Supplemental material serum biomarkers in PMR and GCA

Supplemental Table 1: details of imaging exams in isolated PMR patients.

	PMR patients (n=45)				
Cranial evaluation	**US**	**TAB**	**US +TAB**	**Only US**	**Only TAB**
N	31	38	24	7	14
Extra cranial evaluation	**^{18}FDG-PET/CT**	**Angio -CT**	**^{18}FDG-PET/CT +angio CT**	**Only ^{18}FDG-PET/CT**	**Only angio CT**
N	23	26	4	19	22

^{18}FDG-PET/CT : [18F] Fluorodesoxyglucose - positon emission tomography/computed tomography ; angio-CT : angio-computed tomography ; TAB : temporal artery biopsy ; US: Ultrasound.

Supplemental Table 2: patients characteristics

	PMR/GCA overlap (n = 29)	Isolated PMR (n = 45)	p
Age (years), median (IQR)	74 (68.9-81.1)	72.7 (64.9-79.8)	0.43
Sex (F/H)	19/10	25/20	0.39
IMC	23.4 (20.5-27.5)	26.3 (22.2-29.7)	0.21
Duration (from onset to sample) (months) median (IQR)	1 (0.75-2)	2 (1-4)	0.006
Symptoms			
PMR, n (%)	29 (100)	45 (100)	NC
Cranial GCA, n (%)	21 (72.4)	0	< 0.0001
Sudden vision loss, n (%)	1 (3.4)	0	0.21
Jaw or tongue claudication, n (%)	10 (34.4)	0	< 0.0001
New temporal headache, n (%)	16 (55.1)	2 (4.4)	< 0.0001
Scalp tenderness, n (%)	11 (37.9)	0	< 0.0001
Abnormal examination of the temporal artery, n (%)	9 (31.0)	0	< 0.0001
Complementary exams			
Positive temporal artery biopsy, n (%)*	22 (75.9)	0	< 0.0001
Temporal halo sign (US), n (%)	16 (55.1)	0	< 0.0001
Aortitis § (^{18}FDG PET/CT and/or AngioCT), n (%) **	12 (41.4)	0	< 0.0001
Aortitis + positive TAB, n (%)	9 (31)	0	< 0.0001
Subclinical GCA, n (%)	8 (27.5)	0	< 0.0001
Corticosteroid therapy at the time of blood test, n (%)	0	0	NC

*: Temporal artery biopsy was performed in 29 (100%) GCA patients and 38 (84%) in isolated PMR patients.

**: ^{18}FDG PET/CT was performed in 13 (44,8%) GCA patients and 23 (51%) isolated PMR patients; angio-CT scan was performed in 15 (51.7%) GCA patients and 26 (58%) isolated PMR patients.

§ Aortitis was defined by grade 2 or 3 aortic wall fixation on ^{18}FDG-PET/CT or parietal thickening > 2 mm (angio CT-scan).

Angio CT-scan: angio – computed tomography scan; CRP: C reactive protein; ^{18}FDG-PET/CT: [18F] Fluorodesoxyglucose - positon emission tomography/computed tomography; GCA: giant cell arteritis; Hb: haemoglobin; IQR: interquartile range; PMR: polymyalgia rheumatica; TAB: temporal artery biopsy, US: ultrasound.

Supplemental Table 3: Diagnostic accuracy of serums biomarkers between isolated PMR and GCA patients.

	GCA (n = 29)	Isolated PMR (n = 45)	p	AUC
sCD141 (ng/mL), median (IQR)	**6.9 (5.1-8.1)**	**5.5 (4.4-6.3)**	**0.002**	**0.70**
sCD146 (ng/mL), median (IQR)	46.7 (42.0-53.4)	44.9 (36.4-53.5)	0.21	0.58
ICAM-1 (ng/mL), median (IQR)	271.6 (226.3-473.6)	233.5 (184.3-346.6)	0.05	0.63
VCAM-1 (ng/mL), median (IQR)	914.5 (721.2-1088.2)	764.3 (591.6-963,1)	0.14	0.60
vWFA2 (ng/mL), median (IQR)	24.2 (12.7- 42.1)	19.0 (12.6-24.9)	0.08	0.61
MMP-2 (ng/mL), median (IQR)	201.2 (171.4-226.2)	193.4 (151.4-214.8)	0.20	0.58
MMP-3 (ng/mL), median (IQR)	**28.6 (10.1-45.3)**	**39.9 (27.3-55.3)**	**0.01**	**0.67**
MMP-9 (ng/mL), median (IQR)	290.0 (183.2-404.9)	305.5 (236.3-434.7)	0.34	0.56
IL-6 (pg/mL) , median (IQR)	**10.6 (7.4-17.5)**	**16.1 (12.4-34.7)**	**0.004**	**0.69**
CXCL9 (pg/mL), median (IQR)	**565.9 (411.3-958.3)**	**402.0 (402.0-572.9)**	**0.002**	**0.70**
sCD163 (ng/mL), median (IQR)	767.7 (490.6-926.0)	691.6 (553.5-877.0)	0.47	0.55
CXCL9/IL-6 ratio	**66.8 (34.7-107.1)**	**26.8 (13.9-39.9)**	**0.0001**	**0.76 (> 32.8) Se 79.3; spe 73.3**
MMP-3/sCD141 ratio	**3.7 (1.5-5.2)**	**8.0 (5.1-10.8)**	**< 0.0001**	**0.79 (< 5.3) Se 79.3; spe 71.1**
Hb (g/dL), median (IQR)	11.7 (9.8-12.5)	12 (10.3-12.7)	0.28	0.58
Leukocytes (10^9/L), median (IQR)	7.9 (6.4-10.3)	9.2 (8.4-10.9)	0.04	0.63
Lymphocytes (10^9/L), median (IQR)	1.4 (1.0-1.7)	1.4 (1.1-1.8)	0.40	0.55
Monocytes (10^9/L), median (IQR)	0.6 (0.5-1.0)	0.7 (0.6-0.9)	0.23	0.58
Neutrophils (10^9/L), median (IQR)	6.1 (4.4-7.5)	6.6 (5.5-8.6)	0.08	0.61
CRP (mg/L), median (IQR)	59.9 (35.4-102.5)	73.4 (46.7-101.5)	0.29	0.57
ESR (mm/hr), median (IQR) £	81 (50-103.5)	79 (55-90)	0.49	0.55
Fibrinogen (g/L), median (IQR) ££	6.1 (5.8-7.3)	6.7 (5.8-7.5)	0.53	0.54
Platelets (10^9/L) median (IQR) £££	357 (300-466)	373 (293-451)	0.82	0.51

