Table 1. Clinical Comparison of pNBD and BD without neurological involvement^a

Parameters	pNBD (n=42)	Controls ^b (n=84)	P Value	OR(95%CI)
Age (years, mean±SD)	36.3±11.6	35.2±10.9	0.601	1.01 (0.98-1.04)
Gender (F/M)	25/17	50/34	1.000	—
Clinical Features of BD				
Oral Ulceration	42 (100%)	84 (100%)	1.000	—
Genital Ulceration	27 (64.3%)	61 (72.6%)	0.337	0.68 (0.31-1.50)
Skin Lesions	19 (45.2%)	40 (47.6%)	0.801	0.91 (0.43-1.91)
Gastrointestinal lesions	3 (7.1%)	17 (20.2%)	0.058	0.30 (0.08-1.10)
Ocular involvement ^c	15 (35.7%)	16 (19.0%)	0.041*	2.36 (1.03-5.44)
Vascular involvement	6 (14.3%)	10 (11.9%)	0.705	1.23 (0.42-3.66)
Laboratory tests				
ESR(mm/h, median and range)	15(0-85)	11(1-80)	0.072	1.01(0.99-1.03)
CRP (mg/L, median and range)	3.0(0.14-124)	3.3(0.13-104)	0.995	1.00 (0.98-1.02)

OR= Odds Ratio; CI=Confidential Interval.

^a Values are the number (percentage) unless otherwise indicated.^b Eighty-four age- and gender-matched BD patients without neurological involvement were served as control.^c Ocular involvement includes uveitis, retinal vasculitis, scleritis.

*P<0.05.

Conclusions: The parenchymal neurological involvement is a rare complication of BD with a high mortality. Its most frequent location is brainstem. Ocular involvement is a risk factor for pNBD. Early identification and active treatment are vital for a good prognosis.

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FRI0493

PET/CT IN PATIENTS WITH GIANT CELL ARTERITIS AFTER 1 YEAR OF TREATMENT WITH TOCILIZUMAB PLUS PREDNISONE TAPER OR ONLY PREDNISONE TAPER

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Background: The arterial uptake of ¹⁸fluorine-2-deoxy-d-glucose (FDG) by positron emission tomography-computed tomography (PET/CT) has been used for the diagnosis of giant cell arteritis (GCA). The role for PET/CT in following disease activity and monitoring treatment effects, however, remains unclear

Objectives: To examine the degree of FDG uptake within the large arteries of GCA patients after 1 year of treatment

Methods: We studied a subgroup of patients enrolled in the GiACTA trial.¹ Patients received either tocilizumab (TCZ) given weekly or every other week plus a 26 week prednisone taper, or placebo (PBO) plus either a 26- or 52 week prednisone taper. PET/CTs were done according to site feasibility and not as part of the GiACTA protocol. For this analysis, the 2 TCZ and PBO groups, respectively, were combined. Patients had whole-body PET/CT imaging within 16 weeks of week 52 visit. The ascending aorta, carotid artery and subclavian artery territories were assessed by maximum standardised FDG uptake values (mSUV) measurement. For each territory, we calculated average, most diseased segment (MDS) and most diseased slide mSUVs and target background ratios (TBR). PET/CTs were read centrally by investigators blinded to the clinical and treatment data

Results: From 251 patients enrolled in GiACTA, 24 patients underwent PET/CT within 16 weeks of week 52 visit. Seventeen patients (71%) received TCZ plus a prednisone taper (TCZ group) and 7 patients received a prednisone taper alone (PBO group). There were no significant differences between groups in baseline characteristics (table 1). Mean (SD) cumulative prednisone dose at week 52 was 2.5 g (1.7 g) in the TCZ group and 3.2 g (1.2 g) in the PBO group (p=0.11). FDG

uptake was consistently numerically lower in all vascular territories in TCZ-treated patients compared to PBO-treated patients except in the ascending aorta. However, the between-group differences were statistically significant only in the left subclavian artery (table 2). Adjustment for selected confounders (new onset disease, baseline prednisone dose, prednisone dose at the time of PET/CT, cumulative prednisone dose, flare prior to PET/CT and clinical activity at the time of PET/CT) did not alter the conclusions derived from the univariate analyses

