

# Supplementary Information

## *Exposure to 16 Hours of Normobaric Hypoxia induces Ionic Edema in the Healthy Brain*

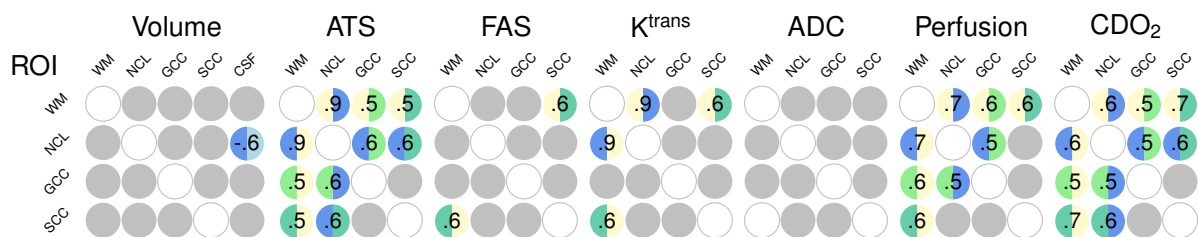
### Supplementary Methods

#### Magnetic resonance imaging

##### Morphometry

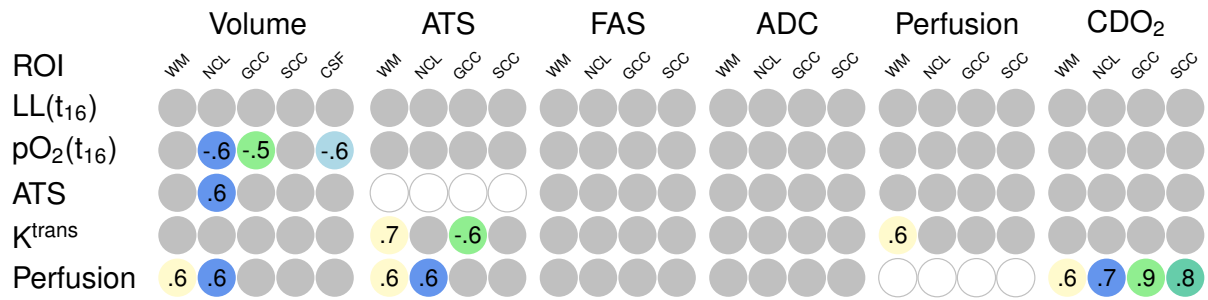
Images were motion corrected and averaged <sup>1</sup> across multiple acquired volumetric T1-weighted images. Image post-processing steps further included removal of non-brain tissue using a hybrid watershed and surface deformation procedure <sup>2</sup>, automated Talairach transformation, segmentation of subcortical white matter and deep gray matter volumetric structures <sup>3,4</sup>, intensity normalization <sup>5</sup>, tessellation of the gray matter - white matter boundary and automated topology correction <sup>6,7</sup>. To extract reliable volume estimates, images were uniformly post-processed with the longitudinal stream <sup>8</sup> in FreeSurfer. During the procedure an unbiased within-subject template space and image was created using robust, inverse consistent registration <sup>1</sup>. Several subsequent processing steps, such as skull stripping, Talairach transforms, atlas registration as well as spherical surface maps and parcellations relied on information from this within-subject template, significantly increasing reliability and statistical power <sup>8</sup>.

### Supplementary Figures



**Supplementary Figure 1.** Intra-modal correlations between changes in brain volume, ATS and FAS signals, K<sup>trans</sup>, ADC values, perfusion and CDO<sub>2</sub> between all ROIs.

WM = white matter; NCL = nucleus lentiformis; GCC = genu corporis callosi; SCC = splenium corporis callosi; CSF = cerebrospinal fluid.



**Supplementary Figure 2.** Inter-modal correlations between changes in pO<sub>2</sub> (t<sub>16</sub>), brain volume, ATS and FAS signals, K<sup>trans</sup>, perfusion, and CDO<sub>2</sub> for each ROI. Naming conventions as in Supplementary Figure 1.

## Supplementary Tables

**Supplementary Table 1.** Medication.

ID	Ibuprofen (dose and time point relative to the start of the experiment)	Motillium (dose and time point relative to the start of the experiment)
1	400 mg, 2 h 15 min; 400 mg, 9 h 15 min;	2 ml, 3 h 15 min
2	400 mg, 9 h	
3		
4		
5	400 mg, 4 h 40 min	
6	400 mg, 7 h	
7	400 mg, 5 h 45 min; 400 mg, 10 h 45 min; 400 mg, 14 h	
8	400 mg, 9 h 30 min	
9		
10		
11	400 mg, 8 h 45 min; 400 mg, 9 h 45 min	
12		
13	400 mg, 2 h 30 min; 600 mg, 6 h 15 min	2 ml, 1 h 15 min
14		
15		
16	400 mg, 5 h; 400 mg, 16 h	2 ml, 5 h; 2 ml, 7 h 30 min; 2 ml, 9 h 30 min; 2 ml, 16 h
17		
18		
19	400 mg, 5 h 45 min	
20	400 mg, 8 h	2 ml, 8 h
21		2 ml, 5 h 50 min
22		2 ml, 2 h 20 min
23	400 mg, 2 h 45 min	

**Supplementary Table 2.** Medication effects.

ROI	Measure	Estimates	Statistics
Genu Corporis Callosi	ADC	M1 = -1.27, M2 = -3.35, 95% CI (-3.64, 7.79)	t(19) = 0.76, p = 0.792, d = 0.17
Nucleus Lentiformis	ADC	M1 = 0.22, M2 = 1.01, 95% CI (-2.03, 0.45)	t(13) = -1.38, p = 0.768, d = -0.37
Splenium Corporis Callosi	ADC	M1 = -5.58, M2 = -6.18, 95% CI (-4.14, 5.35)	t(18) = 0.27, p = 0.792, d = 0.06

