Supplementary Table 1. Increased/decreased functional connectivity of resting state networks in patients and controls.

Anatomical Locations	Hemisphere	BA	Cluster voxels	MNI (x,y,z)	T value
Default Mode Network (DMN)					
Pre vs. NC					
Anterior cingulate cortex	L	10,11,24,25,32	120	-15,39,-3	-2.65
	R	10,24,32	69	6,36,0	-5.12
Superior frontal gyrus	L	8,9,10,11	46	-27,48,39	-3.79
Posterior cingulate cortex	L/R	23,26,29,30	288	-6,-42,33/3,-39,30	-4.41/-4.04
Inferior frontal gyrus, triangular	R	44,45,48	85	45, 36,9	-4.62
1m vs. NC					
Medial Frontal gyrus	L		30	-15,51,3	-3.96
6m vs. NC					
Posterior cingulated gyrus	L	23,26,29,30	47	-6,-42,36	-4.03
Inferior Frontal gyrus, triangular	R	45,46,47,48	38	54,27,3	-2.77
1m vs. Pre					
Medial frontal gyrus	L/R	8,9,10,11,32	50	-9,57,9/12,60,15	+2.99/+3.14
Superior Frontal Gyrus,medial	R	8,9,10,11,32	117	9,54,33	+3.28
Posterior cingulate cortex	L/R	23,26,29,30	118	0,-48,33/3,-42,36	+4.74/+4.77
6m vs. Pre					
Superior frontal gyrus	R	9,10,11,32	127	9,30,57	+5.20
Posterior cingulate	L/R	23,26,29,30	51	-6,-42,24/6,-48,24	+4.23/+2.97
6m vs. 1m					
Medial superior frontal gyrus	L	9,10,11	62	-12,39,30	+3.89
Dorsal Attention Network (DAN)					
Pre vs. NC					

Precentral gyrus	L	4,6,9	59	-48,-12,42	+4.81
Inferior frontal gyrus, triangular	L	44,45,48	111	-42,39,9	-4.35
Middle frontal gyrus	R	44,45	88	27,0,57	-4.46
Inferior parietal gyrus	L	7	142	-42,39,54	-4.16
	R	7	100	45,-42,54	-3.24
Middle temporal gyrus	L	20,21,37	77	-51,-60,-6	-4.02
Postcentral gyrus	R	43,48	61	45,-33,54	-3.69
Inferior frontal gyrus, opercular	R	44,48	74	48,12,24	-2.80
Inferior temporal gyrus	R	20,21,37	41	51,-51,-15	-2.75
Inferior temporal gyrus	L	20,21,37	60	-45,-63,-6	-3.56
Middle occipital gyrus	L	7,19	116	-24,-75,39	-4.59
	R	7,19	51	27,-75,36	-3.27
1m vs. NC					
Middle frontal gyrus	L	9,44,45	64	-39,3,54	-4.23
Inferior temporal gyrus	R	20,21,37	64	48,-63,-6	-3.12
6m vs. NC					
None					
1m vs. Pre					
Middle frontal gyrus	L	9,44,45	48	-45,36,24	+3.12
Inferior frontal gyrus, triangular	L	44,45,48	53	-45,39,3	+2.54
Superior parietal gyrus	L	7,40	112	-18,-54,60	+2.45
Inferior parietal gyrus	L	7	174	-42,-39,42	+3.96
Inferior frontal gyrus, opercular	R	44,48	43	51,9,21	+3.30
	L	44,48	63	-45,6,24	+3.82
Middle temporal gyrus	L	20,21,37	54	-51,-60,6	+2.99
Inferior temporal gyrus	L	20,21,37	63	-51,-63,-12	+3.67
Middle frontal gyrus	R	10,44,45,46,47	43	24,-6,54	+2.93
6m vs. Pre					

