

## Supplementary Table 3. Itemized analysis of SSc patients previously diagnosed with the overlap syndrome of SSc with AAV (n = 3): these patients were not included in this study

Patients number	Scores based on the 2022 ACR/EULAR criteria for MPA	1 (-3)	2 (+6)	3 (+3)	4 (+3)	5 (-1)	6 (-4)
А	12	0	1	1	1	0	0
В	9	0	1	1	0	0	0
C	-2	0	0	1	0	1	1

1 = Nasal involvement (discharge, ulcers, crusting, congestion, septal defect/perforation); 2 = MPO-ANCA (or P-ANCA) positivity; 3 = Fibrosis or interstitial lung disease on chest imaging; 4 = Pauci-immune glomerulonephritis on biopsy; 5 = PR3-ANCA (or C-ANCA) positivity; 6 = Serum eosinophil count ≥ 1,000/μL.

Patients	Scores based on the 2022	1	2	3	4	5	6	7	8	9	10
number	ACR/EULAR criteria for GPA	(+3)	(+2)	(+1)	(+5)	(+2)	(+2)	(+1)	(+1)	(-1)	(-4)
А	3	0	0	0	0	1	0	1	1	1	0
В	2	0	0	1	0	1	0	0	0	1	0
С	6	0	0	0	1	1	1	1	0	0	1

1 = Nasal involvement (discharge, ulcers, crusting, congestion, septal defect/perforation); 2 = Cartilaginous involvement; 3 = Conductive or sensorineural hearing loss; 4 = PR3-ANCA (or C-ANCA) positivity; 5 = Pulmonary nodules, mass or cavitation; 6 = Granuloma, granulomatous inflammation, or giant cells on biopsy; 7 = Nasal/paranasal sinusitis or mastoiditis on imaging; 8 = Pauci-immune glomerulonephritis on biopsy; 9 = MPO-ANCA (or P-ANCA) positivity; 10 = Serum eosinophil count  $\geq$  1,000/ $\mu$ L.

Patients	Scores based on the 2022	1	2	3	4	5	6	7
number	ACR/EULAR criteria for EGPA	(+3)	(+3)	(+1)	(+5)	(+2)	(-3)	(-1)
A	-1	0	0	0	0	0	0	1
В	-1	0	0	0	0	0	0	1
C	2	0	0	1	1	0	1	1

1 = obstructive airway disease; 2 = nasal polyps; 3 = mononeuritis multiplex; 4 = Serum eosinophil count  $\geq$  1,000/ $\mu$ L; 5 = Extravascular eosinophilic-predominant inflammation on biopsy; 6 = PR3-ANCA (or C-ANCA) positivity; 7 = hematuria.

SSc, systemic sclerosis; ILD, interstitial lung disease; ACR, American College of Rheumatology; EULAR, European Alliance of Associations for Rheumatology; MPA, microscopic polyangiitis; GPA, granulomatosis with polyangiitis; EGPA; Eosinophilic granulomatosis with polyangiitis; MPO, myeloperoxidase; P, perinuclear; PR3, proteinase 3; ANCA, antineutrophil cytoplasmic antibody; C, cytoplasmic.