

SUPPLEMENTAL DATA:

Treatment	saline			<i>S. epidermidis</i>			
	Time	2 hr	14 hr	48 hr	2 hr	14 hr	48 hr
IL-1α		57 ± 23	80 ± 45	75 ± 43	398 ± 182	1094 ± 643***	298 ± 125
IL-1β		844 ± 210	725 ± 89	767 ± 162	1462 ± 449	3115 ± 1533***	1361 ± 358
IL-2		38 ± 8	36 ± 8	46 ± 13	66 ± 17*	102 ± 25***	59 ± 18
IL-3		5 ± 7	6 ± 4	14 ± 11	29 ± 18	62 ± 34**	22 ± 8
IL-4		2 ± 0	2 ± 0	5 ± 6	17 ± 16	58 ± 38***	14 ± 12
IL-5		54 ± 32	45 ± 39	79 ± 61	304 ± 113**	474 ± 279***	76 ± 35
IL-6		19 ± 7	16 ± 4	17 ± 5	6978 ± 4218***	2663 ± 5574	160 ± 90
IL-9		440 ± 364	360 ± 204	650 ± 385	143 ± 254	611 ± 598	552 ± 526
IL-10		110 ± 31	114 ± 13	170 ± 53	344 ± 116	684 ± 396***	216 ± 64
IL-12 (p40)		419 ± 93	717 ± 226	821 ± 113	481 ± 88	572 ± 395	350 ± 71***
IL-12 (p70)		260 ± 84	230 ± 87	345 ± 160	1238 ± 471***	829 ± 835	347 ± 122
IL-13		354 ± 83	339 ± 74	369 ± 113	631 ± 202	1404 ± 439***	681 ± 215
IL-17		189 ± 63	179 ± 51	280 ± 114	516 ± 218***	227 ± 148	229 ± 84
Eotaxin		1923 ± 384	1870 ± 1340	1971 ± 483	3522 ± 1343*	5943 ± 1655***	2784 ± 563
G-CSF		78 ± 31	66 ± 23	73 ± 20	12668 ± 9805	4.4×10 ⁵ ± 3.6×10 ⁵ ***	41639 ± 32833
GM-CSF		438 ± 86	459 ± 63	413 ± 79	649 ± 110*	1007 ± 206***	499 ± 94
IFN-γ		44 ± 18	37 ± 7	51 ± 19	80 ± 29	196 ± 64***	83 ± 22
KC		113 ± 24	147 ± 24	123 ± 16	24049 ± 11582	26874 ± 50067	395 ± 269
MCP-1		709 ± 245	647 ± 120	774 ± 340	15237 ± 10276	35134 ± 73021	1732 ± 500
MIP-1α		19 ± 14	13 ± 8	21 ± 11	263 ± 169	1317 ± 2354	77 ± 48
MIP-1β		86 ± 35	59 ± 18	97 ± 34	424 ± 171	2480 ± 4374	203 ± 181
RANTES		25 ± 7	28 ± 9	32 ± 6	61 ± 15	152 ± 179*	29 ± 7
TNF-α		539 ± 140	448 ± 160	773 ± 307	622 ± 186	1505 ± 825***	959 ± 335

Table S1. Serum cytokine profile after injection of saline or bacteria. Postnatal day 4 mice were intraperitoneally injected with saline or 3.5×10^7 CFU of *S. epidermidis*. Selected data is plotted in Figure 1B. Data shows mean concentration of cytokines (pg/mL) ± SD (*P < 0.05, **P < 0.01, ***P < 0.001). Two-way ANOVA with Bonferroni post hoc test comparing between saline (n = 6) and *S. epidermidis* treated groups (n = 8) over time.