Middle frontal gyrus	R	44,45	46	33,-3,54	+3.86
Inferior parietal gyrus	L	7	99	-39,-42,60	+4.15
	R	7	113	39,-39,54	+3.16
Superior parietal lobule	L	7,40	83	-30,-60,60	+3.52
Postcentral gyrus	L	43,48	46	-36,-39,60	+3.31
	R	43,48	108	45,-33,54	+4.36
Middle occipital gyrus	L	7,19	84	-36,-81,27	+2.99
Inferior frontal gyrus, opercular	R	44,48	73	48,6,24	+3.45
6m vs. 1m					
None					
Central-Executive Network (CEN)					
Pre vs. NC					
Inferior frontal gyrus, opercular	R	38,44,45,47,48	51	48,9,21	+3.09
Inferior parietal gyrus	L	40,48	99	-51,-42,51	-4.20
Middle temporal gyrus	R	22,37	247	54,-48,3	-3.43
	L	22,37	50	-36,-66,12	-3.79
Superior temporal gyrus	R	21,22,39	265	51,-51,15	-5.72
Supramarginalgryus	R	22,40,42	97	60,-45,30	-4.61
Inferior parietal lobule	R	39,40	73	57,-42,27	-3.82
1m vs. NC					
Middle temporal gyrus	L	22,37	59	-54,-57,-3	-3.63
Inferior parietal gyrus	L	40,48	52	-42,-42,45	-4.07
Inferior frontal gyrus	R	44,45,48	50	36,24,-6	-2.77
Superior temporal gyrus	R	21,22,39	115	51,-48,12	-4.20
Middle temporal gyrus	R	22,37	95	57,-45,6	-2.75
6m vs. NC					
None					
1m vs. Pre					

Supramarginalgryus	R	22,40,42	111	57,-48,33	+2.57
Inferior Parietal Lobule	R	39,40	82	72,-21,18	+4.14
Superior temporal gyrus	R	21,22,39	50	63,-39,18	+2.88
Middle temporal gyrus	R	22,37	98	42,-57,6	+3.58
6m vs. Pre					
Supramarginalgyrus	L	22,40,43	112	-57,-45,30	+4.32
	R	22,40,42	225	57,-57,33	+2.82
Inferior parietal lobule	L	40,48	65	-57,-33,33	+3.49
	R	39,40	203	60,-42,21	+4.62
Middle temporal gyrus	R	22,37	198	51,-69,24	+4.32
Superior temporal gyrus	R	21,22,39	196	54,-57,18	+6.01
6m vs. 1m					
Supramarginalgyrus	L	22,40,43	56	-63,-24,39	+3.05
Postcentral gyrus	L	2,3,22,40	48	-63,-27,36	+3.92
Sensory-Motor Network (SMN)					
Pre vs. NC					
Postcentral gyrus	L	1,2,3,4,22	424	-57,-9,15	-6.45
	R	1,2,3,4,22	172	60,-9,18	-5.14
Precentral gyrus	L	3,4,6,43	503	-51,-12,42	-5.72
	R	3,4,6,43,48	324	57,-3,30	-4.73
1m vs. NC					
Precentral gyrus	L	3,4,6,43	321	-51,-6,21	-4.59
	R	3,4,6,43,48	138	57,0,12	-3.15
Postcentral gyrus	L	1,2,3,4,22	326	-51,-12,15	-3.54
6m vs. NC					
Supramarginal gyrus	R	1,2,3,42,43	95	50,-30,36	+3.08
Precentral gyrus	L	3,4,6,43	63	-51,-6,18	-3.48
1m vs. Pre					
Postcentral gyrus	R	3,4,6,43,48	89	57,-9,21	+4.02
Precentral gyrus	R	3,4,6,43	86	63,-6,30	+3.22

6m vs. Pre					
Supplementary motor area	L	6	48	0,12,60	+3.47
Postcentral gyrus	R	3,4,6,43,48	195	57,-9,21	+4.92
	L	3,4,6,43,48	91	-54,-9,21	+2.63
Precentral gyrus	R	3,4,6,43,48	287	57,-9,36	+4.02
	L	3,4,6,43	122	-48,-9,36	+3.60
6m vs. 1m					
None					
Self-Referential Network (SRN)					
Pre vs. NC					
None					
1m vs. NC					
None					
6m vs. NC					
None					
1m vs. Pre					
None					
6m vs. Pre					
None					
6m vs. 1m					
None					
Auditory Network (AN)					
Pre vs. NC					
Superior temporal gyrus	L	21,22,41,42,48	298	-60,-24,12	-4.08
	R	21,22,41,42,48	170	51,9,-15	-3.32
Rolandic operculum	R	22,41,42,48	128	57,-18, 9	-5.28
	L	22,41,48	79	-57,-21,12	-4.47
Supramarginalgryus	L	22,42,48	43	-63,-33,12	-3.07
Middle temporal gyrus	R	21,22	42	42,-54,6	+3.19
1m vs. NC					

