Figure A1: Supplementary Motor Cortex Mask

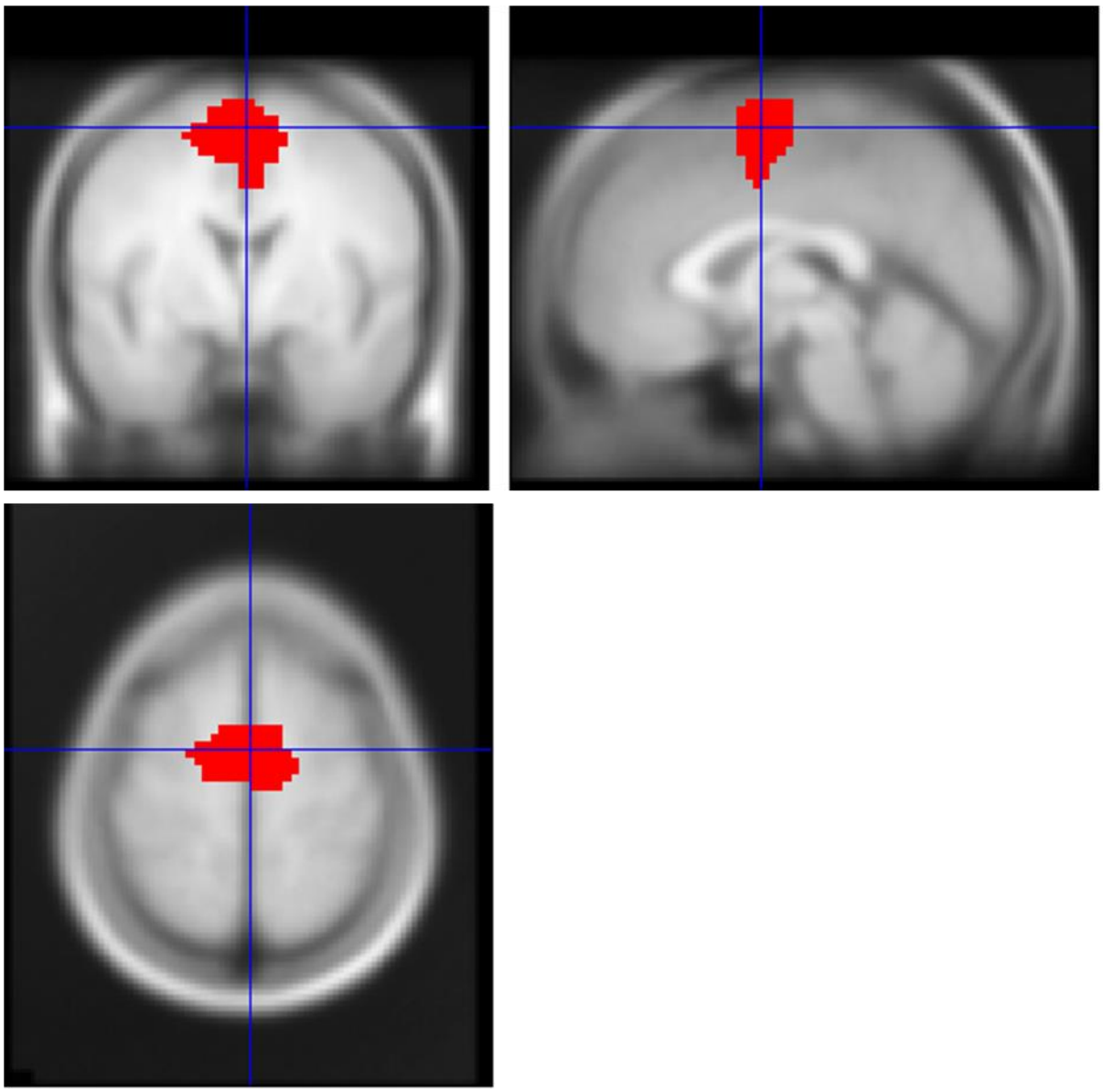

Figure A1: SMA Mask: binary mask (red) created with SPM12 corresponding to the SMA (center at 0 -4 57, consisting of 1079 voxels (at a 3x3x3mm resolution=29133mm3 volume), used for the ROI analysis (ROI=Region of Interest, SMA=Supplementary Motor Cortex, SPM=Statistical Parametric Mapping)