White Matter	ADC	M1 = 0.07, M2 = -0.35, 95% CI (-1.48, 2.32)	t(16) = 0.47, p = 0.792, d = 0.11
NA	AMS-C (t <sub>16</sub> )	M1 = 1.11, M2 = 1.64, 95% CI (-1.19, 0.14)	t(21) = -1.64, p = 0.116, d = -0.35
Genu Corporis Callosi	ATS	M1 = 2.59, M2 = 3.75, 95% CI (-4.68, 2.38)	t(20) = -0.68, p = 0.672, d = -0.15
Nucleus Lentiformis	ATS	M1 = 5.74, M2 = 7.66, 95% CI (-5.94, 2.1)	t(19) = -1, p = 0.66, d = -0.22
Splenium Corporis Callosi	ATS	M1 = 4.74, M2 = 5.5, 95% CI (-6.03, 4.52)	t(19) = -0.3, p = 0.768, d = -0.07
White Matter	ATS	M1 = 4.03, M2 = 6.09, 95% CI (-4.86, 0.74)	t(20) = -1.53, p = 0.564, d = -0.33
Genu Corporis Callosi	CDO <sub>2</sub>	M1 = 15.81, M2 = -5.24, 95% CI (-8.68, 50.78)	t(18) = 1.49, p = 0.308, d = 0.34
Nucleus Lentiformis	CDO <sub>2</sub>	M1 = -20.73, M2 = -31.4, 95% CI (-3.57, 24.91)	t(19) = 1.57, p = 0.308, d = 0.35
Splenium Corporis Callosi	CDO <sub>2</sub>	M1 = -3.36, M2 = -11.07, 95% CI (-14.64, 30.06)	t(19) = 0.72, p = 0.479, d = 0.16
White Matter	CDO <sub>2</sub>	M1 = -14.25, M2 = -21.27, 95% CI (-4.95, 18.98)	t(20) = 1.22, p = 0.313, d = 0.27
Genu Corporis Callosi	FAS	M1 = -4.54, M2 = -2.93, 95% CI (-13.61, 10.4)	t(20) = -0.28, p = 0.783, d = -0.06
Nucleus Lentiformis	FAS	M1 = -3.79, M2 = -5.74, 95% CI (-1.84, 5.72)	t(15) = 1.1, p = 0.684, d = 0.27
Splenium Corporis Callosi	FAS	M1 = -4.98, M2 = -3.61, 95% CI (-8.91, 6.18)	t(19) = -0.38, p = 0.783, d = -0.08
White Matter	FAS	M1 = -3.75, M2 = -6.35, 95% CI (-2.99, 8.2)	t(19) = 0.97, p = 0.684, d = 0.22
Genu Corporis Callosi	K <sup>trans</sup>	M1 = -19.72, M2 = -15.65, 95% CI (-29.57, 21.44)	t(13) = -0.34, p = 0.736, d = -0.09
Nucleus Lentiformis	K <sup>trans</sup>	M1 = -6.95, M2 = 8.62, 95% CI (-48.92, 17.78)	t(14) = -1, p = 0.445, d = -0.26
Splenium Corporis Callosi	K <sup>trans</sup>	M1 = -4.64, M2 = 27.37, 95% CI (-85.63, 21.62)	t(15) = -1.27, p = 0.445, d = -0.32
White Matter	K <sup>trans</sup>	M1 = 4.67, M2 = 26.74, 95% CI (-57.75, 13.6)	t(15) = -1.32, p = 0.445, d = -0.33
Genu Corporis Callosi	K <sup>trans</sup> (Patlak)	M1 = 13.2, M2 = 60.25, 95% CI (-135.66, 41.57)	t(15) = -1.13, p = 0.994, d = -0.28
Nucleus Lentiformis	K <sup>trans</sup> (Patlak)	M1 = 24.39, M2 = 14.3, 95% CI (-82.53, 102.7)	t(14) = 0.23, p = 0.994, d = 0.06
Splenium Corporis Callosi	K <sup>trans</sup> (Patlak)	M1 = -3.45, M2 = 20.06, 95% CI (-99.06, 52.03)	t(13) = -0.67, p = 0.994, d = -0.18
White Matter	K <sup>trans</sup> (Patlak)	M1 = -11.54, M2 = -11.69, 95% CI (-40.59, 40.9)	t(14) = 0.01, p = 0.994, d = 0
NA	LL-score (t <sub>16</sub> )	M1 = 5.64, M2 = 6.58, 95% CI (-2.74, 0.84)	t(21) = -1.1, p = 0.284, d = -0.23
Genu Corporis Callosi	Perfusion	M1 = 44.33, M2 = 19.61, 95% CI (-9.19, 58.62)	t(17) = 1.54, p = 0.568, d = 0.36
Nucleus Lentiformis	Perfusion	M1 = -2.36, M2 = -0.9, 95% CI (-22.94, 20.01)	t(19) = -0.14, p = 0.888, d = -0.03
Splenium Corporis Callosi	Perfusion	M1 = 19.85, M2 = 28.74, 95% CI (-36.82, 19.03)	t(19) = -0.67, p = 0.684, d = -0.15
White Matter	Perfusion	M1 = 6.04, M2 = 12.94, 95% CI (-23.95, 10.15)	t(20) = -0.84, p = 0.684, d = -0.18
NA	pO <sub>2</sub> (t <sub>16</sub> )	M1 = 36.7, M2 = 33.41, 95% CI (-0.4, 6.99)	t(21) = 1.85, p = 0.078, d = 0.4
Genu Corporis Callosi	Volume	M1 = 1.9, M2 = 2, 95% CI (-2.37, 2.18)	t(21) = -0.09, p = 0.931, d = -0.02
Nucleus Lentiformis	Volume	M1 = 0.3, M2 = 2.07, 95% CI (-3.75, 0.22)	t(21) = -1.85, p = 0.195, d = -0.39
Splenium Corporis Callosi	Volume	M1 = 1.14, M2 = 1.75, 95% CI (-3.93, 2.71)	t(21) = -0.38, p = 0.882, d = -0.08
Ventricles	Volume	M1 = -10.7, M2 = -14.53, 95% CI (-2.52, 10.18)	t(21) = 1.25, p = 0.372, d = 0.27
White Matter	Volume	M1 = 1.23, M2 = 2.54, 95% CI (-2.45, -0.18)	t(21) = -2.42, p = 0.125, d = -0.52

Statistics indicate paired t-tests, *p*-values are two-sided and were corrected according to Benjamini and Hochberg's procedure.

### Supplementary Table 3. Hypoxia effects.

ROI	Measure	Estimates	Statistics
Genu Corporis Callosi	ADC	M = -2.46, 95% CI (-5.24, 0.33)	t(20) = -1.84, p = 0.108, d = -0.4
Nucleus Lentiformis	ADC	M = 0.69, 95% CI (0.07, 1.31)	t(14) = 2.38, p = 0.064, d = 0.61
Splenium Corporis Callosi	ADC	M = -5.91, 95% CI (-8.2, -3.62)	t(19) = -5.4, p = 0, d = -1.21
White Matter	ADC	M = -0.19, 95% CI (-1.09, 0.72)	t(17) = -0.44, p = 0.667, d = -0.1
Genu Corporis Callosi	ATS	M = 3.17, 95% CI (1.43, 4.91)	t(21) = 3.8, p = 0.001, d = 0.81
Nucleus Lentiformis	ATS	M = 6.66, 95% CI (4.66, 8.66)	t(20) = 6.94, p = 0, d = 1.52
Splenium Corporis Callosi	ATS	M = 5.1, 95% CI (2.54, 7.67)	t(20) = 4.15, p = 0, d = 0.91
White Matter	ATS	M = 5.06, 95% CI (3.62, 6.5)	t(21) = 7.31, p = 0, d = 1.56
Genu Corporis Callosi	CDO <sub>2</sub>	M = 5.29, 95% CI (-9.99, 20.56)	t(19) = 0.72, p = 0.478, d = 0.16
Nucleus Lentiformis	CDO <sub>2</sub>	M = -26.83, 95% CI (-34.1, -19.55)	t(20) = -7.69, p = 0, d = -1.68
Splenium Corporis Callosi	CDO <sub>2</sub>	M = -7.4, 95% CI (-18.38, 3.59)	t(20) = -1.4, p = 0.235, d = -0.31
White Matter	CDO <sub>2</sub>	M = -18.08, 95% CI (-24.09, -12.07)	t(21) = -6.26, p = 0, d = -1.33