Superior temporal gyrus	L	21,22,41,42,48	68	-54,-12,6	-3.86
6m vs. NC					
None					
1m vs. Pre					
Rolandic operculum	R	22,41,42,48	118	57,6,0	+3.21
	L	22,41,48	63	-57,-21,12	+3.08
Superior Temporal Gyrus	R	21,22,41,42,48	74	60,3,3	+3.60
	L	21,22,41,42,48	77	-60,-27,12	+2.89
Insula	L	22,42,48	125	-39,-6,3	+4.16
6m vs. Pre					
Superior temporal gyrus	L	21,22,41,42,48	96	-54,-39,9	+4.30
	R	21,22,41,42,48	250	69,-9,6	+4.57
Rolandic operculum	R	22,41,42,48	133	51,-12,6	+6.42
6m vs. 1m					
Superior temporal gyrus	R	21,22,41,42,48	117	63,-15,3	+3.93
Rolandic operculum	R	22,41,42,48	68	51,-9,3	+3.69
Visual Network (VN)					
Pre vs. NC					
Calcarine fissure	R	17,18,19	199	15,-54,-0	-3.64
	L	17,18,19	84	-12,-54,-3	-3.24
Cuneus	L	17,18,19	46	-12,-84,6	-3.89
	R	17,18,19	45	15,-69,6	-3.12
1m vs. NC					
Calcarine fissure	R	17,18,19	79	27,-66,-3	-3.82
Superior occipital gyrus	R	17,18,19	45	21,-90,21	+3.69
6m vs. NC					
None					
1m vs. Pre					
Calcarine fissure	L	17,18,19	64	-12,-54,0	+3.93
	R	17,18,19	68	15,-54,0	+3.78
6m vs. Pre					

Calcarine fissure	R	17,18,19	142	12,-72,18	+2.84
Lingual gyrus	L	17,18,19	50	-15,-51,-3	+2.85
6m vs. 1m					
None					

BA = Brodmann area; MNI= Montreal Neurological Institute; Pre= pretransplantation; NC=normal controls; 1m= 1 month after kidney transplantation; 6m= 6 months after kidney transplantation.

Supplementary Table 2 Relationships between the changes of functional connectivity and changes of neuropsychological scores before and 1-month/6-month after kidney transplantation.

Dependent variable	Independent factors	*B*	*SE*	*P*	*LR*	LR_{X^2}	P_{LR}
Default mode Network							
1m vs. Pre							
	TIME	0.403	0.201	0.054	237	5.47	0.019
	NCT	-0.003	0.010	0.764			
	DST	0.013	0.012	0.314			
Medial frontal gyrus (L)	LTT	0.024	0.008	0.007			
	SDT	-0.009	0.013	0.490			
	SAS	0.011	0.022	0.613			
	SDS	-0.016	0.017	0.351			
	TIME	0.504	0.171	0.006	226.6	11.79	0.001
	NCT	0.003	0.009	0.734			
	DST	-0.017	0.012	0.170			
Medial frontal gyrus(R)	LTT	-0.001	0.007	0.867			
	SDT	-0.007	0.012	0.565			
	SAS	0.037	0.020	0.070			
	SDS	-0.024	0.015	0.123			
	TIME	0.490	0.152	0.003	207.7	9.65	0.002
	NCT	0.004	0.008	0.666			

	DST	-0.006	0.010	0.538			
Superior Frontal Gyrus,medial(R)	LTT	0.006	0.007	0.390			
	SDT	-0.011	0.010	0.285			
	SAS	0.019	0.017	0.284			
	SDS	-0.012	0.014	0.392			
	TIME	0.635	0.136	<.0001	182.1	4.03	0.045
	NCT	0.007	0.006	0.300			
	DST	0.003	0.008	0.697			
Posterior cingulate cortex	LTT	-0.004	0.005	0.465			
	SDT	-0.006	0.009	0.482			
	SAS	0.004	0.015	0.803			
	SDS	0.004	0.011	0.711			
6m vs. Pre							
	TIME	1.076	0.185	<.0001	184.3	11.81	0.001
	NCT	0.003	0.008	0.763			
	DST	0.000	0.012	0.994			
Superior frontal gyrus(R)	LTT	-0.001	0.010	0.924			
	SDT	-0.014	0.010	0.173			
	SAS	0.004	0.019	0.827			
	SDS	0.027	0.016	0.100			
	TIME	0.683	0.151	0.000	140.1	7.08	0.008
	NCT	-0.001	0.006	0.875			

	DST	-0.019	0.009	0.051			
Posterior cingulate	LTT	0.004	0.008	0.645			
	SDT	-0.018	0.008	0.032			
	SAS	0.009	0.016	0.551			
	SDS	-0.001	0.012	0.911			
6m vs. 1m							
	TIME	0.406	0.142	0.010	153.6	15.33	<0.001
	NCT	0.017	0.009	0.063			
	DST	0.014	0.011	0.231			
Medial superior frontal gyrus(L)	LTT	-0.004	0.008	0.626			
	SDT	-0.005	0.009	0.563			
	SAS	-0.025	0.022	0.270			
	SDS	0.033	0.020	0.114			
Dorsal Attention Network (DAN)							
1m vs. Pre							
	TIME	0.544	0.182	0.006	230.8	9.76	0.002
	NCT	-0.019	0.010	0.061			
	DST	-0.028	0.012	0.026			
Middle frontal gyrus(L)	LTT	0.010	0.008	0.189			
	SDT	0.018	0.012	0.159			
	SAS	0.062	0.021	0.005			
	SDS	-0.028	0.016	0.088			

