in flow velocity in the GCA-group was PS 2.1 cm/s ($p = 0.039$) and ED 1.4 ($p = 0.0004$) cm/s, while the RI was increased by 0.14 ($p = 0.077$). The results for PS and ED measurements were statistically significant, while the results for RI were not significant.

Conclusion: In GCA patients with ocular symptoms, a reduction of flow velocities of the central retinal artery compared to the eye-healthy control group was found. Results for PS and ED were significant. There seems to be a trend for decreased flow velocities in coexistence with visual symptoms in patients with GCA.

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Figure 1. Transocular ultrasound of an affected eye in giant cell arteritis with reduced flow velocities and increased resistance index.

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OP0148 MEPOLIZUMAB FOR EOSINOPHILIC GRANULOMATOSIS WITH POLYANGIITIS (EGPA): A RETROSPECTIVE REAL-WORLD EUROPEAN STUDY ON 142 PATIENTS

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Background: Evidence on the efficacy of Mepolizumab (MEPO) in Eosinophilic Granulomatosis with Polyangiitis (EGPA) is scarce [1].

Objectives: To assess the efficacy and safety of MEPO in real-life clinical practice.

Methods: We retrospectively included patients diagnosed with EGPA and treated with MEPO (100 or 300 mg/month). MEPO efficacy was evaluated in the first 12 months in terms of systemic disease and asthma control. The occurrence of any adverse event (AE) was recorded.

Results: 142 patients were included (38% males; median age 46.4 (IQR 36.7-54.4); 110 and 32 on MEPO 100 and 300 mg/month, respectively). General, ear-nose-throat, pulmonary, and neurological symptoms significantly decreased during treatment (table 1). MEPO accounted for a significant reduction in the BVAS (figure 1) and for a steroid sparing effect (figure 2). The proportion of patients with asthma attacks decreased by 90% at 12 months compared to t0, and asthma-related emergency accesses dropped from 17.4% to 2.3%. Overall, 21.1% of patients had a non-serious AE.

Figure 1. Changes in BVAS

Table 1. Control of clinical symptoms

	MEPO beginning (t0)	3 months	p-value (t3 vs t0)	6 months	p-value (t6 vs t0)	12 months	p-value (t12 vs t0)
N obs	N=142	N=135		N=123		N=89	
General symptoms	40 (28.2%)	17 (12.6%)	<0.001	19 (15.5%)	<0.001	13 (14.6%)	0.002
Cutaneous manifestations	13 (9.2%)	6 (4.4%)	0.008	5 (4.1%)	0.025	4 (4.5%)	0.180
ENT manifestations	106 (74.7%)	52 (38.5%)	<0.001	44 (35.8%)	<0.001	29 (32.6%)	<0.001
Pulmonary manifestations	130 (91.6%)	59 (43.7%)	<0.001	39 (31.7%)	<0.001	28 (31.5%)	<0.001
Cardiac manifestations	6 (4.2%)	2 (1.5%)	0.083	2 (1.6%)	0.083	0	0.157
Intestinal manifestations	10 (7.0%)	1 (0.7%)	0.005	4 (3.3%)	0.059	3 (3.4%)	0.059
Renal manifestations	5 (3.5%)	3 (2.2%)	0.414	0	0.046	1 (1.1%)	0.317
Neurological manifestations	36 (25.4%)	22 (16.3%)	0.012	18 (14.6%)	0.003	10 (11.2%)	0.035

Figure 2. Steroid treatment

Conclusion: MEPO effectively controlled systemic and respiratory EGPA symptoms in a large European cohort, with no major safety concerns.

References:

[1] Wechsler et al. MEPO or Placebo for Eosinophilic Granulomatosis with Polyangiitis. *NEJM*. 2017

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OP0149 VISUAL LOSS IN PATIENTS WITH GIANT CELL ARTERITIS TREATED WITH TOCILIZUMAB

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Background: Whether Tocilizumab (TCZ) may prevent vision loss in Giant Cell Arteritis (GCA) to the same extent as glucocorticoids remains a key and unanswered question. A patient cohort observed over up to 8 years addresses this issue.

Objectives: To investigate the frequency of vision loss/visual impairment in a GCA cohort treated with TCZ.

