Background: Giant cell arteritis (GCA) may be divided into cranial, and extracranial GCA. Tocilizumab (TCZ) has shown efficacy and safety in GCA and other large-vessel vasculitis (LVV) (1-5).

Objectives: To compare the efficacy of TCZ in cranial and extracranial GCA.

Methods: Multicenter observational study of 312 patients with GCA treated with TCZ. They were divided into 3 groups a) only cranial (cGCA), b) only extracranial (ecGCA), c) mixed affection (mixGCA). GCA was diagnosed by a) ACR criteria, and/or b) positive temporal artery biopsy, and/or c) LVV by imaging. Remission and sustained remission was defined according to EULAR definitions (1). In ecGCA and mixGCA we also studied the improvement (complete or partial) by imaging techniques.

Results: We studied 312 patients (218 females; mean age, 73.4±9.6 years). TABLE shows the main features of the 3 groups. Remission at month 6 was higher in cGCA, as well as the sustained remission at month12 (FIGURE). At 18 and 24months, were similar in the 3 groups. Improvement by imaging techniques was partial/complete at 6,12,18 and 24 months, in 50%/0%,71%/0%, 61%/15% and 67%/17% respectively, in ecGCA, and in 75%/0%,53%/18%, 64%/12% and 50%/28% in mixGCA.

Table 1. Main features of 312 patients at TCZ onset.

	Cranial GCA (n=152)	Extracranial GCA (n=49)	Mixed GCA (n=111)	Cranial vs Extracranial GCA p
Age at TCZ onset, years, mean±SD	76.0±8.2	65.4±12.2	73.5±8.1	0.000*
Sex, female/male, n (%)	105/47 (69)	33/16 (67)	80/31 (72)	0.960
Time from diagnosis to TCZ onset (months, median [IQR])	6 [2-21]	7 [2-20]	9 [3-25]	0.765
Biopsy-proven GCA, n (%)	87/128 (68)	0 (0)	50/87 (57)	0.000*
Systemic manifestations at TCZ onset	109 (72)	32 (65)	84 (76)	0.501
Fever, n (%)	18 (12)	1 (2)	8 (7)	0.048*
Constitutional syndrome, n (%)	52 (34)	16 (33)	47 (42)	0.933
PmR, n (%)	88 (58)	29 (59)	71 (64)	0.999
Ischemic manifestations at TCZ onset	117 (77)	0 (0)	70 (63)	0.000*
Visual involvement, n (%)	31 (20)	0 (0)	16 (14)	0.000*
Headache, n (%)	103 (85)	0 (0)	63 (57)	0.000*
Jaw claudication, n (%)	39 (26)	0 (0)	21 (19)	0.000*
Acute phase reactants				
ESR, mm/1 st hour, median [IQR]	28 [9-53]	24 [10-43]	28 [15-48]	0.462
CRP, mg/dL, median [IQR]	1.2 [0.3-3.4]	0.7 [0.4-1.8]	1.6 [0.4-3.8]	0.153
Prednisone dose at TCZ onset, mean ± SD	26.2±17.6	15.4±14.2	20.1±14.9	0.000*
TCZmono/TCZcombo, n (%)	116/36 (76)	26/23 (53)	69/42 (62)	0.003*
Follow-up (months), mean ± SD	27.3±21.1	32.7±23.3	27.9±22.0	0.143

Figure 1. Remission and sustained remission of cGCA, ecGCA and mixGCA according to EULAR (1). In the first 3 months we only could assess cGCA because in ecGCA and mixGCA a control imaging was not performed

Conclusion: TCZ seems to be effective in all phenotypes but it is faster in cGCA in reaching remission. However, improvement by imaging techniques was partial and very rarely complete in ecGCA and mixGCA.

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OP0065

TOCILIZUMAB IN VISUAL INVOLVEMENT OF GIANT CELL ARTERITIS. MULTICENTER STUDY OF 312 PATIENTS OF CLINICAL PRACTICE

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Background: Visual involvement is one of the most feared complication of Giant Cell Arteritis (GCA). Tocilizumab (TCZ) has shown efficacy and safety in large-vessel vasculitis (LVV) including GCA (1-4).

Objectives: To assess the efficacy of TCZ to: **a)** prevent the appearance of new ocular involvement, and **b)** to improve visual symptoms if present.

Methods: Observational, multicenter study of 312 patients with GCA treated with TCZ. Patients were diagnosed with GCA accordingly to **a)** ACR criteria, and/or **b)** biopsy of temporal artery, and/or **c)** presence of LVV by imaging.

Patients were divided into two subgroups: **a)** with, and **b)** without visual involvement at any time. Visual manifestations were classified as: **a)** Transient visual loss (TVL) (amaurosis fugax), **b)** Permanent visual loss (PVL) (longer than 24 hours) (partial or complete; unilateral or bilateral), **c)** diplopia, and **d)** blurred vision. Accordingly to visual duration up to TCZ onset, we considered: **a)** 1-10 days, **b)** 11-30 days, and **c)** more than 30 days.

Results: We studied 312 (218 women/94 men; mean age 73.4±9.6 years). Visual manifestations at any time (before and/or after TCZ) were observed in 78 (25%). In 47 of them visual manifestations were present at TCZ onset, and in the remaining 31 patients had had a complete recovery. Main clinical features of GCA with and without visual involvement are shown in TABLE. Patients with visual involvement were older, with other ischemic complications, and requiring more corticosteroids dose.

Table 1. Main features of 312 patients at TCZ onset.