	TIME	0.477	0.149	0.003	188.2	1.55	0.213
	NCT	-0.015	0.007	0.033			
	DST	-0.013	0.008	0.124			
Inferior frontal gyrus, triangular(L)	LTT	0.007	0.006	0.190			
	SDT	0.013	0.009	0.150			
	SAS	0.035	0.016	0.031			
	SDS	-0.018	0.012	0.145			
	TIME	0.351	0.150	0.026	180.5	0.05	0.827
	NCT	-0.001	0.006	0.933			
	DST	-0.013	0.007	0.088			
Superior parietal gyrus(L)	LTT	-0.002	0.005	0.675			
	SDT	0.003	0.008	0.742			
	SAS	0.038	0.015	0.014			
	SDS	-0.021	0.011	0.065			
	TIME	0.581	0.159	0.001	216.5	10.83	0.001
	NCT	0.003	0.009	0.737			
	DST	-0.012	0.011	0.271			
Inferior parietal gyrus(L)	LTT	0.019	0.007	0.009			
	SDT	-0.018	0.011	0.121			
	SAS	-0.006	0.018	0.766			
	SDS	-0.010	0.014	0.472			

	TIME	0.507	0.114	0.000	153.1	1.45	0.229
	NCT	-0.003	0.005	0.592			
	DST	-0.003	0.006	0.685			
Inferior frontal gyrus, opercular(R)	LTT	0.003	0.004	0.421			
	SDT	0.002	0.007	0.794			
	SAS	-0.013	0.012	0.296			
	SDS	0.023	0.009	0.016			
	TIME	0.415	0.131	0.004	175.4	2.93	0.087
	NCT	-0.003	0.006	0.577			
	DST	-0.004	0.008	0.618			
Inferior frontal gyrus, opercular(L)	LTT	0.003	0.005	0.524			
	SDT	0.003	0.008	0.671			
	SAS	0.007	0.014	0.633			
	SDS	-0.010	0.011	0.355			
	TIME	0.466	0.164	0.008	203.1	2.41	0.121
	NCT	-0.008	0.007	0.264			
	DST	-0.013	0.009	0.177			
Middle temporal gyru(L)	LTT	0.000	0.006	0.970			
	SDT	-0.003	0.010	0.770			
	SAS	-0.008	0.017	0.632			
	SDS	0.008	0.013	0.576			

	TIME	0.478	0.222	0.039	254.6	8.48	0.004
	NCT	-0.014	0.011	0.234			
	DST	0.006	0.014	0.700			
Inferior temporal gyrus(L)	LTT	0.001	0.009	0.929			
	SDT	0.022	0.015	0.157			
	SAS	-0.039	0.025	0.131			
	SDS	-0.001	0.019	0.977			
	TIME	0.342	0.117	0.007	159.4	2.43	0.119
	NCT	-0.012	0.005	0.029			
	DST	-0.018	0.007	0.013			
Middle frontal gyrus(R)	LTT	0.006	0.005	0.168			
	SDT	0.003	0.007	0.698			
	SAS	0.000	0.012	0.998			
	SDS	0.006	0.010	0.564			
6m vs. Pre							
	TIME	0.341	0.131	0.017	120.2	2.26	0.133
	NCT	0.003	0.005	0.492			
	DST	-0.009	0.007	0.242			
Middle frontal gyrus(R)	LTT	-0.012	0.007	0.078			
	SDT	-0.006	0.006	0.356			
	SAS	-0.024	0.013	0.073			
	SDS	-0.002	0.010	0.823			

	TIME	1.026	0.294	0.002	199.6	3.89	0.049
	NCT	0.021	0.012	0.093			
	DST	0.020	0.018	0.269			
Inferior parietal gyrus(L)	LTT	-0.025	0.016	0.121			
	SDT	-0.009	0.015	0.565			
	SAS	-0.020	0.030	0.521			
	SDS	0.035	0.023	0.150			
	TIME	0.385	0.259	0.152	186.2	3.69	0.055
	NCT	0.005	0.010	0.639			
	DST	0.014	0.015	0.366			
Inferior parietal gyrus(R)	LTT	-0.014	0.013	0.312			
	SDT	0.0015	0.013	0.912			
	SAS	-0.080	0.026	0.006			
	SDS	0.014	0.020	0.498			
	TIME	1.141	0.326	0.002	222.8	17.71	<0.001
	NCT	0.029	0.016	0.076			
	DST	-0.022	0.023	0.344			
Superior parietal lobule(L)	LTT	-0.025	0.018	0.176			
	SDT	-0.011	0.018	0.553			
	SAS	-0.053	0.034	0.135			
	SDS	0.027	0.028	0.356			

