Table S1. Behavior results of APP animals that were subjected to sepsis.

	Open Field Test												Novel Object Recognition Test			
	Speed (cm/s)				Distance (cm)				Time (s)				D2			
	Pre		5 Weeks		Pre		5 Weeks		Pre		5 Weeks		Pre		5 Weeks	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Early Sepsis	5.73	0.72	2.87	0.87	3240.80	578.34	1512.14	534.04	160.75	27.48	110.63	87.46	0.31	0.09	0.17	0.17
Late Sepsis	4.26	0.83	3.20	1.64	3101.23	330.75	2039.58	951.10	179.85	51.13	98.57	49.25	0.37	0.29	0.31	0.48
APP Sham	5.70	1.32	7.27	1.11	3325.93	782.28	3048.52	706.48	152.86	29.59	88.79	36.56	0.47	0.21	0.44	0.22
WT Sepsis	5.29	0.73	2.24	0.39	2944.35	459.23	1241.17	228.81	151.11	30.08	67.01	40.14	0.52	0.15	0.05	0.36
WT-Sham	5.01	1.02	4.88	0.72	2759.25	386.94	2860.51	582.90	162.04	36.14	137.11	26.52	0.54	0.15	0.465	0.12

Table S2. Signal areas measured in the cortex and hippocampus of APP mice that were subjected to sepsis.

		NeuN (%)		GFAP (%)		Iba1 (%)		Aβ (%)	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Cortex	Early Sepsis	7.04	1.73	1.94	1.11	1.22	0.80	0.36	0.17
	Late Sepsis	4.09	2.11	4.84	3.10	0.28	0.20	0.71	0.37
	APP Sham	6.69	1.25	2.77	0.47	1.31	0.15	0.29	0.23
	WT Sepsis	6.80	2.16	1.39	1.60	0.72	0.25	0	0
	WT-Sham	8.14	1.19	2.35	0.53	0.97	0.15	0	0
Hippocampus	Early Sepsis	5.22	1.20	2.87	1.11	1.02	0.90	0.12	0.09
	Late Sepsis	3.72	2.30	5.36	2.10	0.44	0.45	0.24	0.12
	APP Sham	3.80	0.43	3.60	0.58	1.06	0.54	0.28	0.13
	WT Sepsis	3.91	1.91	3.02	2.68	0.29	0.13	0	0
	WT-Sham	4.67	0.72	3.16	0.53	0.66	0.22	0	0

Table S3. AQP4 signal area around SMA+ vessels quantified within a certain distance from the target.

	Cortex					Hippocampus				
	50 µm	100 µm	150 µm	200 µm	250 µm	50 µm	100 µm	150 µm	200 µm	250 µm
APP-Sham vs. WT-Sepsis - #	0,8159	0,1191	<0,0001	0,0002	<0,0001	0,7495	0,9868	>0,9999	0,6216	0,1497
APP-Sham vs. EarlySepsis - $	0,8545	0,5295	<0,0001	0,0008	<0,0001	0,9496	0,7678	0,9748	0,9762	0,9675
APP-Sham vs. LateSepsis - &	0,8732	0,7226	0,6476	0,7484	0,7146	0,8324	0,5988	0,4178	0,2341	0,0474
WT-Sepsis vs. EarlySepsis - *	0,9993	0,7412	0,3303	0,9234	0,6684	0,9547	0,5518	0,9796	0,3366	0,04
WT-Sepsis vs. LateSepsis - ‡	0,9969	0,0041	<0,0001	0,0015	<0,0001	0,9944	0,3762	0,3997	0,938	0,9902
EarlySepsis vs. LateSepsis - ©	0,9998	0,0509	0,001	0,0061	0,0002	0,99	0,994	0,1593	0,0699	0,0072