Table A1: Patients Overview

ID	Sex[a]	Age at DoC onset (in years)	Aetiology[b]	Time of fMRI (in months after onset)	Diagnosis at fMRI	CRS-R score at fMRI[c]	Months until discharge	Diagnosis at discharge	CRS-R score at discharge	Develop-ment[d]	SVC Analysis significant[e]	REX Analysis significant[e]	Activity in whole brain
1	M	35	T	61	MCS	8	61	MCS	8	0	No	No	Yes
2	F	29	NT	30	UWS	3	30	UWS	4	0	Yes	Yes	Yes
3	F	37	T	10	UWS	6	12	UWS	5	0	No	No	No
4	F	54	T	19	MCS	8	19	MCS	8	0	No	No	Yes
5	M	66	T	2	UWS	5	2	UWS	7	0	No	No	No
6	M	66	T	2	MCS	16	8	eMCS	22	+	No	No	Yes
7	F	28	NT	4	MCS	9	13	MCS	9	0	No	No	No
8	F	63	T	2	MCS	6	5	MCS	6	0	No	No	No
9	M	26	T	4	UWS	6	9	MCS	15	+	No	No	No
10†	F	62	T	2	MCS	10	5	MCS	10	0	No	No	No
11	M	55	NT	1	MCS	NA	5	eMCS	22	+	No	No	No
12	M	55	NT	2	UWS	1	7	UWS	1	0	No	No	Yes
13	M	46	NT	1	MCS	9	5	MCS	9	0	Yes	Yes	Yes
14	M	54	NT	2	MCS	12	2	MCS	12	0	Yes	Yes	Yes
15	M	65	T	2	MCS	10	6	eMCS	22	+	No	No	Yes
16	F	35	NT	1	UWS	5	14	MCS	14	+	No	No	No
17	M	31	T	24	UWS	8	3	eMCS	22	++	No	No	No
18†	M	52	NT	39	UWS	7	39	UWS	7	0	No	No	No
19	F	71	NT	0	MCS	10	0	UWS	6	-	No	No	Yes
20	M	61	NT	2	MCS	8	6	eMCS	22	+	No	Yes	Yes

ID	Sex[a]	Age at DoC onset (in years)	Aetiology[b]	Time of fMRI (in months after onset)	Diagnosis at fMRI	CRS-R score at fMRI[c]	Months until discharge	Diagnosis at discharge	CRS-R score at discharge	Develop-ment[d]	SVC Analysis significant[e]	REX Analysis significant[e]	Activity in whole brain
21†	M	59	NT	0	UWS	5	1	UWS	4	0	No	No	Yes
22	M	55	NT	0	UWS	4	0	UWS	5	0	No	No	No
23	M	73	T	0	UWS	3	1	UWS	3	0	No	No	No
24	M	60	T	0	UWS	4	2	UWS	4	0	No	No	No
25	F	65	NT	7	MCS	9	7	MCS	9	0	No	No	No
26	F	53	NT	3	MCS	11	8	eMCS	23	+	No	No	No
27†	M	50	NT	4	MCS	8	6	MCS	8	0	No	No	No
28	F	41	NT	0	eMCS	18	1	eMCS	20	0	Yes	Yes	Yes
29	F	71	NT	3	MCS	7	3	MCS	7	0	No	No	No
30	M	64	NT	2	UWS	6	3	UWS	5	0	No	No	No
31	M	51	NT	3	MCS	7	8	UWS	3	-	No	No	Yes
32	M	43	NT	3	UWS	5	12	UWS	5	0	No	No	No
33†	M	43	T	2	MCS	20	8	MCS	12	0	No	No	No
34†	F	31	NT	1	MCS	9	6	eMCS	23	+	No	No	No
35	M	52	NT	2	UWS	6	3	UWS	7	0	No	No	No
36†	M	33	NT	2	MCS	10	13	eMCS	20	+	No	No	No
37	M	53	NT	1	eMCS	22	3	eMCS	22	0	Yes	Yes	Yes
38	M	82	NT	0	UWS	4	1	UWS	3	0	No	No	No
39†	M	68	NT	1	UWS	3	3	UWS	6	0	No	No	No
40	M	29	T	10	UWS	5	12	UWS	5	0	No	No	No