£ missing data, isolated PMR, n = 11
££ missing data: Isolated PMR, n = 4; GCA, n = 1
£££ missing data: isolated PMR, n = 6

Supplemental Table 4: Diagnostic accuracy of serum biomarkers in isolated PMR vs subclinical GCA.

	PMR vs subclinical GCA (50 *vs* 8)			
	Subclinical GCA (n =8)	Isolated PMR (n = 45)	P	AUC
sCD141 (ng/mL), median (IQR)	**7.9 (6.0-11.2)**	**5.5 (4.4-6.3)**	**0.004**	**0.81**
sCD146 (ng/mL), median (IQR)	47.4 (43.5-56.6)	44.9 (36.4-53.5)	0.17	0.65
ICAM-1 (ng/mL), median (IQR)	333.6 (216.6-606.9)	233.5 (184.3-346.6)	0.12	0.67
VCAM-1 (ng/mL), median (IQR)	952.8 (589.3-1049.6)	764.3 (591.6-963,1)	0.29	0.61
vWFA2 (ng/mL), median (IQR)	23.9 (9.5-29.0)	19.0 (12.6-24.9)	0.68	0.54
MMP-2 (ng/mL), median (IQR)	181.1 (167.3-217.2)	193.4 (151.4-214.8)	0.89	0.51
MMP-3 (ng/mL), median (IQR)	30.8 (8.1-74.8)	39.9 (27.3-55.3)	0.53	0.56
MMP-9 (ng/mL), median (IQR)	350.4 (216.3-459.3)	305.5 (236.3-434.7)	0.93	0.51
IL-6 (pg/mL), median (IQR)	12.9 (7.6-103.4)	16.1 (12.4-34.7)	0.49	0.57
CXCL9 (pg/mL), median (IQR)	469.3 (402.0-946.5)	402.0 (402.0-572.9)	0.47	0.56
sCD163 (ng/mL), median (IQR)	655.4 (363.7-850.9)	691.6 (553.5-877.0)	0.59	0.56
CXCL9/IL-6 ratio	36.2 (10.8-108.4)	26.8 (13.9-39.9)	0.40	0.59
MMP-3/sCD141 ratio	**4.1 (1.2-6.6)**	**8.0 (5.1-10.8)**	**0.01**	**0.77**
Hb (g/dL), median (IQR)	10.8 (9.6-12.8)	12 (10.3-12.7)	0.45	0.58
Leukocytes (10^9/L), median (IQR)	7.7 (6.3-11.0)	9.2 (8.4-10.9)	0.10	0.68
Lymphocytes (10^9/L), median (IQR)	1.1 (0.7-1.6)	1.4 (1.1-1.8)	0.19	0.64
Monocytes (10^9/L), median (IQR)	0.6 (0.4-0.8)	0.7 (0.6-0.9)	0.10	0.68
Neutrophils (10^9/L), median (IQR)	5.6 (4.7-7.5)	6.6 (5.5-8.6)	0.26	0.62
CRP (mg/L), median (IQR)	78.9 (30.0-116.5)	73.4 (46.7-101.5)	0.96	0.50
ESR (mm/hr) £ median (IQR)	68 (29.7-108.7)	79 (55-90)	0.55	0.56
Fibrinogen (g/L), ££ median (IQR)	6.0 (5.5-7.3)	6.7 (5.8-7.5)	0.34	0.61
Plaquettes (10^9/L), £££ median (IQR)	340.5 (238.7-467.2)	373 (293-451)	0.77	0.53

£ missing data, isolated PMR, n = 11
££ missing data: Isolated PMR, n = 4, subclinical GCA, n = 1
£££ missing data: isolated PMR, n = 6

Supplemental Figure 1: Concentration level of sCD146, vWFA2, ICAM-1, VCAM-1, sCD163, MMP-2, MMP-9, Haemoglobin, platelets, Lymphocytes, Monocytes, CRP, ESR and fibrinogen in isolated PMR, GCA and subclinical GCA patients.

Bars represent the median; NS: non significative; *: p< 0.05

CRP : C -Reactive Protein ; ESR : Erythrocyte Sedimentation Rate ; GCA : Giant Cell Arteritis ; PMR : polymyalgia Rheumatica ; subGCA : subclinical Giant Cell Arteritis.