	TIME	0.725	0.219	0.004	169.5	2.79	0.095
	NCT	0.017	0.009	0.066			
	DST	0.021	0.013	0.104			
Postcentralgyrus(L)	LTT	-0.012	0.011	0.313			
	SDT	-0.004	0.011	0.694			
	SAS	-0.012	0.022	0.584			
	SDS	0.032	0.017	0.070			
	TIME	0.705	0.25	0.012	193.8	12.48	0.000
	NCT	0.026	0.012	0.037			
	DST	0.008	0.017	0.645			
Postcentralgyrus(R)	LTT	-0.025	0.014	0.083			
	SDT	0.006	0.014	0.689			
	SAS	-0.052	0.027	0.066			
	SDS	0.006	0.022	0.796			
	TIME	0.460	0.121	0.001	111.7	1.28	0.258
	NCT	-0.001	0.004	0.873			
	DST	-0.007	0.007	0.324			
Middle occipital gyrus(L)	LTT	-0.005	0.006	0.399			
	SDT	-0.009	0.006	0.138			
	SAS	0.004	0.012	0.766			
	SDS	-0.008	0.009	0.369			

	TIME	0.497	0.146	0.003	129.3	1.71	0.190
	NCT	0.004	0.005	0.482			
	DST	-0.007	0.008	0.411			
Inferior frontal gyrus, opercula(R)	LTT	-0.010	0.007	0.197			
	SDT	-0.009	0.007	0.199			
	SAS	-0.009	0.014	0.522			
	SDS	-0.008	0.011	0.478			
Central-Executive Network (CEN)							
1m vs. Pre							
	TIME	0.594	0.249	0.023	264.5	5.33	0.021
	NCT	-0.010	0.012	0.384			
	DST	-0.022	0.015	0.154			
Supramarginalgryus(R)	LTT	0.006	0.010	0.522			
	SDT	-0.021	0.016	0.190			
	SAS	0.014	0.027	0.623			
	SDS	-0.019	0.021	0.382			
	TIME	0.426	0.140	0.005	176.8	0.75	0.386
	NCT	-0.001	0.006	0.822			
	DST	-0.006	0.007	0.444			
Inferior Parietal Lobule(R)	LTT	0.001	0.005	0.895			
	SDT	-0.007	0.008	0.412			
	SAS	-0.002	0.014	0.871			

	SDS	-0.008	0.011	0.482			
	TIME	0.621	0.203	0.005	250.6	13.25	<0.001
	NCT	-0.005	0.011	0.666			
	DST	-0.010	0.014	0.475			
Superior temporal gyrus(R)	LTT	0.000	0.009	0.982			
	SDT	-0.014	0.014	0.338			
	SAS	0.030	0.023	0.212			
	SDS	-0.003	0.018	0.890			
	TIME	0.413	0.118	0.002	154	0.56	0.455
	NCT	-0.003	0.005	0.600			
	DST	-0.002	0.006	0.783			
Middle temporal gyrus(R)	LTT	-0.002	0.004	0.662			
	SDT	0.002	0.007	0.802			
	SAS	0.004	0.012	0.756			
	SDS	0.008	0.009	0.412			
6m vs. Pre							
	TIME	0.833	0.238	0.002	178.1	4.12	0.042
	NCT	0.001	0.009	0.894			
	DST	0.000	0.014	0.998			
Supramarginalgyrus (L)	LTT	-0.009	0.012	0.482			
	SDT	0.024	0.012	0.055			
	SAS	-0.039	0.024	0.114			

	SDS	0.026	0.019	0.170			
	TIME	0.951	0.313	0.006	200	1.63	0.202
	NCT	0.008	0.012	0.487			
	DST	-0.001	0.017	0.940			
Supramarginalgyrus (R)	LTT	-0.007	0.016	0.651			
	SDT	0.019	0.015	0.222			
	SAS	-0.012	0.030	0.706			
	SDS	0.031	0.023	0.196			
	TIME	0.818	0.254	0.004	188.9	8.30	0.004
	NCT	-0.001	0.011	0.915			
	DST	0.001	0.016	0.938			
Inferior parietal lobule(L)	LTT	0.000	0.014	0.987			
	SDT	-0.010	0.013	0.478			
	SAS	-0.003	0.026	0.915			
	SDS	0.026	0.021	0.219			
	TIME	0.671	0.212	0.005	178.5	14.87	<0.001
	NCT	0.009	0.010	0.367			
	DST	-0.021	0.014	0.161			
Inferior parietal lobule(R)	LTT	-0.006	0.012	0.584			
	SDT	-0.006	0.012	0.626			
	SAS	-0.052	0.022	0.030			