Genu Corporis Callosi	FAS	M = -3.73, 95% CI (-9.58, 2.12)	t(21) = -1.33, p = 0.199, d = -0.28
Nucleus Lentiformis	FAS	M = -4.82, 95% CI (-6.71, -2.93)	t(16) = -5.42, p = 0, d = -1.31
Splenium Corporis Callosi	FAS	M = -4.33, 95% CI (-8, -0.65)	t(20) = -2.46, p = 0.031, d = -0.54
White Matter	FAS	M = -5.11, 95% CI (-7.89, -2.33)	t(20) = -3.83, p = 0.002, d = -0.84
Genu Corporis Callosi	K <sup>trans</sup>	M = -17.82, 95% CI (-30.05, -5.59)	t(14) = -3.13, p = 0.028, d = -0.81
Nucleus Lentiformis	K <sup>trans</sup>	M = 0.83, 95% CI (-15.74, 17.41)	t(15) = 0.11, p = 0.916, d = 0.03
Splenium Corporis Callosi	K <sup>trans</sup>	M = 12.31, 95% CI (-14.82, 39.44)	t(16) = 0.96, p = 0.468, d = 0.23
White Matter	K <sup>trans</sup>	M = 16.36, 95% CI (-1.76, 34.47)	t(16) = 1.91, p = 0.148, d = 0.46
Genu Corporis Callosi	K <sup>trans</sup> (Patlak)	M = 38.11, 95% CI (-6.27, 82.48)	t(16) = 1.82, p = 0.348, d = 0.44
Nucleus Lentiformis	K <sup>trans</sup> (Patlak)	M = 19.35, 95% CI (-25.2, 63.89)	t(15) = 0.93, p = 0.492, d = 0.23
Splenium Corporis Callosi	K <sup>trans</sup> (Patlak)	M = 7.52, 95% CI (-29.15, 44.2)	t(14) = 0.44, p = 0.667, d = 0.11
White Matter	K <sup>trans</sup> (Patlak)	M = -11.62, 95% CI (-31.18, 7.94)	t(15) = -1.27, p = 0.45, d = -0.32
Genu Corporis Callosi	Perfusion	M = 32.62, 95% CI (15.14, 50.1)	t(18) = 3.92, p = 0.002, d = 0.9
Nucleus Lentiformis	Perfusion	M = -1.52, 95% CI (-11.85, 8.8)	t(20) = -0.31, p = 0.761, d = -0.07
Splenium Corporis Callosi	Perfusion	M = 24.51, 95% CI (10.8, 38.21)	t(20) = 3.73, p = 0.002, d = 0.81
White Matter	Perfusion	M = 9.81, 95% CI (1.4, 18.21)	t(21) = 2.43, p = 0.032, d = 0.52
Genu Corporis Callosi	Volume	M = 1.95, 95% CI (0.84, 3.06)	t(22) = 3.65, p = 0.002, d = 0.76
Nucleus Lentiformis	Volume	M = 1.23, 95% CI (0.18, 2.27)	t(22) = 2.44, p = 0.029, d = 0.51
Splenium Corporis Callosi	Volume	M = 1.46, 95% CI (-0.17, 3.08)	t(22) = 1.86, p = 0.076, d = 0.39
Ventricles	Volume	M = -12.7, 95% CI (-15.9, -9.49)	t(22) = -8.22, p = 0, d = -1.71
White Matter	Volume	M = 1.91, 95% CI (1.29, 2.53)	t(22) = 6.37, p = 0, d = 1.33

Statistics indicate paired t-tests, p-values are two-sided and were corrected according to Benjamini and Hochberg's procedure.

**Supplementary Table 4.** Inter-ROI correlations.

ROI 1	ROI 2	Measure	Statistics
Genu Corporis Callosi	Nucleus Lentiformis	ADC	r = -0.19, 95% CI (-0.64, 0.36), p = 0.502
Genu Corporis Callosi	Splenium Corporis Callosi	ADC	r = 0.43, 95% CI (-0.01, 0.74), p = 0.168
Splenium Corporis Callosi	Nucleus Lentiformis	ADC	r = 0.27, 95% CI (-0.28, 0.69), p = 0.502
White Matter	Genu Corporis Callosi	ADC	r = 0.2, 95% CI (-0.3, 0.61), p = 0.502
White Matter	Nucleus Lentiformis	ADC	r = 0.52, 95% CI (0.01, 0.82), p = 0.168
White Matter	Splenium Corporis Callosi	ADC	r = 0.23, 95% CI (-0.28, 0.64), p = 0.502
Genu Corporis Callosi	Nucleus Lentiformis	ATS	r = 0.56, 95% CI (0.17, 0.8), p = 0.016
Genu Corporis Callosi	Splenium Corporis Callosi	ATS	r = 0.31, 95% CI (-0.14, 0.65), p = 0.177
Splenium Corporis Callosi	Nucleus Lentiformis	ATS	r = 0.6, 95% CI (0.22, 0.82), p = 0.012
White Matter	Genu Corporis Callosi	ATS	r = 0.51, 95% CI (0.12, 0.77), p = 0.017
White Matter	Nucleus Lentiformis	ATS	r = 0.86, 95% CI (0.68, 0.94), p < 0.001
White Matter	Splenium Corporis Callosi	ATS	r = 0.53, 95% CI (0.13, 0.78), p = 0.017
Genu Corporis Callosi	Nucleus Lentiformis	CDO <sub>2</sub>	r = 0.49, 95% CI (0.05, 0.77), p = 0.038
Genu Corporis Callosi	Splenium Corporis Callosi	CDO <sub>2</sub>	r = 0.17, 95% CI (-0.3, 0.57), p = 0.486
Splenium Corporis Callosi	Nucleus Lentiformis	CDO <sub>2</sub>	r = 0.58, 95% CI (0.18, 0.81), p = 0.016
White Matter	Genu Corporis Callosi	CDO <sub>2</sub>	r = 0.49, 95% CI (0.06, 0.77), p = 0.038
White Matter	Nucleus Lentiformis	CDO <sub>2</sub>	r = 0.6, 95% CI (0.22, 0.82), p = 0.012
White Matter	Splenium Corporis Callosi	CDO <sub>2</sub>	r = 0.67, 95% CI (0.34, 0.86), p = 0.006
Genu Corporis Callosi	Nucleus Lentiformis	FAS	r = 0.28, 95% CI (-0.23, 0.67), p = 0.329
Genu Corporis Callosi	Splenium Corporis Callosi	FAS	r = 0.37, 95% CI (-0.07, 0.69), p = 0.19
Splenium Corporis Callosi	Nucleus Lentiformis	FAS	r = 0.13, 95% CI (-0.39, 0.59), p = 0.64
White Matter	Genu Corporis Callosi	FAS	r = 0.4, 95% CI (-0.04, 0.71), p = 0.19
White Matter	Nucleus Lentiformis	FAS	r = 0.38, 95% CI (-0.12, 0.73), p = 0.196
White Matter	Splenium Corporis Callosi	FAS	r = 0.58, 95% CI (0.19, 0.82), p = 0.042