Methods: In this observational monocentric study, the courses of 192 patients with GCA treated with TCZ between 01.01.2011 and 31.12.2018 were analyzed. Data were extracted from medical records and collected in a Clinical Trial Unit (CTU) - based registry. Demographic, clinical and laboratory data were analyzed.

Results: 192 patients with GCA were treated with TCZ; 121 (63%) were female, 112 (58%) fulfilled 1990 American College of Rheumatology (ACR) criteria, all others had large vessel vasculitis based on magnetic resonance-angiography (MRA). The cumulative duration of TCZ treatment was 3467 months; the median treatment duration was 13.8 (8.5; 22.8) months. At baseline, visual impairment was present in 71 (37%) and vision loss in 21 (7.8%) patients. Visual loss was associated with higher age (74 (70; 82) vs. 70 (63; 76) years; $p=0.029$), lower C-reactive protein at baseline (14.0 (3.5; 42.0) vs. 54.5 (21.0; 101.0) mg/l;

$p<0.001$), cranial symptoms ($p<0.0001$), jaw claudication ($p=0.030$) and negative MRA of the aorta ($p=0.020$). Over the observed time span only one patient taking part in a clinical trial developed vision loss. In total 4 (2%) patients with vision impairment showed deterioration and 61 (32%) improvement.

Conclusion: Collectively, our data suggest that TCZ is able to prevent visual loss and may have a favorable effect on visual impairment.

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OP0150 WHAT IS THE ROLE OF TEMPORAL ARTERY BIOPSY IN GIANT CELL ARTERITIS FAST-TRACK PATHWAYS WHEN TEMPORAL ARTERY ULTRASOUND IS NEGATIVE?

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Background: A number of centres are now running fast track pathways for diagnosis and management of Giant cell arteritis with ultrasound as the first port of call for diagnosis¹. Temporal artery biopsies (TABs) have become the second line of investigation, and it is unclear how useful TAB is in this setting.

Objectives: This study looked at accuracy of Temporal artery biopsy (TAB) in patients with suspected Giant Cell arteritis (GCA) with negative/inconclusive ultrasound (U/S) and how duration of treatment on steroids prior to these investigations and arterial specimen size affected it.

Methods: Prospective study of all patients with suspected GCA referred for TAB when U/S was negative or inconclusive, as part of the local fast-track pathway (Coventry). Database included clinical findings, serological work up, U/S and TAB results and treatment. Sensitivity and specificity of U/S and TAB was calculated and compared based on duration of treatment with steroids.

Results: One hundred and nine patients were referred for TAB via Coventry fast-track-pathway. The sensitivity of U/S in this cohort of patients was 9.08% and specificity was 93.33%. After 3 days of steroid this was 0% and 100% respectively. For TAB when done within 10 days of starting steroids, this was 65% and 87.5% respectively. After 20 days of steroids this was 0 % and 100%. The sensitivity and specificity was 20% and 85% when arterial specimen size was 11-15mm and 47% and 100% when specimen size was 16mm or more. Sensitivity and specificity of U/S of 644 suspected GCA patients was 48% and 98%.

Conclusion: Our study demonstrates that TAB plays a relevant role in GCA fast-track-pathways, when U/S is negative/inconclusive. TAB was more sensitive than U/S in this cohort of patients, but overall sensitivity of U/S was higher when calculated for all patients suspected with GCA. Both remain useful tests if performed early. TAB specimen size should ideally be 16mm or more and done within 10 days of starting steroids.

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OP0151-PARE WORK IMPACTS EXPERIENCED BY YOUNGER PEOPLE WITH ARTHRITIS: A SYSTEMATIC REVIEW

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Background: On a global scale, it is estimated that adults in their peak income-earning years are disproportionately impacted by arthritis (1). Younger adults with arthritis are less likely to be employed and are more likely to face productivity challenges at work when compared to healthy similar-aged peers (2). The work-related impacts of arthritis on younger adults remain largely unexplored and are rarely considered in routine clinical care for arthritis.

Objectives: To systematically identify, appraise and synthesise the available evidence on work impacts experienced by individuals aged 16-50 years with arthritis.