Supplementary Table 1. Median (IQR) of PVS count, volume and diameter in the right and left DMN, stratified by language disorders, sensorial overload, motor stereotypies, and rehabilitation needs. In bold significant p values.

Language impairment	Left DMN	Right DMN	p-value left	p-value right
No (n =17)				
PVS count	1 (0-4)	1 (0-4)		
PVS diameter	1.24 (0-1.7)	1.24 (0-1.56)		
PVS volume	1 (0-8)	0 (0-12)		
Yes (n= 15)				
PVS count	2 (0.75-8)	3 (0.75-9)	**0.012**	**0.0014**
PVS diameter	1.42 (0-1.6)	1.42 (1.24-1.68)	0.26	**0.031**
PVS volume	8 (0-12)	3 (0-9)	**0.004**	0.17
Sensory disorder				
No (n =13)				
PVS count	1 (0-4,75)	1 (0-6,75)		
PVS diameter	1.24 (0-1.68)	1.24 (0-1.56)		
PVS volume	1 (0-8)	0 (0-5)		
Yes (n= 20)				
PVS count	2 (0-6)	2 (0.5-7)	**0.011**	**0.029**
PVS diameter	1.45 (0-1.63)	1.46 (0-1.68)	0.076	**0.047**
PVS volume	2 (0-11)	3 (0-11)	0.12	**0.046**
Stereotypes				
No (n= 16)				
PVS count	1 (0-4)	1 (0-6)		
PVS diameter	1.24 (0-1.56)	1.24 (0-1.59)		
PVS volume	0 (0-2)	1 (0-10)		
Yes (n= 17)				
PVS count	2 (0-6)	2 (0-6.25)	**0.015**	0.26
PVS diameter	1.52 (0-1.7)	1.46 (0-1.68)	**0.048**	0.15
PVS volume	3.5 (0-12)	7 (1-26)	**0.000018**	**0.00018**
Level of needs				
Level 1 (n= 10)				
PVS count	1 (0-3)	1 (0-6)		

PVS diameter	1.24 (0-1.58)	1.24 (0-1.55)		
PVS volume	1 (0-13)	0 (0-15)		
Level 3 (n= 20)				
PVS count	2 (0-6)	2 (0-6)	**0.02**	0.49
PVS diameter	1.5 (0-1.71)	1.43 (0-1.68)	0.09	0.15
PVS volume	3 (0-11)	5.5 (1-15.25)	0.22	**0.006**

PVS= Perivascular spaces; IQR= interquartile range; n= number of patients; DMN= Default mode network. Unit of measures: PVS count (number); PSV volume (expressed as number of PVS voxels); PSV diameter (expressed as mm).

Supplementary Table 2. Median (IQR) of PVS count, volume and diameter in the right and left CEN/FPN, stratified by language disorders, sensorial overload, motor stereotypies, and rehabilitation needs. In bold significant p values.

Language impairment	Left CEN/FTN	Right CEN/FTN	p-value left	p-value right
No (n =17)				
PVS count	0 (0-1)	0 (0-1)		
PVS diameter	0 (0-1.4)	0 (0-1.24)		
PVS volume	0 (0-5)	1 (0-7)		
Yes (n= 15)				
PVS count	1 (0-2)	1 (0-3)	**0.028**	**0.005**
PVS diameter	0 (0-1.52)	1.24 (0-1.56)	0.33	**0.013**
PVS volume	2 (0-14)	2 (0-17)	**0.014**	**0.029**
Sensory disorder				
No (n =13)				
PVS count	0 (0-1)	0 (0-1)		
PVS diameter	0 (0-1.42)	0 (0-1.24)		
PVS volume	0 (0-5)	1 (0-7)		
Yes (n= 20)				
PVS count	0 (0-2)	1 (0-2)	**0.044**	**0.043**
PVS diameter	1.24 (0-1.49)	1.24 (0-1.66)	**0.034**	**0.041**
PVS volume	2 (0-15.5)	4 (0-16)	**0.013**	**0.0031**
Stereotypes				
No (n= 16)				
PVS count	0 (0-1)	0 (0-1)		
PVS diameter	0 (0-1.24)	0 (0-1.31)		
PVS volume	0 (0-5)	1 (0-7)		
Yes (n= 17)				
PVS count	1 (0-2)	1 (0-2)	**0.009**	**0.0074**
PVS diameter	0.62 (0-1.56)	1.24 (0-1.53)	**0.0039**	**0.022**
PVS volume	2.5 (0-18.25)	2 (0-14.75)	**0.0017**	**0.042**
Level of needs				
Level 1 (n= 10)				
PVS count	0 (0-4)	1 (0-2)		