Table 1 Baseline characteristics: All results represent means (SD) except otherwise indicated. PBO=placebo, TCZ=tocilizumab

	PBO group (n=7)	TCZ group (n=17)	p-value
New onset disease, n (%)	6 (86)	9 (53)	0.19
Baseline prednisone dose (mg)	30 (30-50)	30 (20-40)	0.30
Cumulative prednisone dose (g) at week 52	3.2 (1.2)	2.5 (1.7)	0.11
Prednisone dose (mg) at PET time, median (IQR)	0 (0; 3)	0 (0; 7.5)	0.44
PET time point (weeks from baseline)	54.47 (5.75)	57.38 (8.33)	0.11
Primary outcome met, n (%)	4 (57)	11 (65)	1.00
Clinically active disease at the time of PET, n (%)	1 (14)	3 (18)	1.00
Disease relapse before PET, n (%)	3 (43)	8 (47)	0.61
TCZ treatment at the time of PET, n (%)	0 (100)	7 (41)	0.07

All results represent means (SD) except otherwise indicated. PBO = placebo, TCZ = tocilizumab

Table 2 Results: All results represent means (SD). mSUV=maximum standardised uptake value, MDS=most diseased segment, TBR=target to background ratio

	PBO group (n=7)	TCZ group (n=17)	p-value
Left subclavian artery			
Average mSUV	2.74 (0.77)	2.33 (0.42)	0.11
Average MDS mSUV	3.05 (0.90)	2.47 (0.46)	0.04
Hottest spot mSUV	3.23 (1.02)	2.56 (0.48)	0.04
TBR	2.94 (0.86)	2.47 (0.45)	0.09
Right subclavian artery			
Average mSUV	2.59 (0.86)	2.28 (0.43)	0.25
Average MDS mSUV	2.72 (0.88)	2.35 (0.42)	0.17
Hottest spot mSUV	2.82 (0.91)	2.49 (0.49)	0.26
TBR	2.76 (0.88)	2.41 (0.40)	0.19
Left carotid artery			
Average mSUV	2.51 (0.49)	2.36 (0.41)	0.50
Average MDS mSUV	2.64 (0.54)	2.52 (0.49)	0.66
Hottest spot mSUV	2.70 (0.54)	2.64 (0.54)	0.82
TBR	2.67 (0.52)	2.51 (0.43)	0.78
Right carotid artery			
Average mSUV	2.86 (0.77)	2.38 (0.44)	0.14
Average MDS mSUV	3.12 (0.95)	2.63 (0.65)	0.14
Hottest spot mSUV	3.23 (0.94)	2.76 (0.69)	0.16
TBR	2.98 (0.67)	2.54 (0.46)	0.31
Ascending aorta			
Average mSUV	2.85 (0.63)	2.86 (0.51)	0.93
Average MDS mSUV	2.99 (0.68)	2.98 (0.56)	0.97
Hottest spot mSUV	3.01 (0.71)	3.12 (0.61)	0.97
TBR	3.05 (0.65)	3.05 (0.61)	0.99
Hottest spot total score	13.40 (4.08)	12.62 (3.30)	0.62
Average MDS total score	12.84 (4.01)	12.04 (3.06)	0.60

All results represent means (SD). mSUV = maximum standardized uptake value, MDS = most diseased segment, TBR = target to background ratio

Conclusions: In this exploratory study, subclavian FDG-uptake was significantly reduced in GCA patients treated with TCZ plus prednisone versus prednisone monotherapy despite lower cumulative prednisone doses. A larger, carefully designed prospective study is required to fully understand the utility of PET/CT in the longitudinal evaluation of large-vessel vasculitis associated with GCA

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FRI0494

SPECTRUM OF VISUAL INVOLVEMENT IN GIANT CELL ARTERITIS

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Background: The dreaded complication of giant cell arteritis (GCA), irreversible sight loss (SL), is present in 15%–25% of patients at diagnosis. This is likely due to delayed presentation, recognition and treatment. Fast track pathways for urgent assessment of suspected GCA reduce SL with associated cost savings. Information regarding the burden of SL in GCA is required to guide health strategy and has been explored in this UK wide study.