Genu Corporis Callosi	Nucleus Lentiformis	$K^{trans}$	$r = 0.05$ , 95% CI (-0.48, 0.55), $p = 0.864$
Genu Corporis Callosi	Splenium Corporis Callosi	$K^{trans}$	$r = 0.22$ , 95% CI (-0.33, 0.66), $p = 0.521$
Splenium Corporis Callosi	Nucleus Lentiformis	$K^{trans}$	$r = 0.45$ , 95% CI (-0.06, 0.77), $p = 0.16$
White Matter	Genu Corporis Callosi	$K^{trans}$	$r = 0.24$ , 95% CI (-0.31, 0.67), $p = 0.521$
White Matter	Nucleus Lentiformis	$K^{trans}$	$r = 0.88$ , 95% CI (0.69, 0.96), $p < 0.001$
White Matter	Splenium Corporis Callosi	$K^{trans}$	$r = 0.62$ , 95% CI (0.2, 0.85), $p = 0.024$
Genu Corporis Callosi	Nucleus Lentiformis	Perfusion	$r = 0.54$ , 95% CI (0.09, 0.8), $p = 0.033$
Genu Corporis Callosi	Splenium Corporis Callosi	Perfusion	$r = 0.31$ , 95% CI (-0.17, 0.67), $p = 0.197$
Splenium Corporis Callosi	Nucleus Lentiformis	Perfusion	$r = 0.43$ , 95% CI (-0.02, 0.73), $p = 0.073$
White Matter	Genu Corporis Callosi	Perfusion	$r = 0.6$ , 95% CI (0.21, 0.83), $p = 0.012$
White Matter	Nucleus Lentiformis	Perfusion	$r = 0.67$ , 95% CI (0.33, 0.85), $p = 0.006$
White Matter	Splenium Corporis Callosi	Perfusion	$r = 0.6$ , 95% CI (0.22, 0.82), $p = 0.012$
Genu Corporis Callosi	Nucleus Lentiformis	Volume	$r = 0.3$ , 95% CI (-0.12, 0.64), $p = 0.298$
Genu Corporis Callosi	Splenium Corporis Callosi	Volume	$r = 0.09$ , 95% CI (-0.33, 0.48), $p = 0.758$
Genu Corporis Callosi	Ventricles	Volume	$r = -0.3$ , 95% CI (-0.63, 0.13), $p = 0.298$
Nucleus Lentiformis	Ventricles	Volume	$r = -0.6$ , 95% CI (-0.81, -0.25), $p = 0.03$
Splenium Corporis Callosi	Nucleus Lentiformis	Volume	$r = -0.23$ , 95% CI (-0.59, 0.2), $p = 0.416$
Splenium Corporis Callosi	Ventricles	Volume	$r = -0.03$ , 95% CI (-0.44, 0.39), $p = 0.888$
White Matter	Genu Corporis Callosi	Volume	$r = 0.1$ , 95% CI (-0.32, 0.49), $p = 0.758$
White Matter	Nucleus Lentiformis	Volume	$r = 0.31$ , 95% CI (-0.12, 0.64), $p = 0.298$
White Matter	Splenium Corporis Callosi	Volume	$r = 0.29$ , 95% CI (-0.14, 0.63), $p = 0.298$
White Matter	Ventricles	Volume	$r = -0.45$ , 95% CI (-0.73, -0.05), $p = 0.145$

Statistics indicate Pearson correlations, p-values are two-sided and were corrected according to Benjamini and Hochberg's procedure.

**Supplementary Table 5.** Intra-ROI correlations between measures.

ROI	Measure 1	Measure 2	Statistics
Genu Corporis Callosi	ADC	AMS-C ( $t_{16}$ )	$r = -0.28$ , 95% CI (1.29, 2.53), $p = 0.432$
Nucleus Lentiformis	ADC	AMS-C ( $t_{16}$ )	$r = 0.39$ , 95% CI (15.14, 50.1), $p = 0.432$
Splenium Corporis Callosi	ADC	AMS-C ( $t_{16}$ )	$r = -0.01$ , 95% CI (-11.85, 8.8), $p = 0.973$
White Matter	ADC	AMS-C ( $t_{16}$ )	$r = -0.19$ , 95% CI (10.8, 38.21), $p = 0.608$
Genu Corporis Callosi	ADC	ATS	$r = -0.37$ , 95% CI (1.43, 4.91), $p = 0.428$
Nucleus Lentiformis	ADC	ATS	$r = -0.14$ , 95% CI (4.66, 8.66), $p = 0.961$
Splenium Corporis Callosi	ADC	ATS	$r = -0.03$ , 95% CI (2.54, 7.67), $p = 0.961$
White Matter	ADC	ATS	$r = 0.01$ , 95% CI (3.62, 6.5), $p = 0.961$
Genu Corporis Callosi	ADC	CDO <sub>2</sub>	$r = -0.03$ , 95% CI (-9.99, 20.56), $p = 0.982$
Nucleus Lentiformis	ADC	CDO <sub>2</sub>	$r = -0.01$ , 95% CI (-34.1, -19.55), $p = 0.982$
Splenium Corporis Callosi	ADC	CDO <sub>2</sub>	$r = -0.18$ , 95% CI (-18.38, 3.59), $p = 0.982$
White Matter	ADC	CDO <sub>2</sub>	$r = 0.09$ , 95% CI (-24.09, -12.07), $p = 0.982$
Genu Corporis Callosi	ADC	FAS	$r = 0.45$ , 95% CI (-9.58, 2.12), $p = 0.192$
Nucleus Lentiformis	ADC	FAS	$r = -0.05$ , 95% CI (-6.71, -2.93), $p = 0.973$
Splenium Corporis Callosi	ADC	FAS	$r = -0.2$ , 95% CI (-8, -0.65), $p = 0.83$
White Matter	ADC	FAS	$r = 0.01$ , 95% CI (-7.89, -2.33), $p = 0.973$
Genu Corporis Callosi	ADC	$K^{trans}$	$r = 0.64$ , 95% CI (-30.05, -5.59), $p = 0.076$
Nucleus Lentiformis	ADC	$K^{trans}$	$r = 0.62$ , 95% CI (-15.74, 17.41), $p = 0.084$
Splenium Corporis Callosi	ADC	$K^{trans}$	$r = -0.24$ , 95% CI (-14.82, 39.44), $p = 0.531$
White Matter	ADC	$K^{trans}$	$r = -0.02$ , 95% CI (-1.76, 34.47), $p = 0.936$
Genu Corporis Callosi	ADC	LL-score ( $t_{16}$ )	$r = -0.29$ , 95% CI (0.84, 3.06), $p = 0.408$
Nucleus Lentiformis	ADC	LL-score ( $t_{16}$ )	$r = 0.28$ , 95% CI (0.18, 2.27), $p = 0.408$