	SDS	-0.032	0.0181	0.089			
	TIME	0.608	0.227	0.015	171.2	1.82	0.178
	NCT	-0.025	0.009	0.009			
	DST	0.006	0.013	0.632			
Middle temporal gyrus(R)	LTT	-0.001	0.012	0.940			
	SDT	0.002	0.011	0.828			
	SAS	-0.022	0.022	0.335			
	SDS	0.015	0.017	0.388			
	TIME	0.714	0.218	0.004	172.6	5.51	0.019
	NCT	0.003	0.009	0.738			
	DST	0.031	0.013	0.029			
Superior temporal gyrus(R)	LTT	-0.004	0.012	0.733			
	SDT	0.008	0.011	0.492			
	SAS	-0.065	0.022	0.008			
	SDS	0.024	0.017	0.180			
6m vs. 1m							
	TIME	-0.106	0.302	0.729	201.6	2.18	0.140
	NCT	0.013	0.014	0.360			
	DST	0.019	0.017	0.274			
Supramarginalgyrus(L)	LTT	-0.014	0.016	0.379			
	SDT	-0.015	0.016	0.336			
	SAS	-0.034	0.040	0.404			

	SDS	0.050	0.038	0.201			
	TIME	0.101	0.321	0.756	204.2	1.05	0.304
	NCT	0.003	0.014	0.855			
	DST	0.013	0.017	0.453			
Postcentralgyrus(L)	LTT	-0.019	0.016	0.267			
	SDT	-0.024	0.016	0.143			
	SAS	-0.007	0.041	0.860			
	SDS	0.048	0.039	0.239			
Sensory-Motor Network (SMN)							
1m-Pre							
	TIME	0.502	0.171	0.006	230.7	16.54	<0.001
	NCT	-0.003	0.010	0.743			
	DST	-0.021	0.012	0.105			
Postcentralgyrus (R)	LTT	0.008	0.008	0.284			
	SDT	-0.004	0.012	0.733			
	SAS	-0.038	0.020	0.064			
	SDS	-0.004	0.016	0.792			
	TIME	0.721	0.259	0.009	266.4	3.43	0.064
	NCT	0.009	0.012	0.468			
	DST	-0.011	0.015	0.471			
Precentralgyrus(R)	LTT	0.006	0.010	0.584			
	SDT	-0.015	0.016	0.362			

	SAS	-0.036	0.028	0.208			
	SDS	0.006	0.022	0.793			
6m-Pre							
	TIME	0.720	0.200	0.002	151.3	0.01	0.913
	NCT	0.007	0.006	0.299			
	DST	0.015	0.009	0.117			
Supplementary motor area (L)	LTT	0.002	0.009	0.818			
	SDT	0.005	0.008	0.578			
	SAS	-0.034	0.018	0.071			
	SDS	0.036	0.013	0.015			
	TIME	0.937	0.237	0.001	182.9	8.24	0.004
	NCT	0.020	0.010	0.066			
	DST	-0.014	0.015	0.370			
Postcentralgyrus (R)	LTT	-0.014	0.013	0.279			
	SDT	-0.001	0.013	0.958			
	SAS	-0.041	0.025	0.112			
	SDS	0.001	0.019	0.964			
	TIME	0.471	0.242	0.066	180.1	4.03	0.045
	NCT	0.017	0.010	0.089			
	DST	0.004	0.014	0.777			
Postcentralgyrus (L)	LTT	-0.013	0.013	0.320			
	SDT	0.003	0.012	0.823			

	SAS	-0.019	0.024	0.452			
	SDS	0.004	0.019	0.853			
	TIME	1.021	0.321	0.005	205.5	3.41	0.065
	NCT	0.036	0.013	0.011			
	DST	0.029	0.019	0.136			
Precentralgyrus (R)	LTT	-0.009	0.017	0.578			
	SDT	-0.027	0.016	0.104			
	SAS	-0.040	0.032	0.226			
	SDS	0.002	0.025	0.952			
	TIME	0.997	0.329	0.007	200.4	0.45	0.504
	NCT	0.026	0.011	0.035			
	DST	0.025	0.017	0.144			
Precentralgyrus (L)	LTT	0.002	0.016	0.903			
	SDT	-0.027	0.015	0.079			
	SAS	-0.003	0.031	0.915			
	SDS	0.003	0.023	0.908			
6m-1m							
Auditory Network (AN)							
1m-Pre							
	TIME	0.815	0.245	0.002	257.9	2.39	0.122
	NCT	-0.014	0.011	0.241			
	DST	-0.009	0.014	0.510			

