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Table S1. Mean (SD) SUV, SUVR for patients with rCI and rNC.

	Cerebellum	Temporal lobe		Striatum		Hippocampus		Subcortex		Cortex	
	SUV	SUV	SUVR	SUV	SUVR	SUV	SUVR	SUV	SUVR	SUV	SUVR
rCI	1.10 (0.39)	1.01 (0.27)	0.94 (0.07)	0.99 (0.31)	0.91 (0.05)	0.95 (0.25)	0.93 (0.11)	1.01 (0.32)	0.98 (0.10)	1.05 (0.29)	0.97 (0.07)
rNC	1.02 (0.26)	0.98 (0.22)	0.97 (0.07)	0.91 (0.29)	0.90 (0.07)	0.98 (0.18)	1.00 (0.07)	0.97 (0.20)	0.99 (0.07)	0.99 (0.26)	0.97 (0.06)

Table S2. SUV (g/ml) values calculated in the interval 60 to 90 min.

Patient	Whole Brain	Frontal Lobe	Occipital Lobe	Temporal Lobe	Parietal Lobe	Striatum	Thalamus	Hippocampus	Amygdala	Cerebellum	Subcortex	Cortex
001	0.83	0.83	0.89	0.85	0.85	0.77	0.78	0.72	0.86	0.87	0.75	0.85
002	0.83	0.87	0.84	0.78	0.84	0.80	0.94	0.78	0.80	0.81	0.86	0.84
003	1.01	1.04	0.99	1.03	0.97	0.96	1.08	1.05	1.07	1.05	0.97	1.02
004	1.48	1.47	1.53	1.39	1.47	1.43	1.61	1.25	1.26	1.67	1.48	1.47
Mean	**1.04**	**1.05**	**1.06**	**1.01**	**1.03**	**0.99**	**1.10**	**0.95**	**1.00**	**1.10**	**1.01**	**1.05**
SD	**0.31**	**0.29**	**0.32**	**0.27**	**0.30**	**0.31**	**0.36**	**0.25**	**0.21**	**0.39**	**0.32**	**0.29**
101	0.99	0.95	0.99	0.96	0.90	0.92	1.21	1.09	1.07	1.10	1.06	0.96
102	1.02	1.02	1.03	1.01	0.99	0.92	1.07	1.01	1.01	1.06	0.94	1.02
103	0.77	0.78	0.74	0.78	0.73	0.75	0.89	0.81	0.77	0.77	0.80	0.77
104	1.38	1.44	1.43	1.33	1.43	1.21	1.37	1.21	1.21	1.40	1.26	1.42
105	0.77	0.77	0.80	0.80	0.71	0.75	0.84	0.78	0.82	0.76	0.77	0.78
Mean	**0.99**	**0.99**	**1.00**	**0.98**	**0.95**	**0.91**	**1.07**	**0.98**	**0.97**	**1.02**	**0.97**	**0.99**
SD	**0.25**	**0.27**	**0.27**	**0.22**	**0.29**	**0.19**	**0.22**	**0.18**	**0.18**	**0.26**	**0.20**	**0.26**

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Table S3. SUVR values for each patient calculated between 60 to 90 min. Reference region is the cerebellum (grey matter-masked).

Patient	Whole Brain	Frontal Lobe	Occipital Lobe	Temporal Lobe	Parietal Lobe	Striatum	Thalamus	Hippocampus	Amygdala	Cerebellum	Subcortex	Cortex
001	0.96	0.95	1.02	0.98	0.98	0.88	0.90	0.84	1.00	1	0.88	0.98
002	1.03	1.07	1.04	0.96	1.03	0.98	1.21	1.01	1.03	1	1.11	1.04
003	0.97	0.99	0.94	0.98	0.92	0.91	1.06	1.04	1.05	1	0.95	0.97
004	0.89	0.88	0.92	0.83	0.88	0.86	1.08	0.84	0.85	1	0.99	0.88
Mean	**0.96**	**0.97**	**0.98**	**0.94**	**0.95**	**0.91**	**1.06**	**0.93**	**0.98**	**1.00**	**0.98**	**0.97**
SD	**0.06**	**0.08**	**0.06**	**0.07**	**0.06**	**0.05**	**0.12**	**0.11**	**0.09**	**0.00**	**0.10**	**0.07**
101	0.90	0.86	0.90	0.87	0.81	0.83	1.14	1.02	1.00	1	1.00	0.87
102	0.96	0.96	0.97	0.95	0.93	0.87	1.03	0.98	0.97	1	0.91	0.96
103	1.00	1.02	0.95	1.01	0.94	0.97	1.18	1.08	1.03	1	1.06	1.00
104	0.99	1.03	1.02	0.95	1.02	0.87	1.01	0.89	0.89	1	0.93	1.01
105	1.01	1.00	1.05	1.04	0.93	0.98	1.12	1.05	1.10	1	1.03	1.02
Mean	**0.97**	**0.97**	**0.98**	**0.97**	**0.93**	**0.90**	**1.09**	**1.00**	**1.00**	**1.00**	**0.99**	**0.97**
SD	**0.05**	**0.07**	**0.06**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.08**	**0.00**	**0.07**	**0.06**

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Table S4. SUV, SUVR and V_T values for the 2 patients with blood measurement and without MRI. V_T calculated with reversible two tissue compartmental model, with blood contribution fixed to 5%.

Patient	SUV					SUVR					V_T			
	Brain	Cerebellum	Subcortex	Cortex		Brain	Cerebellum	Subcortex	Cortex		Brain	Cerebellum	Subcortex	Cortex
106	0.66	0.72	0.75	0.67		0.92	1	1.04	0.93		4.07	4.28	4.89	4.09
107	0.79	0.84	0.81	0.82		0.94	1	0.96	0.98		3.91	4.10	4.00	4.04
Mean	**0.72**	**0.78**	**0.78**	**0.74**		**0.93**	**1.00**	**1.00**	**0.96**		**3.99**	**4.19**	**4.45**	**4.07**
SD	**0.09**	**0.09**	**0.04**	**0.11**		**0.02**	**0.00**	**0.05**	**0.03**		**0.12**	**0.13**	**0.63**	**0.03**

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Table S5. Pearson's correlation coefficient and corresponding p-value of the SUVR values in relevant brain regions versus the activation maps derived with the CRT, memory and Tower of London tasks. Single asterisks mark significant correlation (p <0.05).

	CRT whole map
Pearson's r	0.321
p-value	0.400
Pearson's r	0.220
p-value	0.569
Pearson's r	0.503
p-value	0.167
Pearson's r	-0.178
p-value	0.646
Pearson's r	-0.113
p-value	0.772
Pearson's r	NaN
p-value	NaN
Pearson's r	0.297
p-value	0.438
Pearson's r	0.531
p-value	0.141
Pearson's r	0.405
p-value	0.279
Pearson's r	0.718*
p-value	0.029
Pearson's r	0.792*
p-value	0.011

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Figure S1. Activation maps from fMRI analysis for the choice reaction time (CRT) task. Mixed-effects (FLAME-1) analysis, and statistical thresholds were set at Z >2.3, p <0.05 (cluster-corrected for multiple comparisons). The results show motor-related activity in the cerebellum and primary motor cortex, and a set of attention-related regions such as the primary visual cortex, the frontal eye-fields, and parietal regions.