Splenium Corporis Callosi	ADC	LL-score ( $t_{16}$ )	$r = 0.06$ , 95% CI (-0.17, 3.08), $p = 0.797$
White Matter	ADC	LL-score ( $t_{16}$ )	$r = -0.28$ , 95% CI (-15.9, -9.49), $p = 0.408$
Genu Corporis Callosi	ADC	pO2 ( $t_{16}$ )	$r = 0.22$ , 95% CI (1.4, 18.21), $p = 0.601$
Nucleus Lentiformis	ADC	pO2 ( $t_{16}$ )	$r = -0.54$ , 95% CI (-5.24, 0.33), $p = 0.156$
Splenium Corporis Callosi	ADC	pO2 ( $t_{16}$ )	$r = -0.02$ , 95% CI (0.07, 1.31), $p = 0.938$
White Matter	ADC	pO2 ( $t_{16}$ )	$r = -0.19$ , 95% CI (-8.2, -3.62), $p = 0.601$
NA	AMS-C ( $t_{16}$ )	pO2 ( $t_{16}$ )	$r = -0.54$ , 95% CI (10.8, 38.21), $p = 0.007$
Genu Corporis Callosi	ATS	AMS-C ( $t_{16}$ )	$r = 0.1$ , 95% CI (-24.09, -12.07), $p = 0.838$
Nucleus Lentiformis	ATS	AMS-C ( $t_{16}$ )	$r = -0.09$ , 95% CI (0.84, 3.06), $p = 0.838$
Splenium Corporis Callosi	ATS	AMS-C ( $t_{16}$ )	$r = 0.05$ , 95% CI (0.18, 2.27), $p = 0.838$
White Matter	ATS	AMS-C ( $t_{16}$ )	$r = 0.25$ , 95% CI (-0.17, 3.08), $p = 0.838$
Genu Corporis Callosi	ATS	CDO <sub>2</sub>	$r = -0.28$ , 95% CI (-7.89, -2.33), $p = 0.445$
Nucleus Lentiformis	ATS	CDO <sub>2</sub>	$r = 0.27$ , 95% CI (-30.05, -5.59), $p = 0.445$
Splenium Corporis Callosi	ATS	CDO <sub>2</sub>	$r = 0.23$ , 95% CI (-15.74, 17.41), $p = 0.445$
White Matter	ATS	CDO <sub>2</sub>	$r = -0.06$ , 95% CI (-14.82, 39.44), $p = 0.812$
Genu Corporis Callosi	ATS	FAS	$r = 0.16$ , 95% CI (-1.09, 0.72), $p = 0.63$
Nucleus Lentiformis	ATS	FAS	$r = 0.13$ , 95% CI (1.43, 4.91), $p = 0.63$
Splenium Corporis Callosi	ATS	FAS	$r = -0.18$ , 95% CI (4.66, 8.66), $p = 0.63$
White Matter	ATS	FAS	$r = -0.4$ , 95% CI (2.54, 7.67), $p = 0.284$
Genu Corporis Callosi	ATS	K <sup>trans</sup>	$r = -0.62$ , 95% CI (3.62, 6.5), $p = 0.038$
Nucleus Lentiformis	ATS	K <sup>trans</sup>	$r = 0.5$ , 95% CI (-9.58, 2.12), $p = 0.093$
Splenium Corporis Callosi	ATS	K <sup>trans</sup>	$r = 0.24$ , 95% CI (-6.71, -2.93), $p = 0.391$
White Matter	ATS	K <sup>trans</sup>	$r = 0.7$ , 95% CI (-8, -0.65), $p = 0.012$
Genu Corporis Callosi	ATS	LL-score ( $t_{16}$ )	$r = 0.11$ , 95% CI (-1.76, 34.47), $p = 0.999$
Nucleus Lentiformis	ATS	LL-score ( $t_{16}$ )	$r = -0.16$ , 95% CI (-9.99, 20.56), $p = 0.999$
Splenium Corporis Callosi	ATS	LL-score ( $t_{16}$ )	$r = -0.04$ , 95% CI (-34.1, -19.55), $p = 0.999$
White Matter	ATS	LL-score ( $t_{16}$ )	$r = 0$ , 95% CI (-18.38, 3.59), $p = 0.999$
Genu Corporis Callosi	ATS	pO2 ( $t_{16}$ )	$r = -0.24$ , 95% CI (-15.9, -9.49), $p = 0.38$
Nucleus Lentiformis	ATS	pO2 ( $t_{16}$ )	$r = -0.38$ , 95% CI (1.29, 2.53), $p = 0.182$
Splenium Corporis Callosi	ATS	pO2 ( $t_{16}$ )	$r = -0.12$ , 95% CI (15.14, 50.1), $p = 0.597$
White Matter	ATS	pO2 ( $t_{16}$ )	$r = -0.47$ , 95% CI (-11.85, 8.8), $p = 0.104$
Genu Corporis Callosi	CDO <sub>2</sub>	AMS-C ( $t_{16}$ )	$r = 0.2$ , 95% CI (-6.71, -2.93), $p = 0.399$
Nucleus Lentiformis	CDO <sub>2</sub>	AMS-C ( $t_{16}$ )	$r = -0.29$ , 95% CI (-8, -0.65), $p = 0.272$
Splenium Corporis Callosi	CDO <sub>2</sub>	AMS-C ( $t_{16}$ )	$r = -0.34$ , 95% CI (-7.89, -2.33), $p = 0.256$
White Matter	CDO <sub>2</sub>	AMS-C ( $t_{16}$ )	$r = -0.43$ , 95% CI (-30.05, -5.59), $p = 0.184$
Genu Corporis Callosi	CDO <sub>2</sub>	LL-score ( $t_{16}$ )	$r = 0.09$ , 95% CI (4.66, 8.66), $p = 0.716$
Nucleus Lentiformis	CDO <sub>2</sub>	LL-score ( $t_{16}$ )	$r = -0.41$ , 95% CI (2.54, 7.67), $p = 0.18$
Splenium Corporis Callosi	CDO <sub>2</sub>	LL-score ( $t_{16}$ )	$r = -0.23$ , 95% CI (3.62, 6.5), $p = 0.427$
White Matter	CDO <sub>2</sub>	LL-score ( $t_{16}$ )	$r = -0.37$ , 95% CI (-9.58, 2.12), $p = 0.18$
Genu Corporis Callosi	CDO <sub>2</sub>	pO2 ( $t_{16}$ )	$r = -0.01$ , 95% CI (-15.74, 17.41), $p = 0.95$
Nucleus Lentiformis	CDO <sub>2</sub>	pO2 ( $t_{16}$ )	$r = 0.42$ , 95% CI (-14.82, 39.44), $p = 0.073$
Splenium Corporis Callosi	CDO <sub>2</sub>	pO2 ( $t_{16}$ )	$r = 0.43$ , 95% CI (-1.76, 34.47), $p = 0.073$
White Matter	CDO <sub>2</sub>	pO2 ( $t_{16}$ )	$r = 0.44$ , 95% CI (-9.99, 20.56), $p = 0.073$
Genu Corporis Callosi	FAS	AMS-C ( $t_{16}$ )	$r = -0.17$ , 95% CI (-8, -0.65), $p = 0.885$
Nucleus Lentiformis	FAS	AMS-C ( $t_{16}$ )	$r = -0.11$ , 95% CI (-7.89, -2.33), $p = 0.885$
Splenium Corporis Callosi	FAS	AMS-C ( $t_{16}$ )	$r = 0.03$ , 95% CI (-30.05, -5.59), $p = 0.895$
White Matter	FAS	AMS-C ( $t_{16}$ )	$r = -0.46$ , 95% CI (-15.74, 17.41), $p = 0.148$
Genu Corporis Callosi	FAS	CDO <sub>2</sub>	$r = -0.03$ , 95% CI (-8.2, -3.62), $p = 0.904$
Nucleus Lentiformis	FAS	CDO <sub>2</sub>	$r = -0.08$ , 95% CI (-1.09, 0.72), $p = 0.904$
Splenium Corporis Callosi	FAS	CDO <sub>2</sub>	$r = 0.14$ , 95% CI (1.43, 4.91), $p = 0.904$

