

SUPPLEMENTARY INFORMATION

Longitudinal hippocampal volumetric changes in mice following brain infarction

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Supplementary Table S1: Ipsilateral and contralateral total hippocampal volume: *p*-values for comparison between baseline volume and post-surgical time points in sham- and MCAO-operated mice.

<i>p</i> -values	Sham		MCAO		Non-infarcted hippocampus		Infarcted hippocampus	
	Ipsilateral	Contralateral	Ipsilateral	Contralateral	Ipsilateral	Contralateral	Ipsilateral	Contralateral
1-week	0.532	0.499	0.401	1.000	0.874	0.621	0.043	0.469
4-weeks	<0.0001	<0.0001	0.011	0.112	0.466	0.080	<0.0001	0.734
12-weeks	<0.0001	<0.0001	<0.0001	0.003	0.354	0.009	<0.0001	0.116
24-weeks	<0.0001	<0.0001	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
36-weeks	<0.0001	<0.0001	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
48-weeks	<0.0001	<0.0001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Supplementary Table S2: Dorsal and ventral ipsilateral and contralateral hippocampi: *p*-values for comparison between baseline volume and post-surgical time points in sham- and MCAO-operated mice.

<i>p</i> -values	Non-infarcted hippocampus				Infarcted hippocampus			
	Dorsal		Ventral		Dorsal		Ventral	
	Ipsilateral	Contralateral	Ipsilateral	Contralateral	Ipsilateral	Contralateral	Ipsilateral	Contralateral
1-week	0.330	0.462	0.843	0.758	0.010	0.897	0.428	0.992
4-weeks	0.907	0.018	0.394	0.708	<0.0001	0.756	0.008	0.684
12-weeks	0.396	0.082	0.153	0.062	<0.0001	0.598	0.001	0.173
24-weeks	0.424	<0.0001	0.024	<0.0001	<0.0001	0.004	<0.0001	0.110
36-weeks	0.260	<0.0001	0.013	<0.0001	<0.0001	0.005	<0.0001	0.017
48-weeks	0.543	<0.0001	0.068	<0.0001	<0.0001	0.137	<0.0001	0.004

Supplementary Table S3: Animal numbers for the immunohistochemistry.

n-values		Bregma -1.82				Bregma -3.02			
		Sham		MCAO		Sham		MCAO	
		Ipsilateral	Contralateral	Ipsilateral	Contralateral	Ipsilateral	Contralateral	Ipsilateral	Contralateral
NeuN	1-week	4	4	3	3	4	4	4	3
	4-weeks	5	5	2	2	4	5	2	2
	12-weeks	5	5	5	5	5	5	5	4
	24-weeks	4	4	6	6	4	4	5	4
	36-weeks	4	4	3	3	4	4	4	4
	48-weeks	5	5	4	4	4	4	4	4
Iba1	1-week	3	3	3	3	3	3	4	3
	4-weeks	5	5	2	2	5	5	2	2
	12-weeks	5	5	2	2	5	5	2	2
	24-weeks	4	4	6	6	4	3	5	5
	36-weeks	3	3	3	3	3	3	4	4
	48-weeks	3	3	3	3	3	3	3	3
GFAP	1-week	2	2	4	4	2	2	5	4
	4-weeks	5	5	2	2	5	5	3	3
	12-weeks	5	5	5	5	5	5	5	5
	24-weeks	5	5	6	6	5	5	5	6
	36-weeks	5	5	4	4	5	5	5	5
	48-weeks	5	5	4	4	5	4	4	4

Supplementary Table S4: Animal numbers for the hippocampal volume calculated by histology.

n-values	Sham		MCAO	
	Ipsilateral	Contralateral	Ipsilateral	Contralateral
1-week	5	3	4	3
4-weeks	5	5	2	2
12-weeks	5	5	5	5
24-weeks	4	4	6	6
36-weeks	5	5	3	3
48-weeks	5	5	4	4