ID	Sex[a]	Age at DoC onset (in years)	Aetiology[b]	Time of fMRI (in months after onset)	Diagnosis at fMRI	CRS-R score at fMRI[c]	Months until discharge	Diagnosis at discharge	CRS-R score at discharge	Develop-ment[d]	SVC Analysis significant[e]	REX Analysis significant[e]	Activity in whole brain
41	M	18	NT	1	UWS	4	6	UWS	7	0	No	No	Yes
42	F	17	NT	8	UWS	5	10	UWS	4	0	No	No	No
43	M	85	T	2	UWS	6	2	MCS	7	+	No	Yes	No
44†	M	17	NT	4	UWS	5	6	UWS	4	0	No	No	No
45†	M	15	T	33	MCS	8	34	MCS	8	0	No	No	Yes
46†	M	35	NT	1	eMCS	18	1	eMCS	19	0	Yes	Yes	Yes
47	M	33	NT	2	UWS	6	3	UWS	5	0	No	No	No
48†	F	48	T	1	UWS	3	5	UWS	3	0	No	No	No
49	M	66	T	1	UWS	4	5	UWS	4	0	No	No	Yes
50	M	49	NT	3	MCS	12	5	MCS	12	0	No	No	No
51	M	47	NT	3	UWS	5	3	UWS	4	0	No	No	Yes
52	F	36	NT	24	MCS	8	25	MCS	8	0	No	Yes	Yes
53	M	23	T	2	UWS	7	1	eMCS	23	++	No	No	No
54	F	58	NT	26	MCS	9	26	MCS	9	0	Yes	Yes	Yes
55	M	61	NT	3	MCS	10	11	MCS	9	0	No	No	Yes
56	F	57	NT	2	MCS	13	4	MCS	14	0	No	No	Yes
57	F	19	T	264	UWS	5	264	UWS	5	0	No	No	Yes
58	F	25	NT	2	MCS	11	3	MCS	12	0	Yes	Yes	Yes
59†	M	46	NT	2	MCS	9	5	UWS	6	-	No	No	No
60	M	55	T	1	UWS	5	7	MCS	12	+	No	No	Yes

ID	Sex[a]	Age at DoC onset (in years)	Aetiology[b]	Time of fMRI (in months after onset)	Diagnosis at fMRI	CRS-R score at fMRI[c]	Months until discharge	Diagnosis at discharge	CRS-R score at discharge	Develop-ment[d]	SVC Analysis significant[e]	REX Analysis significant[e]	Activity in whole brain
61	F	27	NT	240	UWS	7	241	UWS	7	0	No	No	No
62	F	49	NT	31	MCS	8	32	MCS	8	0	No	No	No
63	F	70	NT	3	UWS	5	3	UWS	5	0	No	No	Yes
64	M	29	T	8	MCS	9	9	MCS	9	0	No	No	Yes
65	F	47	NT	4	MCS	9	12	MCS	20	0	Yes	Yes	Yes
66	M	65	T	2	UWS	2	2	UWS	3	0	No	No	No
67	M	68	NT	1	UWS	3	2	UWS	3	0	No	No	No
68	M	60	NT	2	UWS	4	2	UWS	1	0	No	No	No
69	M	45	NT	3	MCS	13	4	MCS	10	0	No	No	No
70	M	45	NT	3	MCS	7	3	UWS	6	-	No	No	No
71	F	40	NT	3	MCS	7	9	eMCS	22	+	No	No	Yes
72	M	46	NT	5	MCS	8	8	MCS	8	0	Yes	Yes	Yes
73	M	56	T	6	UWS	4	7	UWS	6	0	No	No	No

Table A1. Descriptive data for each patient that participated in the study. The symbol † indicates patients who were already deceased at the time of the study.

[a] F = Female; M = Male

[b] NT = Non-traumatic; T = Traumatic

[c] Refers to the CRS-R score given within the week of the fMRI examination; NA = Respective CRS-R score is not available

[d] 0 = no improvement; + = improved to the next higher clinical state; ++ = improved by two clinical states; - = worsened by one clinical state

[e] results are reported for the one-tailed analyses