

Low-intensity pulsed ultrasound stimulation (LIPUS) modulates microglial activation following intracortical microelectrode implantation.

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Supplementary Materials

Supplementary tables

Table 1: N and n for velocity of migrating microglia analysis (Figure 2)

Day	LIPUS N	Control N	LIPUS n	Control n
1	6	5	36	29
2	7	5	41	28
3	7	4	40	23
4	7	4	38	22
5	7	4	37	23
6	5	4	23	22
7	2	4	7	17

N = number of animals

n = number of cells

Table 2: N and n for microglial activation analysis (Figure 3)

Bin			0-50		50-100		100-150		150-200		200-250		250-300	
Day	LIPUS N	Control N	LIPUS n	Control n	LIPUS n	Control n	LIPUS n	Control n	LIPUS n	Control n	LIPUS n	Control n	LIPUS n	Control n
1	6	6	6	4	10	16	5	12	16	15	16	8	7	9
2	6	5	4	10	16	10	14	13	19	10	16	7	10	10
3	5	5	5	9	11	9	10	9	11	9	12	11	8	11
4	6	4	7	5	3	4	10	7	14	10	13	8	12	13
5	5	5	17	11	27	23	26	14	18	17	17	12	8	10
6	5	4	21	40	29	29	23	23	27	25	24	23	19	23
7	4	5	16	8	24	17	17	13	14	16	6	14	5	14

N = number of animals

n = number of cells

Table 3: N and n for microglia surveillance analysis (Figure 4)

Day	LIPUS N	Control N	LIPUS n	Control n
0	3	3	14	16
1	4	3	17	14
2	3	4	26	17
3	3	3	13	15
4	3	3	15	15
5	2	2	12	14
6	4	3	10	11
7	4	2	16	9

N = number of animals

n = number of cells

Table 4: N and n for microglial encapsulation analysis (Figure 5)

Day	LIPUS N	Control N
0	7	6
1	7	6
2	7	6
3	7	6
4	7	6
5	7	6
6	7	6
7	7	6
14	4	6
21	3	5
28	3	4

N = number of animals

n = number of cells

Table 5: N and n for vessel-associated microglia analysis (Figure 6)

Day	LIPUS N	Control N
1	7	5
2	6	6
3	6	6
4	7	6
5	7	5
6	7	6
7	6	6

N = number of animals

n = number of cells

Table 6: N and n for blood vessel analysis (Figure 7)

Day	LIPUS N	Control N	LIPUS n	Control n
0	3	4	7	5
1	3	4	7	5
2	3	4	7	5
3	3	4	7	5
4	3	4	7	5
5	3	4	7	5
6	3	4	7	5
7	3	4	7	5
14	3	4	7	5
21	3	4	7	5
28	3	4	7	5

N = number of animals

n = number of cells

Table 7: N and n for electrophysiology and immunohistochemistry analysis (Figure 8)

	Rats		Probe Shank	
	LIPUS N	Control N	LIPUS n	Control n
Ephys (d0-43)	4	4	10	9
GFAP (d43)	3	3	10	9
BDNF(d43)	3	3	10	9

N = number of animals

n = number of probe shanks quantified