

Supplementary Table 1: Quantitative real-time polymerase chain reaction primers

Gene Name	Primer sequence (F,R)	Relevance	Efficiency	Product Length (base pairs)	Annealing Temp (°C)	Accession number
CCR5	TGGTCAGAGGAGCTGAGACA	Chemokine	106%	86	60	NM_001001618.1
	AGAAGGGACTCGTCGTTTGA					
CLDN5	CTCTGCTGGTTCGCCAACA	Tight junction	108%	75	60	NM_001161636.1
	CAGCTCGTACTTCTGCGACATG					
COX2 (PTGS2)	CCCAATTTGTTGAATCATTT	Enzyme – inflammation related	86%	119	56	NM_214321.1
	TCTCATCTCTCTGCTCTGGT					
CXCL10	CCCACATGTTGAGATCATTGC	Chemokine	89%	168	55	NM_001008691.1
	CATCCTTATCAGTAGTGCCG					
GAPDH	CTTCACGACCATGGAGAAGG	Reference gene	90%	170	60	XM_003361568.3
	CCAAGCAGTTGGTGGTGCAG					
IL1β	GGCCGCCAAGATATAACTGA	Cytokine	91%	70	58	NM_214055.1
	GGACCTCTGGGTATGGCTTTC					
IL6	ATCAGGAGACCTGCTTGATG	Cytokine	109%	177	60	NM_001252429.1
	TGGTGGCTTTGTCTGGATTG					
IL8 (CXCL8)	GAAGAGAACTGAGAAGCAACAACA	Cytokine	91%	99	60	NM_213867.1
	TTGTGTTGGCATCTTTACTGAGA					
MMP2	CTGTGCAATACCTGAACACC	Enzyme – extracellular matrix breakdown	112%	85	55	NM_214192.1
	TGCATCTTCTTTAGTGTGTCC					
OCLN	ATCAACAAAGGCAACTCT	Tight junction	112%	157	55	NM_001163647.2
	GCAGCAGCCATGTACTCT					
TGFβ	CGAGCCCTGGATACCAACT	Cytokine	97%	135	60	NM_214015.2
	GCAGAAATTGGCATGGTAG					
TNFα	CCAATGGCAGAGTGGGTATG	Cytokine	87%	116	55	NM_214022.1
	TGAAGAGGACCTGGGAGTAG					
VEGFA	CAACGACGAAGGTCTGGAGTG	Angiogenesis	95%	155	55	NM_214084.1
	GCCTCGCTCTATCTTTCTTTGG					
ZO1	GAGGGCATTCCACGTTTC	Tight junction	85%	256	55	XM_021098827.1
	GCTTTAGAGCCGAGTCCTTG					

Supplementary table 2: Correlations between immunoglobulin G extravasation into parietal cortex and hippocampus and measures of insult and injury. Significant correlations are shown in bold

Variable		IgG level Parietal Cortex	IgG level Hippocampus
Background pattern 1h PI	r_s	-0.601	-0.614
	p	0.004	0.003
Background pattern 2h PI	r_s	-0.616	-0.629
	p	0.003	0.002
Background pattern 4h PI	r_s	-0.778	-0.767
	p	0.000	0.000
Background pattern 8h PI	r_s	-0.765	-0.708
	p	0.000	0.000
Background pattern 12h PI	r_s	-0.775	-0.713
	p	0.000	0.000
Background pattern 24h PI	r_s	-0.686	-0.522
	p	0.001	0.015
Background pattern 36h PI	r_s	-0.465	-0.566
	p	0.034	0.008
Background pattern 48h PI	r_s	-0.812	-0.784
	p	0.000	0.000
Background pattern 72h PI	r_s	-0.770	-0.676
	p	0.000	0.001
Histology score- Parietal cortex	r_s	0.768	
	p	0.000	
Histology score – hippocampus	r_s		0.558
	p		0.007
Neurobehavioural score – 48h	r_s	-0.642	-0.587
	p	0.001	0.002
Neurobehavioural score – 52h	r_s	-0.712	-0.638
	p	0.000	0.001
Neurobehavioural score – 56h	r_s	-0.743	-0.602
	p	0.000	0.003
Neurobehavioural score – 60h	r_s	-0.779	-0.718
	p	0.000	0.000
Neurobehavioural score – 64h	r_s	-0.733	-0.713
	p	0.000	0.000
Neurobehavioural score – 68h	r_s	-0.700	-0.716
	p	0.000	0.000
Neurobehavioural score 72h	r_s	-0.686	-0.612
	p	0.000	0.001
Length of hypoxia	r	-0.273	-0.216
	p	0.197	0.31
Time hypotensive	r	-0.028	-0.048
	p	0.898	0.822
End pH	r	-0.376	-0.510
	p	0.070	0.011
End ABE	r	-0.277	-0.378
	p	0.189	0.068
Period LAEEG	r	0.280	0.227
	p	0.195	0.298