. Thirteen patients successfully discontinued GC, while 23 patients (24.7%) were resistant to or intolerant of GC/MTX. Ten of 23 patients agreed with TCZ therapy. Before TCZ addition, they were treated with PSL of 6.0 ± 2.2 mg/day plus MTX of 6.0 ± 3.8 mg/week, and serum CRP 9.7 ± 9 mg/L, blood platelet counts $271 \pm 32 \times 10^3/\mu\text{L}$ and PMR-AS 15.5 ± 13.5 . After 7.3 ± 4.2 month-TCZ treatment, PSL and MTX were reduced to 1.3 ± 1.6 mg/day and 2.2 ± 3.0 mg/week, and CRP, blood platelet counts and PMR-AS decreased to <0.2 mg/L, $191 \pm 28 \times 10^3/\mu\text{L}$ and 5.7 ± 8.3 , respectively. GC could be withdrawn in 7 patients, and 4 patients reached drug-free remission. There were significant differences in blood platelet counts and the initial PSL amount between GC/MTX responders and GC/MTX-resistant patients ($p<0.05$; Mann-Whitney U test).

Conclusion: TCZ may provide a therapeutic option for patients with refractory PMR who were resistant to or intolerant of GC/MTX. Our retrospective results suggest that patients with severe PMR, who show thrombocytosis and need high dose GC for initial therapy, may be considered for early induction of TCZ.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.4499

AB0623

ANTI-NEUTROPHIL CYTOPLASMIC ANTIBODY-ASSOCIATED VASCULITIS AND RISK OF CEREBROVASCULAR ACCIDENT: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: An increased risk of cardiovascular disease, including cerebrovascular accident (CVA), among patients with chronic inflammatory immune-mediated disorders is well-recognized, especially among patients with rheumatoid arthritis and systemic lupus erythematosus [1]. Patients with anti-neutrophil cytoplasmic antibody-associated vasculitis (AAV) may

be at an increased risk of CVA as well although the data are still inconclusive as most studies addressing this association were small in size.

Objectives: The current systematic review and meta-analysis was conducted with the aims to comprehensively identify all relevant studies and summarize their results together to better characterize the risk of CVA among patients with AAV.

Methods: Two investigators independently searched for published studies indexed in MEDLINE and EMBASE database from inception to October 2018 using the search strategy that included the terms for anti-neutrophil cytoplasmic antibody-associated vasculitis and cerebrovascular accident. Eligible studies must be cohort studies (either retrospective or prospective) that compared the risk of incident CVA between patients with AAV and individuals without AAV. They must also report the relative risk or hazard ratio with 95% confidence interval (CI) of this comparison. Point estimates and standard errors from each study were extracted and combined together using the random effect, generic inverse variance technique of DerSimonian and Laird.

Results: A total of 5 studies fulfilled the inclusion criteria and were included in this meta-analysis. The risk of incident CVA among patients with AAV was significantly higher than individuals without AAV with the pooled risk ratio of 1.49 (95% CI, 1.06–2.10). The statistical heterogeneity was insignificant with an I^2 of 11%. The forest plot of this meta-analysis is shown as figure 1. The funnel plot of this study was relatively symmetric and did not suggest the presence of publication bias.

Conclusion: A significantly increased risk of CVA among patients with AAV was demonstrated by this meta-analysis. Physicians who take care of patients with AAV should be aware of this risk and focus on interventions to modify other conventional risk factors for CVA may be warranted.

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Figure 1. Forest plot of the studies on risk of incident CVA among patients with AAV

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.581

AB0625 SAFETY OF RITUXIMAB BIOSIMILAR FOR THE TREATMENT OF CRYOGLOBULINEMIC VASCULITIS

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Background Rituximab (RTX) represents a milestone in the treatment of mixed cryoglobulinemic vasculitis (MCV). Despite usually well-tolerated, RTX may induce different types of adverse drug reactions, including exacerbation of vasculitis. RTX biosimilars have been recently approved in Europe in the treatment of rheumatoid arthritis, but no data are available about effectiveness and safety of RTX biosimilars in the treatment of MCV.

