Supplementary

Table S1 Attenuation of grey and white matter structures, GWRs in patients with and without ECPR

Brain structure	Patients with ECPR (n=31)	Patients without ECPR (n=14)	P (with *vs.* without ECPR)	Selected threshold		Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	AUC	P
				Lower	Upper						
Panel A: attenuation (HU)											
Caudate	36.3±5.6	37.6±3.6	0.44	33	40	30	67	71	26	0.62	0.22
Putamen	36.8±4.6	37.9±2.9	0.45	33	39	36	58	71	25	0.57	0.44
Thalamus	35.5 (4.0)	37.0 (4.4)	0.18	33	40	18	79	67	29	0.52	0.80
Medial cortex	32.8 (4.5)	34.6 (4.6)	0.29	30	39	15	79	63	28	0.50	0.98
CS	28.3±2.7	31.0±2.8	0.003*	27	33	36	86	86	36	0.63	0.16
Panel B: attenuation ratio (GWR)											
Caudate: CS	1.28±0.19	1.22±0.08	0.22	1.18	1.30	64	57	78	40	0.64	0.13
Putamen: CS	1.32 (0.11)	1.22 (0.11)	0.090	1.20	1.33	52	71	81	38	0.66	0.082
Thalamus: CS	1.30 (0.15)	1.22 (0.11)	0.024*	1.21	1.40	39	57	68	29	0.53	0.78
Medial cortex: CS	1.16 (0.09)	1.13 (0.10)	0.021*	1.10	1.20	39	64	72	31	0.53	0.78

Lower and upper thresholds are obtained from *Table 3*. Data are expressed as mean ± standard deviation or median (IQR). In this table, IQRs are expressed Q75 minus Q25. *, significant P values. GWR, grey-to-white matter attenuation ratio; ECPR, extracorporeal cardiopulmonary resuscitation; PPV, positive predictive value; NPV, negative predictive value; AUC, area under the ROC curve; ROC, receiver operator characteristic; HU, Hounsfield unit; CS, centrum semiovale; IQR, interquartile range; Q25, 25th percentile; Q75, 75th percentile.

Table S2 Correlation (rho) between attenuation in brain structures (and GWRs) with mean attenuation in the superior and inferior sagittal sinus (residual contrast material opacification)

Brain structure	Correlation	
	Rho	P value
Attenuation (HU)		
Caudate	0.22	0.14
Putamen	0.32	0.033*
Thalamus	0.38	0.011*
Medial cortex	0.24	0.12
CS	0.26	0.087
Attenuation ratio (GWR)		
Caudate: CS	0.036	0.82
Putamen: CS	–0.029	0.85
Thalamus: CS	0.150	0.32
Medial cortex: CS	0.055	0.72

*, significant P values. GWR, grey-to-white matter attenuation ratio; HU, Hounsfield unit; CS, centrum semiovale.

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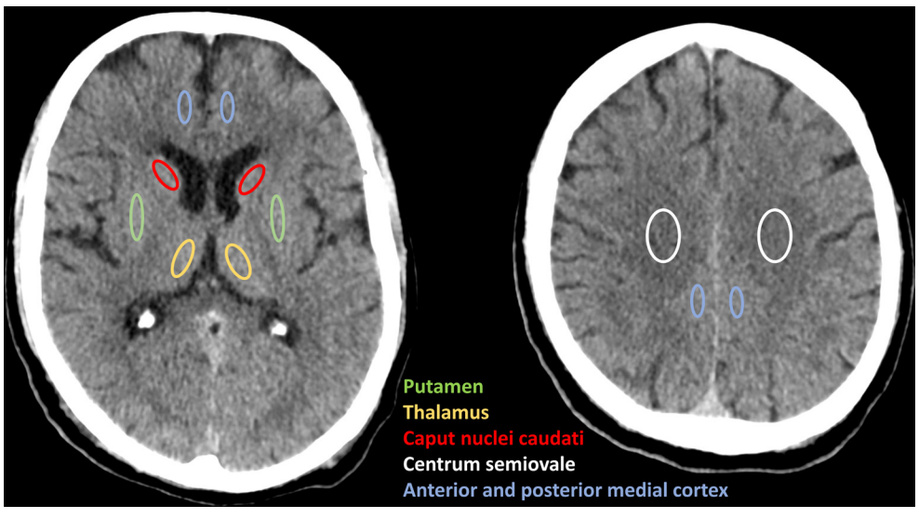

Figure S1 Measurement of attenuation of grey and white matter on axial 5 mm CT scan at the level of basal ganglia and centrum semiovale. CT, computed tomography.