White Matter	FAS	CDO <sub>2</sub>	r = 0.22, 95% CI (4.66, 8.66), p = 0.904
Genu Corporis Callosi	FAS	K <sup>trans</sup>	r = 0.16, 95% CI (10.8, 38.21), p = 0.592
Nucleus Lentiformis	FAS	K <sup>trans</sup>	r = 0.31, 95% CI (1.4, 18.21), p = 0.504
Splenium Corporis Callosi	FAS	K <sup>trans</sup>	r = -0.35, 95% CI (-5.24, 0.33), p = 0.504
White Matter	FAS	K <sup>trans</sup>	r = -0.25, 95% CI (0.07, 1.31), p = 0.504
Genu Corporis Callosi	FAS	LL-score (t <sub>16</sub> )	r = -0.25, 95% CI (2.54, 7.67), p = 0.536
Nucleus Lentiformis	FAS	LL-score (t <sub>16</sub> )	r = -0.14, 95% CI (3.62, 6.5), p = 0.807
Splenium Corporis Callosi	FAS	LL-score (t <sub>16</sub> )	r = 0.03, 95% CI (-9.58, 2.12), p = 0.898
White Matter	FAS	LL-score (t <sub>16</sub> )	r = -0.47, 95% CI (-6.71, -2.93), p = 0.132
Genu Corporis Callosi	FAS	pO <sub>2</sub> (t <sub>16</sub> )	r = -0.05, 95% CI (-14.82, 39.44), p = 0.831
Nucleus Lentiformis	FAS	pO <sub>2</sub> (t <sub>16</sub> )	r = 0.14, 95% CI (-1.76, 34.47), p = 0.792
Splenium Corporis Callosi	FAS	pO <sub>2</sub> (t <sub>16</sub> )	r = 0.16, 95% CI (-9.99, 20.56), p = 0.792
White Matter	FAS	pO <sub>2</sub> (t <sub>16</sub> )	r = 0.46, 95% CI (-34.1, -19.55), p = 0.136
Genu Corporis Callosi	K <sup>trans</sup>	AMS-C (t <sub>16</sub> )	r = -0.33, 95% CI (-11.85, 8.8), p = 0.674
Nucleus Lentiformis	K <sup>trans</sup>	AMS-C (t <sub>16</sub> )	r = 0.14, 95% CI (10.8, 38.21), p = 0.793
Splenium Corporis Callosi	K <sup>trans</sup>	AMS-C (t <sub>16</sub> )	r = -0.25, 95% CI (1.4, 18.21), p = 0.674
White Matter	K <sup>trans</sup>	AMS-C (t <sub>16</sub> )	r = -0.04, 95% CI (-5.24, 0.33), p = 0.891
Genu Corporis Callosi	K <sup>trans</sup>	CDO <sub>2</sub>	r = -0.33, 95% CI (-18.38, 3.59), p = 0.499
Nucleus Lentiformis	K <sup>trans</sup>	CDO <sub>2</sub>	r = 0.25, 95% CI (-24.09, -12.07), p = 0.499
Splenium Corporis Callosi	K <sup>trans</sup>	CDO <sub>2</sub>	r = 0.24, 95% CI (0.84, 3.06), p = 0.499
White Matter	K <sup>trans</sup>	CDO <sub>2</sub>	r = 0.17, 95% CI (0.18, 2.27), p = 0.506
Genu Corporis Callosi	K <sup>trans</sup>	LL-score (t <sub>16</sub> )	r = -0.31, 95% CI (-0.17, 3.08), p = 0.53
Nucleus Lentiformis	K <sup>trans</sup>	LL-score (t <sub>16</sub> )	r = 0.01, 95% CI (-15.9, -9.49), p = 0.969
Splenium Corporis Callosi	K <sup>trans</sup>	LL-score (t <sub>16</sub> )	r = -0.32, 95% CI (1.29, 2.53), p = 0.53
White Matter	K <sup>trans</sup>	LL-score (t <sub>16</sub> )	r = -0.21, 95% CI (15.14, 50.1), p = 0.555
Genu Corporis Callosi	K <sup>trans</sup>	pO <sub>2</sub> (t <sub>16</sub> )	r = 0.27, 95% CI (0.07, 1.31), p = 0.565
Nucleus Lentiformis	K <sup>trans</sup>	pO <sub>2</sub> (t <sub>16</sub> )	r = -0.16, 95% CI (-8.2, -3.62), p = 0.565
Splenium Corporis Callosi	K <sup>trans</sup>	pO <sub>2</sub> (t <sub>16</sub> )	r = 0.19, 95% CI (-1.09, 0.72), p = 0.565
White Matter	K <sup>trans</sup>	pO <sub>2</sub> (t <sub>16</sub> )	r = -0.27, 95% CI (1.43, 4.91), p = 0.565
NA	LL-score (t <sub>16</sub> )	AMS-C (t <sub>16</sub> )	r = 0.84, 95% CI (-34.1, -19.55), p = 0
NA	LL-score (t <sub>16</sub> )	pO <sub>2</sub> (t <sub>16</sub> )	r = -0.39, 95% CI (-0.17, 3.08), p = 0.066
Genu Corporis Callosi	Perfusion	ADC	r = 0.08, 95% CI (0.07, 1.31), p = 0.746
Nucleus Lentiformis	Perfusion	ADC	r = 0.43, 95% CI (-8.2, -3.62), p = 0.572
Splenium Corporis Callosi	Perfusion	ADC	r = -0.16, 95% CI (-1.09, 0.72), p = 0.746
White Matter	Perfusion	ADC	r = 0.15, 95% CI (1.43, 4.91), p = 0.746
Genu Corporis Callosi	Perfusion	AMS-C (t <sub>16</sub> )	r = -0.01, 95% CI (15.14, 50.1), p = 0.964
Nucleus Lentiformis	Perfusion	AMS-C (t <sub>16</sub> )	r = 0.19, 95% CI (-11.85, 8.8), p = 0.964
Splenium Corporis Callosi	Perfusion	AMS-C (t <sub>16</sub> )	r = -0.05, 95% CI (10.8, 38.21), p = 0.964
White Matter	Perfusion	AMS-C (t <sub>16</sub> )	r = 0.1, 95% CI (1.4, 18.21), p = 0.964
Genu Corporis Callosi	Perfusion	ATS	r = -0.14, 95% CI (4.66, 8.66), p = 0.59
Nucleus Lentiformis	Perfusion	ATS	r = 0.62, 95% CI (2.54, 7.67), p = 0.012
Splenium Corporis Callosi	Perfusion	ATS	r = 0.3, 95% CI (3.62, 6.5), p = 0.276
White Matter	Perfusion	ATS	r = 0.58, 95% CI (-9.58, 2.12), p = 0.012
Genu Corporis Callosi	Perfusion	CDO <sub>2</sub>	r = 0.91, 95% CI (-34.1, -19.55), p = 0
Nucleus Lentiformis	Perfusion	CDO <sub>2</sub>	r = 0.7, 95% CI (-18.38, 3.59), p = 0
Splenium Corporis Callosi	Perfusion	CDO <sub>2</sub>	r = 0.84, 95% CI (-24.09, -12.07), p = 0
White Matter	Perfusion	CDO <sub>2</sub>	r = 0.57, 95% CI (0.84, 3.06), p = 0.006
Genu Corporis Callosi	Perfusion	FAS	r = 0, 95% CI (-6.71, -2.93), p = 0.995
Nucleus Lentiformis	Perfusion	FAS	r = -0.04, 95% CI (-8, -0.65), p = 0.995
Splenium Corporis Callosi	Perfusion	FAS	r = 0.08, 95% CI (-7.89, -2.33), p = 0.995