	Overall N= 312	GCA with visual involvement (n= 78)	GCA without visual involvement (n=234)	p
General features				
Age (mean±SD)	73.4±9.6	76.6±8.0	72.4±9.8	0.001*
Female/Male(% of female), n	218/94 (70)	47/31 (60)	171/63(73)	0.046*
Time from GCA diagnosis to TCZ onset (months), median [IQR]	8 [3-24]	5 [1-14]	10 [3-24]	0.040*
Positive TAB, n (%)	137/229 (60)	33/60 (55)	104/169 (61)	0.444
Ischemic manifestations				
Visual involvement, n (%)	47 (15)	47 (60)	0	0.000*
Headache, n (%)	166 (53)	59 (76)	107 (46)	0.000*
Jaw claudication	60 (19)	26 (33)	34 (14)	0.001*
Systemic manifestations				
Fever, n (%)	27 (9)	8 (10)	19 (8)	0.743
Constitutional syndrome, n (%)	115 (37)	30 (38)	85 (36)	0.878
PmR, n (%)	188 (60)	46 (59)	142 (61)	0.830
Acute phase reactants				
ESR, mm/1st hour, median [IQR]	27 [10-50]	34.5 [15.2-58]	26.0 [10.0-48.0]	0.193
CRP (mg/dL), median [IQR]	1.4 [0.4-3.3]	1.5 [0.3-5.5]	1.3 [0.4-2.9]	0.134
Prednisone dose, mg/day, mean±SD	22.3±16.6	27.1±18.6	20.8±15.6	0.008*
TCZmono/TCZcombo, n (%)	211/101	57/21	154/80	0.295
Follow-up (months), mean±SD	28.4±21.8	25.8±22.4	29.3±21.6	0.119

After TCZ onset, none patient developed new visual involvement. At TCZ onset 47 patients had the following visual manifestations; PVL (n= 28; unilateral/bilateral; 22/6), TVL (n=15; unilateral/bilateral; 9/6), diplopia (n=2) and blurred vision (n=2).

None of the patients with TVL presented new episodes after TCZ onset, while 8 out of 28 patients with PVL experienced partial improvement (FIGURE). The 2 patients with diplopia and 1 of 2 patients with blurred vision improved.

Figure 1. Efficacy of TCZ in 47 patients with GCA and visual involvement at TCZ onset.

Conclusion: TCZ seems to prevent the appearance of new ocular manifestations. When they are present, TCZ may improve totally TVL and partially PVL.

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OP0066

METABOLIC PROFILE AND COMORBIDITIES IN GIANT CELL ARTERITIS AND POLYMYALGIA RHEUMATICA PATIENTS BEFORE AND AFTER TREATMENT

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Background: Giant cell arteritis (GCA) is a granulomatous vasculitis that affects the large vessels, occurring in people over 50 years of age. GCA frequently overlaps with polymyalgia rheumatica (PMR), which affects the proximal joints in the shoulders and hips. Both GCA and PMR patients require long-term treatment with glucocorticoids (GCs). Investigation of new treatment options is required because many GCA and PMR patients experience GC-related adverse events. These include hypercholesterolemia, hypertension, diabetes mellitus, cataract, and infections. (1) Previous studies suggest that unhealthy metabolic features and a higher Body Mass Index (BMI) might be protective in the development of GCA (2). However, data are limited.

Objectives: We aimed to elaborate more in depth on the metabolic features, BMI and prevalence of comorbidities of GCA and PMR patients at the time of diagnosis and during treatment, to characterize patients for improved treatment options.

Methods: This study included two independent cohorts: the GPS (Groningen) cohort, and the Aarhus cohort for validation of baseline data (Table 1). Patients in the GPS cohort were prospectively followed with visits at 3 months, 1, 2, and 5 years. Laboratory measurements, metabolic co-morbidities were assessed at every visit. At baseline, we assessed whether comorbidities and BMI predicted the duration of GC treatment.

Table 1. Baseline characteristics. P-values were calculated with Mann-Whitney U test and Fischer Exact test. Numbers in bold: significance between HC and GCA/PMR patients from GPS cohort. *: significance between GCA and PMR of GPS cohort. **: significance between two cohorts.

	GCA GPS cohort (n=50)	PMR GPS cohort (n=44)	HCs GPS cohort (n=65)	GCA Aarhus cohort (n=52)	PMR Aarhus cohort (n=25)
Age, median	71	73	70	67	68
Female, %	35	26	43	32	13
Follow-up duration in months, median	42	40	NA	NA	NA
BMI, median	24.3	26.6	25.4	24	26.4
Systolic BP (mmHg), median	140	140	145	135	143
Diastolic BP (mmHg), median	79.5*	80	80	76.5	83
HbA1c (mmol/mol), median	43	40	39	43	40
CRP (mg/L), median	54	42	4	76	53
ESR (mm/h), median	94*	57	9	77	51
Diabetes mellitus, %	12	23	12	15	8
Hypercholesterolemia, %	22	14	17	15	24
Hypertension, %	66 ^a	55	60	38	36
Cataract, %	14	16	34	NA	NA

Results: Frequencies of metabolic features in GCA/PMR patients from the GPS cohort were not significantly different in comparison to healthy controls (HCs). Higher HbA1c levels were detected in GCA patients than in HCs. Data on metabolic features from the Aarhus cohort compared well with the GPS cohort data and thus validated these findings (Table 1). Next, the effect of co-existing co-morbidities on the clinical manifestations was investigated. GCA patients with cataract had reduced CRP and ESR whereas PMR patients with cataract had a higher ESR than