Objectives Aim of the study was to analyse the safety of RTX biosimilar in patients with MCV treated in first-line or after a shift by RTX originator.

Methods In a multicenter, prospective, open-label study, we enrolled all MCV patients treated with RTX biosimilar, both in first-line or after a shift by RTX originator. Nineteen consecutive MCV patients (F/M 13/6, mean age 68.3±11.5 months,

mean disease duration 94±86 months, 10/19 HCV+ and 6/19 HBV+) were treated with RTX in a six-month period (July-December, 2018). Nine patients were treated with RTX for the first time, while the other 9 patients have been already treated with RTX originator and were switched to RTX biosimilar. Twelve patients received a dose of 250 mg/m² of RTX every other week, while 6 were treated with 1 gram of RTX every other week.

Results During a month-period after the last infusion, 5 adverse events (AE) were observed, namely 2 vasculitis flares, and 1 urticaria, atrial fibrillation occurred during infusion, and septicemia, respectively.

Three of 5 AE were observed in patients treated with the higher dose of RTX (in particular both cases of vasculitis flare were recorded in patients treated with 1 gram of RTX), while no differences were observed according to the previous treatment with RTX originator (2/9 vs 3/9 AE in patients switch or naïve, respectively).

Conclusion Despite the low number of patients, the switch among RTX originator and biosimilar appear to be safe and the number of AE were in line with previous reports about RTX originator. The main limit of this study is the absence of a control group, that doesn't allow a direct comparison of the safety between RTX originator and biosimilar. Previous reports suggested that higher dosage of RTX are associated to a higher risk of side effects. Also, in our study the occurrence of AE, mainly vasculitis flare, seem to be associated to the dose of RTX, rather than to the switch to biosimilar

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Disclosure of Interests None declared

DOI: 10.1136/annrheumdis-2019-eular.2263

AB0625 EXPERIENCE IN THE USUAL PRACTICE OF PATIENTS WITH BEHÇET'S DISEASE WHO ARE IN FOLLOW-UP IN THE UVEITIS UNIT OF THE DONOSTIA UNIVERSITY HOSPITAL

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Background: Behçet's disease (BD) is an inflammatory, chronic, recurrent, multisystemic process of unknown origin, characterized by the simultaneous or sequential presence of oral aphthae, genital ulcers, uveitis, inflammatory skin lesions, arterial or venous thrombosis, arthritis, inflammatory bowel disease and involvement of the central nervous system (CNS). The highest incidence figures correspond to the countries of the Middle East and the Far East (prevalence's of 20-42/100,000), decreases in the Western Mediterranean (<10) and is much less frequent in the rest of the world (<2). The uveitis unit was created in our hospital in 2007, where a rheumatologist and an ophthalmologist jointly visit, so our aim is to report our experience for almost 12 years with this rare disease.

Objectives: To describe the demographic, clinical, and analytical characteristics, as well as immunosuppressive and biological treatments used, type of ocular and extra ocular involvement, presence of sequelae, and visual acuity (VA) affection, of the patients that are in follow-up in the uveitis unit of the Donostia University Hospital (DUH).

Methods: A retrospective search of all patients with BD and ocular involvement evaluated the uveitis unit since 2007. The computerized medical records were reviewed. The variables collected were: sex, age, immunosuppressive and biological treatments used, and complementary tests. The immunosuppressant's sought were methotrexate (MTX), azathioprine (AZA), tacrolimus, sulfasalazine (SSZ), cyclosporine (CsA), leflunomide (LFN), cyclophosphamide (CFM); adalimumab (ADA); infliximab (IFX), golimumab (GLM), intravenous immunoglobulins (IVIg). The quantitative variables are shown with the median and interquartile range; the qualitative ones are shown with the absolute value and its percentage.

Results: We found 22 patients diagnosed with BD, the average age was 42 years, with a predominance of women (59%). Table 1 shows the clinical characteristics, complementary tests and treatments used in these