White Matter	Perfusion	FAS	$r = -0.36, 95\% \text{ CI } (-30.05, -5.59), p = 0.456$
Genu Corporis Callosi	Perfusion	$K^{\text{trans}}$	$r = -0.22, 95\% \text{ CI } (-15.74, 17.41), p = 0.499$
Nucleus Lentiformis	Perfusion	$K^{\text{trans}}$	$r = 0.56, 95\% \text{ CI } (-14.82, 39.44), p = 0.056$
Splenium Corporis Callosi	Perfusion	$K^{\text{trans}}$	$r = 0.3, 95\% \text{ CI } (-1.76, 34.47), p = 0.348$
White Matter	Perfusion	$K^{\text{trans}}$	$r = 0.64, 95\% \text{ CI } (-9.99, 20.56), p = 0.024$
Genu Corporis Callosi	Perfusion	LL-score ( $t_{16}$ )	$r = 0.03, 95\% \text{ CI } (0.18, 2.27), p = 0.97$
Nucleus Lentiformis	Perfusion	LL-score ( $t_{16}$ )	$r = -0.04, 95\% \text{ CI } (-0.17, 3.08), p = 0.97$
Splenium Corporis Callosi	Perfusion	LL-score ( $t_{16}$ )	$r = -0.01, 95\% \text{ CI } (-15.9, -9.49), p = 0.97$
White Matter	Perfusion	LL-score ( $t_{16}$ )	$r = 0.02, 95\% \text{ CI } (1.29, 2.53), p = 0.97$
Genu Corporis Callosi	Perfusion	pO2 ( $t_{16}$ )	$r = 0.07, 95\% \text{ CI } (-5.24, 0.33), p = 0.779$
Nucleus Lentiformis	Perfusion	pO2 ( $t_{16}$ )	$r = -0.28, 95\% \text{ CI } (0.07, 1.31), p = 0.444$
Splenium Corporis Callosi	Perfusion	pO2 ( $t_{16}$ )	$r = -0.08, 95\% \text{ CI } (-8.2, -3.62), p = 0.779$
White Matter	Perfusion	pO2 ( $t_{16}$ )	$r = -0.39, 95\% \text{ CI } (-1.09, 0.72), p = 0.284$
Genu Corporis Callosi	Volume	ADC	$r = -0.39, 95\% \text{ CI } (1.29, 2.53), p = 0.226$
Nucleus Lentiformis	Volume	ADC	$r = 0.43, 95\% \text{ CI } (15.14, 50.1), p = 0.226$
Splenium Corporis Callosi	Volume	ADC	$r = -0.17, 95\% \text{ CI } (-11.85, 8.8), p = 0.637$
White Matter	Volume	ADC	$r = 0.07, 95\% \text{ CI } (10.8, 38.21), p = 0.793$
Genu Corporis Callosi	Volume	AMS-C ( $t_{16}$ )	$r = 0.42, 95\% \text{ CI } (0.84, 3.06), p = 0.22$
Nucleus Lentiformis	Volume	AMS-C ( $t_{16}$ )	$r = 0.19, 95\% \text{ CI } (0.18, 2.27), p = 0.599$
Splenium Corporis Callosi	Volume	AMS-C ( $t_{16}$ )	$r = 0.13, 95\% \text{ CI } (-0.17, 3.08), p = 0.599$
Ventricles	Volume	AMS-C ( $t_{16}$ )	$r = -0.25, 95\% \text{ CI } (-15.9, -9.49), p = 0.599$
White Matter	Volume	AMS-C ( $t_{16}$ )	$r = 0.12, 95\% \text{ CI } (1.29, 2.53), p = 0.599$
Genu Corporis Callosi	Volume	ATS	$r = 0.22, 95\% \text{ CI } (1.4, 18.21), p = 0.335$
Nucleus Lentiformis	Volume	ATS	$r = 0.59, 95\% \text{ CI } (-5.24, 0.33), p = 0.02$
Splenium Corporis Callosi	Volume	ATS	$r = -0.48, 95\% \text{ CI } (0.07, 1.31), p = 0.054$
White Matter	Volume	ATS	$r = 0.37, 95\% \text{ CI } (-8.2, -3.62), p = 0.119$
Genu Corporis Callosi	Volume	CDO <sub>2</sub>	$r = 0.23, 95\% \text{ CI } (-7.89, -2.33), p = 0.74$
Nucleus Lentiformis	Volume	CDO <sub>2</sub>	$r = -0.07, 95\% \text{ CI } (-30.05, -5.59), p = 0.75$
Splenium Corporis Callosi	Volume	CDO <sub>2</sub>	$r = -0.14, 95\% \text{ CI } (-15.74, 17.41), p = 0.74$
White Matter	Volume	CDO <sub>2</sub>	$r = 0.17, 95\% \text{ CI } (-14.82, 39.44), p = 0.74$
Genu Corporis Callosi	Volume	FAS	$r = -0.1, 95\% \text{ CI } (-1.09, 0.72), p = 0.912$
Nucleus Lentiformis	Volume	FAS	$r = 0, 95\% \text{ CI } (1.43, 4.91), p = 0.996$
Splenium Corporis Callosi	Volume	FAS	$r = -0.17, 95\% \text{ CI } (4.66, 8.66), p = 0.912$
White Matter	Volume	FAS	$r = -0.09, 95\% \text{ CI } (2.54, 7.67), p = 0.912$
Genu Corporis Callosi	Volume	$K^{\text{trans}}$	$r = -0.17, 95\% \text{ CI } (3.62, 6.5), p = 0.575$
Nucleus Lentiformis	Volume	$K^{\text{trans}}$	$r = 0.52, 95\% \text{ CI } (-9.58, 2.12), p = 0.152$
Splenium Corporis Callosi	Volume	$K^{\text{trans}}$	$r = 0.15, 95\% \text{ CI } (-6.71, -2.93), p = 0.575$
White Matter	Volume	$K^{\text{trans}}$	$r = 0.33, 95\% \text{ CI } (-8, -0.65), p = 0.386$
Genu Corporis Callosi	Volume	LL-score ( $t_{16}$ )	$r = 0.52, 95\% \text{ CI } (-1.76, 34.47), p = 0.055$
Nucleus Lentiformis	Volume	LL-score ( $t_{16}$ )	$r = -0.06, 95\% \text{ CI } (-9.99, 20.56), p = 0.985$
Splenium Corporis Callosi	Volume	LL-score ( $t_{16}$ )	$r = 0.23, 95\% \text{ CI } (-34.1, -19.55), p = 0.72$
Ventricles	Volume	LL-score ( $t_{16}$ )	$r = 0, 95\% \text{ CI } (-18.38, 3.59), p = 0.989$
White Matter	Volume	LL-score ( $t_{16}$ )	$r = -0.14, 95\% \text{ CI } (-24.09, -12.07), p = 0.853$
Genu Corporis Callosi	Volume	Perfusion	$r = 0.25, 95\% \text{ CI } (0.84, 3.06), p = 0.412$
Nucleus Lentiformis	Volume	Perfusion	$r = 0.35, 95\% \text{ CI } (0.18, 2.27), p = 0.23$
Splenium Corporis Callosi	Volume	Perfusion	$r = -0.06, 95\% \text{ CI } (-0.17, 3.08), p = 0.781$
White Matter	Volume	Perfusion	$r = 0.45, 95\% \text{ CI } (-15.9, -9.49), p = 0.148$
Genu Corporis Callosi	Volume	pO2 ( $t_{16}$ )	$r = -0.51, 95\% \text{ CI } (15.14, 50.1), p = 0.02$
Nucleus Lentiformis	Volume	pO2 ( $t_{16}$ )	$r = -0.56, 95\% \text{ CI } (-11.85, 8.8), p = 0.015$
Splenium Corporis Callosi	Volume	pO2 ( $t_{16}$ )	$r = -0.14, 95\% \text{ CI } (10.8, 38.21), p = 0.536$