PVS diameter	0 (0-0.93)	1.24 (0-1.32)		
PVS volume	0 (0-6.5)	1 (0-9.5)		
Level 3 (n= 20)				
PVS count	1 (0-4)	1 (0-2)	**0.014**	0.25
PVS diameter	0 (0-1.55)	1.24 (0-1.55)	**0.018**	0.24
PVS volume	2 (0-16.5)	2 (0-15.5)	0.056	0.16

PVS= Perivascular spaces; IQR= interquartile range; n= number of patients; CEN/FTN= Central Executive and Frontoparietal networks. Unit of measures: PVS count (number); PSV volume (expressed as number of PVS voxels); PSV diameter (expressed as mm).

Supplementary Table 3. Median (IQR) of PVS count, volume and diameter in the right and left SN, stratified by language disorders, sensorial overload, motor stereotypies, and rehabilitation needs. In bold significant p values.

Language impairment	Left SN	Right SN	p-value left	p-value right
No (n =17)				
PVS count	0 (0-3)	1 (0-4)		
PVS diameter	0.62 (0-1.43)	1.24 (0-1.4)		
PVS volume	1 (0-4)	1 (0-8.75)		
Yes (n= 15)				
PVS count	1 (0.25-4.75)	5 (2-9.75)	**0.029**	**0.0014**
PVS diameter	1.40 (1.24-1.56)	1.47 (1.4-1.56)	**0.032**	**0.021**
PVS volume	3 (0-6)	4 (0-9.5)	0.21	0.28
Sensory disorder				
No (n =13)				
PVS count	1 (0-2.25)	1 (0-5)		
PVS diameter	1.24 (0-1.42)	1.24 (0-1.44)		
PVS volume	1 (0-4.25)	8.5 (4-11)		
Yes (n= 20)				
PVS count	1 (0-4)	2 (0-4)	0.13	0.15
PVS diameter	1.37 (0-1.51)	1.47 (1.24-1.56)	0.17	**0.042**
PVS volume	2.5 (0-6)	8 (5-16.75)	0.25	0.43
Stereotypes				
No (n= 16)				
PVS count	1 (0-3)	1 (0-3)		
PVS diameter	1.24 (0-1.46)	1.24 (0-1.46)		
PVS volume	1 (0-4)	1 (0-6.75)		
Yes (n= 17)				
PVS count	1 (0-3.25)	2 (0-5)	0.24	0.14
PVS diameter	1.34 (0-1.5)	1.42 (0-1.56)	0.26	0.15
PVS volume	3 (0-8.5)	9 (2.75-12.25)	0.062	**0.0028**
Level of needs				
Level 1 (n= 10)				
PVS count	1 (0-3)	1 (0-3,25)		

PVS diameter	1.24 (0-1.47)	1.24 (0-1.44)		
PVS volume	1 (0-6.5)	2 (0-9.75)		
Level 3 (n= 20)				
PVS count	1 (0-4)	2 (0-5)	0.17	0.16
PVS diameter	1.35 (0-1.5)	1.41 (0-1.56)	0.25	0.12
PVS volume	3 (0-6.25)	4.5 (0-11.25)	0.42	0.45

PVS= Perivascular spaces; IQR= interquartile range; n= number of patients; SN= Salience network. Unit of measures: PVS count (number); PSV volume (expressed as number of PVS voxels); PSV diameter (expressed as mm).