



Supplementary Fig. S1. Receiver operating characteristic curve analysis of the intima-media thickness of temporal arteries to determine the cut-off points for predicting cranial GCA

The clinical diagnosis is used as a reference standard. The area under the curve is 0.763 (95% confidence interval 0.675–0.851), and the Youden's index reveals an optimal cut-off of 0.5 mm.

AUC: area under the curve; CI: confidence interval; GCA: giant cell arteritis.

Supplementary Table S1. A 2×2 contingency table comparing TAUS findings with clinical diagnosis and TAB classified by the previous use of GCs or any DMARDs at baseline.

Patients treated with GCs or any DMARDs

	(A) Clinical diagnosis			(B) TAB		
	Positive (n=14)	Negative (n=30)	Total (n=44)	Positive (n=7)	Negative (n=7)	Total (n=14)
Increased IMT	9	2	11	6	3	9
No increased IMT	5	28	33	1	4	5
Halo sign positive	3	0	3	3	0	3
Halo sign negative	11	30	41	4	7	11

Patients untreated with GCs or any DMARDs

	(A) Clinical diagnosis			(B) TAB		
	Positive (n=39)	Negative (n=120)	Total (n=159)	Positive (n=25)	Negative (n=19)	Total (n=44)
Increased IMT	24	13	37	20	3	23
No increased IMT	15	107	122	5	16	21
Halo sign positive	14	0	14	12	1	13
Halo sign negative	25	120	145	13	18	31

TAUS findings classified by the previous use of GCs or any DMARDs are evaluated based on increased IMT and the halo sign. (A) Clinical diagnosis and (B) TAB results are used as reference standards.

TAUS: temporal artery ultrasonography; TAB: temporal artery biopsy; GCs: glucocorticoids; DMARDs: disease-modifying antirheumatic drugs; IMT: intima-media thickness.

Supplementary Table S2. Diagnostic performance of TAUS for the diagnosis of cranial GCA classified by the previous use of GCs or any DMARDs at baseline.

Patients treated with GCs or any DMARDs

	(A) Clinical diagnosis		(B) TAB	
	Increased IMT	Halo sign	Increased IMT	Halo sign
Sensitivity	64.3% (35.1-87.2)	21.4% (4.7-50.8)	85.7% (42.1-99.6)	42.9% (9.9-81.6)
Specificity	93.3% (77.9-99.2)	100% (88.4-100)	57.1% (18.4-90.1)	100% (59.0-100)
PPV	81.8% (48.2-97.7)	100% (29.2-100)	66.7% (29.9-92.5)	100% (29.2-100)
NPV	84.8% (68.1-94.9)	73.2% (57.1-85.8)	80.0% (28.4-99.5)	63.6% (30.8-89.1)

Patients untreated with GCs or any DMARDs

	(A) Clinical diagnosis		(B) TAB	
	Increased IMT	Halo sign	Increased IMT	Halo sign
Sensitivity	61.5% (44.6-76.6)	35.9% (21.2-52.8)	80.0% (59.3-93.2)	48.0% (27.8-68.7)
Specificity	89.2% (82.2-94.1)	100% (97.0-100)	84.2% (60.4-96.6)	94.7% (74.0-99.9)
PPV	64.9% (47.5-79.8)	100% (76.8-100)	87.0% (66.4-97.2)	92.3% (64.0-99.8)
NPV	87.7% (80.5-93.0)	82.8% (75.6-88.5)	76.2% (52.8-91.8)	58.1% (39.1-75.5)

Diagnostic performance of TAUS based on increased IMT and the halo sign classified by the previous use of GCs or any DMARDs at baseline is calculated. Data are presented as percentage values (95% confidence interval).

TAUS: temporal artery ultrasonography; GCA: giant cell arteritis; GCs: glucocorticoids; DMARDs: disease-modifying antirheumatic drugs; IMT: intima-media thickness; PPV: positive predictive value; NPV: negative predictive value.