Ventricles	Volume	pO2 (t <sub>16</sub> )	r = 0.57, 95% CI (1.4, 18.21), p = 0.015
White Matter	Volume	pO2 (t <sub>16</sub> )	r = -0.2, 95% CI (-5.24, 0.33), p = 0.439

Statistics indicate Pearson correlations, p-values are two-sided and were corrected according to Benjamini and Hochberg's procedure.

**Supplementary Table 6.** MR Sequence details.

	Morpho- metry	Sodium mapping		Transfer constant $K^{trans}$	Diffusion imaging	Perfusion imaging
		ATS	FAS			
Spatial resolution	1,0 x 1,0 x 1,0 mm <sup>3</sup>	4,5 x 4,5 x 4,5 mm <sup>3*</sup>	5,5 x 5,5 x 5,5 mm <sup>3*</sup>	0,9 x 0,9 x 5,0 mm <sup>3</sup>	1,6 x 1,6 x 3,0 mm <sup>3</sup>	3,6 x 3,6 x 3,6 mm <sup>3</sup>
Repetition time (TR)	1570 ms	160 ms	124 ms	5,28 ms	5100 ms	2500 ms
Echo time (TE)	2,63 ms	0,3 ms	0,3 ms	2,45 ms	72,8 ms	9,9 ms
Inversion time (TI <sub>1</sub> )	900 ms		0,34 ms			700 ms
Inversion time (TI <sub>2</sub> )						1800 ms
Acquisition time (TA)	4 min 8 s	10 min 40s	8 min 16 s	8 min 0 s	1 min 22 s	2 min 47 s
Projections		4000	4000			
Readout time (T <sub>RO</sub> )		20 ms	10 ms			
Temporal resolution				11,8 s		
B-values					0 s/mm <sup>2</sup> 1000 s/mm <sup>2</sup>	
Diffusion directions					12	
Tagged-control pairs						30

\* nominal spatial resolution

## Supplementary References

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