Rolandic operculum(R)	LTT	0.010	0.009	0.305			
	SDT	-0.010	0.015	0.512			
	SAS	0.015	0.026	0.561			
	SDS	0.023	0.020	0.258			
	TIME	0.612	0.286	0.040	281.1	4.58	0.032
	NCT	-0.011	0.014	0.447			
	DST	-0.004	0.017	0.799			
Rolandic operculum(L)	LTT	0.014	0.011	0.219			
	SDT	0.018	0.018	0.339			
	SAS	-0.019	0.031	0.553			
	SDS	-0.012	0.024	0.631			
	TIME	0.904	0.262	0.002	272.8	5.00	0.025
	NCT	-0.016	0.013	0.239			
	DST	-0.009	0.016	0.578			
Superior Temporal Gyrus(R)	LTT	0.014	0.011	0.196			
	SDT	-0.001	0.017	0.956			
	SAS	0.006	0.029	0.844			
	SDS	0.028	0.023	0.220			
	TIME	0.653	0.330	0.057	294.9	2.23	0.135
	NCT	0.003	0.015	0.854			
	DST	-0.014	0.019	0.466			

Superior Temporal Gyrus(L)	LTT	-0.002	0.012	0.861			
	SDT	-0.018	0.020	0.384			
	SAS	0.000	0.035	0.991			
	SDS	-0.014	0.027	0.613			
	TIME	0.458	0.117	0.001	169.2	7.83	0.005
	NCT	-0.004	0.006	0.476			
	DST	0.002	0.008	0.754			
Insula (L)	LTT	0.001	0.005	0.815			
	SDT	0.000	0.008	0.967			
	SAS	0.009	0.013	0.504			
	SDS	0.008	0.010	0.446			
6m-Pre							
	TIME	0.691	0.103	<.0001	99	2.97	0.085
	NCT	0.003	0.004	0.490			
	DST	0.002	0.006	0.711			
Superior temporal gyrus (L)	LTT	0.002	0.005	0.704			
	SDT	-0.003	0.005	0.588			
	SAS	-0.035	0.010	0.002			
	SDS	0.015	0.008	0.080			
	TIME	0.630	0.211	0.007	172	7.24	0.007
	NCT	0.010	0.009	0.280			
	DST	0.012	0.013	0.153			

Superior temporal gyrus(R)	LTT	-0.012	0.011	0.323			
	SDT	-0.002	0.011	0.894			
	SAS	-0.015	0.022	0.496			
	SDS	0.015	0.017	0.388			
	TIME	1.043	0.210	<.0001	172.9	8.17	0.004
	NCT	0.014	0.009	0.133			
	DST	0.012	0.014	0.372			
Rolandic operculum (R)	LTT	0.016	0.011	0.166			
	SDT	-0.011	0.011	0.342			
	SAS	-0.025	0.022	0.269			
	SDS	0.010	0.017	0.576			
6m-1m							
	TIME	0.736	0.208	0.002	179	7.56	0.006
	NCT	0.012	0.011	0.298			
	DST	0.000	0.014	0.974			
Superior temporal gyrus (R)	LTT	0.016	0.012	0.189			
	SDT	-0.004	0.012	0.769			
	SAS	-0.034	0.031	0.280			
	SDS	0.004	0.028	0.900			
	TIME	0.540	0.181	0.007	168.5	9.41	0.002
	NCT	0.015	0.010	0.144			
	DST	0.015	0.013	0.277			

Rolandic operculum(R)	LTT	0.006	0.010	0.603			
	SDT	0.003	0.011	0.766			
	SAS	-0.009	0.027	0.748			
	SDS	0.015	0.025	0.561			
Visual Network (VN)							
1m-Pre							
Calcarine fissure(L)	TIME	0.523	0.133	0.000	170.6	0.94	0.332
	NCT	0.000	0.006	0.999			
	DST	-0.002	0.007	0.742			
	LTT	0.004	0.005	0.431			
	SDT	0.007	0.008	0.352			
	SAS	-0.006	0.014	0.681			
	SDS	0.001	0.010	0.932			
	TIME	0.489	0.145	0.002	193.1	5.09	0.024
	NCT	-0.002	0.007	0.829			
	DST	-0.005	0.009	0.546			
Calcarine fissure(R)	LTT	0.006	0.006	0.344			
	SDT	0.002	0.009	0.812			
	SAS	0.013	0.016	0.416			
	SDS	-0.017	0.012	0.190			
6m-Pre							
	TIME	0.508	0.147	0.003	128.3	0.99	0.321
	NCT	0.010	0.005	0.062			
	DST	0.000	0.008	0.994			
Calcarine fissure(R)	LTT	-0.012	0.007	0.114			