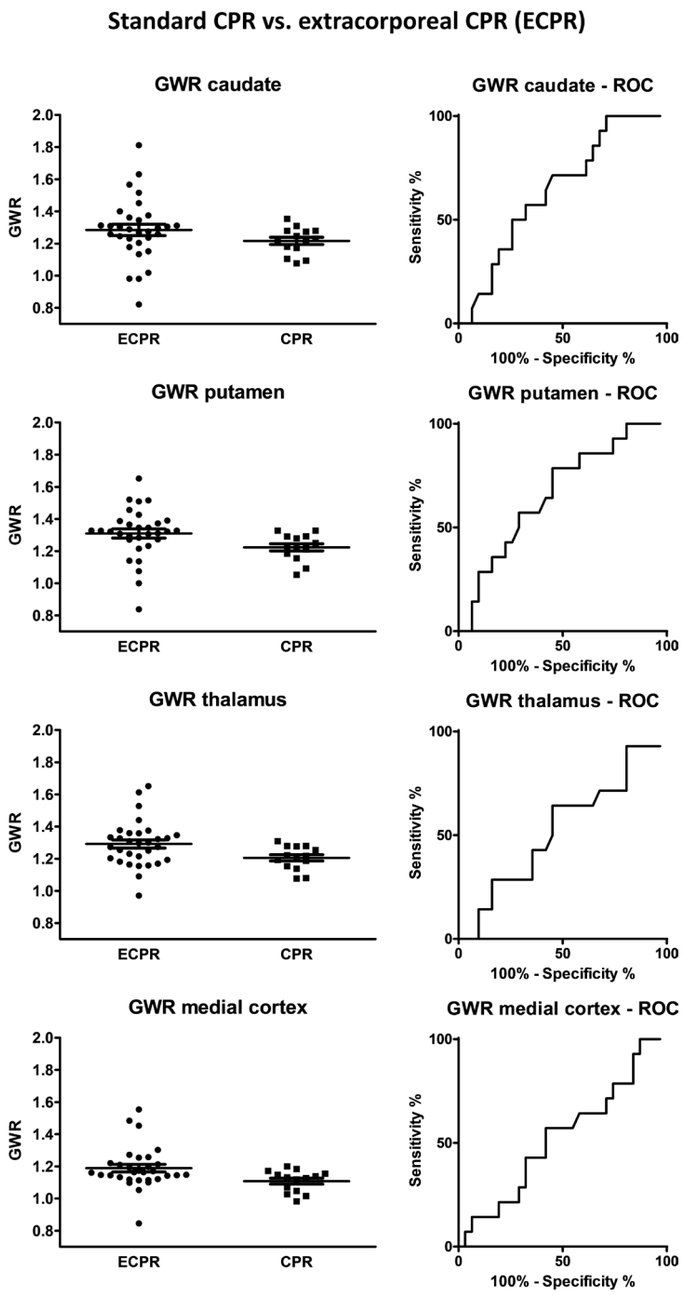

Figure S2 Comparison of GWRs in deep grey matter structures (caudate, putamen, thalamus) and cerebral cortex in a dot plot (left column) between patients treated with standard CPR and ECPR in a dot plot (left column). Corresponding ROC curves are shown in the right column. CPR, cardiopulmonary resuscitation; ECPR, extracorporeal cardiopulmonary resuscitation; GWR, grey-to-white matter attenuation ratio; ROC, receiver operator characteristic.

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