	SDT	-0.008	0.007	0.232			
	SAS	-0.011	0.014	0.451			
	SDS	-0.004	0.011	0.707			
	TIME	0.572	0.194	0.008	164.6	8.78	0.003
	NCT	0.013	0.008	0.132			
	DST	0.011	0.012	0.376			
Lingual gyrus(L)	LTT	-0.007	0.011	0.494			
	SDT	-0.002	0.010	0.828			
	SAS	-0.044	0.020	0.040			
	SDS	0.003	0.016	0.838			

Supplementary texts:

MR Imaging Data Acquisition

MR imaging data were acquired using a 3T MR system (TIM Trio; Siemens Medical Solutions, Erlangen, Germany). All subjects were instructed to do lie still, keep their eyes closed, and stay awake during MRI. Foam padding was used to reduce head motion. T1-weighted and T2 fluid-attenuated inversion-recovery anatomic images of each subject were obtained for the detection of silent lesions using the following two sequences: *(a)* axial T1 fast low-angle shot sequence with 30 axial slices; slice thickness, 4 mm; slice gap, 0.4 mm; image matrix, 320 x 256; field of view, 240 x 240 mm^2; repetition time (TR) /echo time (TE), 350/2.46 ms and *(b)* axial T2 fluid-attenuated inversion-recovery sequence with 25 axial slices; slice thickness, 4 mm; slice gap, 1.2 mm; image matrix, 232 x 256; field of view, 220 x 220 mm^2; TR/TE, 9000/93 ms; flip angle, 130°; inversion time, 2500 ms, bandwidth 287 Hz/Px. Functional data were obtained using a gradient-echo echo-planar sequence: slice thickness, 4 mm; slice gap, 0.4 mm; matrix, 64 x 64; field of view, 240 x 240 mm^2; TR/TE, 2000/30 ms; flip angle, 90°. Each functional MRI sequence contained 250 volumes, and each volume included 30 axial sections placed approximately along the anterior–posterior commissure line. Each functional MRI scan lasted 500 seconds.

Data Preprocessing

Data were preprocessed and analyzed using statistical parametric mapping (SPM8,*http://www.fil.ion.ucl.ac.uk/spm/*) with a software platform (Matlab; MathWorks, Natick, Mass). The first 10 volumes of the functional images were discarded to allow image stabilization and participants' adaptation to the environment. The section timing, head motion correction, and spatial normalization were adjusted to the standard Montreal Neurologic Institute template, with a resampled voxel size of 3 x 3 x 3 mm^3. Afterwards, the data were spatially smoothed by means of convolution with an isotropic Gaussian kernel of 8 mm.

Independent component analysis and identification of resting state networks

Group spatial independent component analysis was conducted using the GIFT software (http://icatb.sourceforge.net/, Vision 2.0d). Independent component analysis separates linear mixed data into spatially independent sources. To determine the numbers of independent components, dimension estimation of the smoothed data of the two groups was conducted using the minimum description length criterion. Then, functional MRI data from all subjects in each group were concatenated and the temporal dimension of the aggregate data set was reduced by means of principal component analysis, followed by an independent component estimation (with time-courses and spatial maps) using the infomax algorithm. The spatial independent component analysis for 32 independent components was performed on the patient and control groups together to ensure that the resting state networks demonstrated similar spatial patterns in both groups. Independent component time-courses and spatial maps for each subject were back-reconstructed using the aggregated components and the results from the data reduction step. For each independent component, the time courses correspond to the waveform of a specific pattern of brain activity. The intensity of this pattern of brain activity across the voxels was expressed by the associated spatial map (1). Using the GIFT software, the components to be retained for further analysis were selected from among the 32 estimated independent components based on the largest spatial correlation with specific resting state network templates. To display the voxels that most strongly contributed to a particular independent component, the intensity values in each spatial map were converted to z-values. The z-values here reflect the degree to which the time courses of a given voxel correlate to the time courses of each special independent component. Seven resting state network templates were used in this study: dorsal attention network, central executive network, default mode network, self-referential network, sensorimotor network, visual network, and auditory network, which can be found in previous studies (2, 3).

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