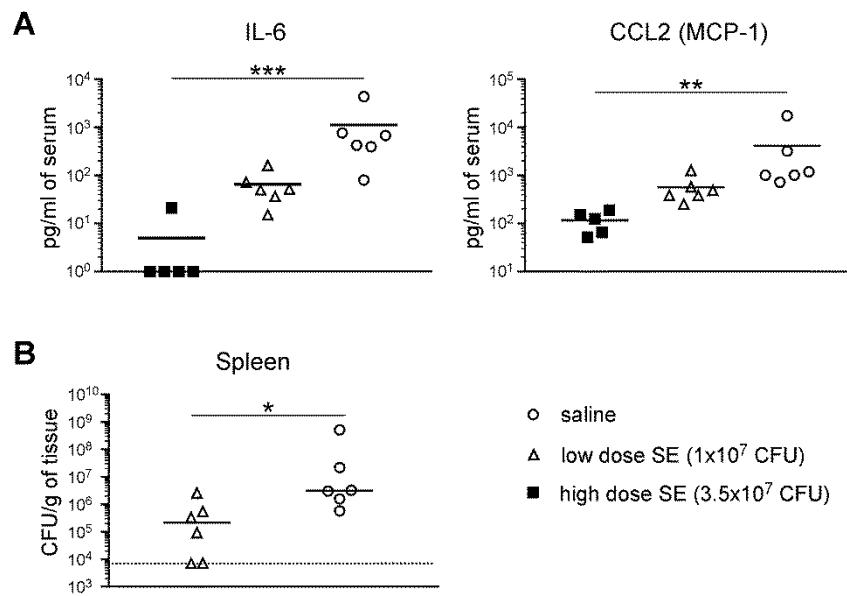


Figure S1: Serum cytokine production upon *S. epidermidis* infection is inoculum dose dependent. Mice injected intraperitoneally with saline, 1×10^7 or 3.5×10^7 CFU *S. epidermidis* (SE) at PND4 were sacrificed for peripheral blood cytokine analysis at 14 hours after infection. **(A)** IL-6 and MCP-1 ELISA of serum samples. Statistical analysis employed Kruskal-Wallis test with Bonferroni post hoc test (**P < 0.01; ***P < 0.001). **(B)** Bacterial cell counts in the spleen. Solid line depicts the median. Dotted line represents detection threshold. Statistical analysis employed Mann-Whitney U test (*P < 0.05). Data shown are pooled from two independent experiments.

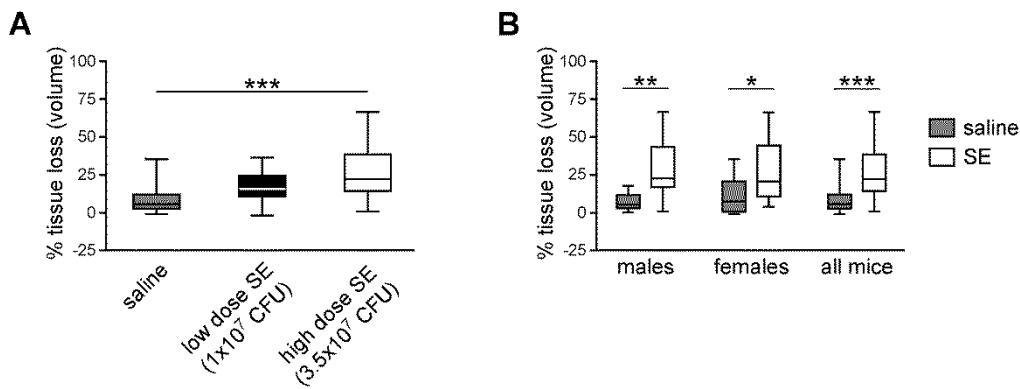


Figure S2: Bacterial infection potentiation of hypoxia-ischemia brain injury is unaffected by the sex of the animals, but is dependent on the bacterial inoculum dose. Hypoxia-ischemia was induced 14 hours after injection with saline or *S. epidermidis* (SE) into PND4 mice. Brains were harvested 9 days later (PND14), stained for microtubule-associated protein 2 (MAP-2) and analyzed for gray matter tissue loss. Box and whiskers plot with the box extending from the 25th to 75th percentiles and the median (line) is depicted. Whiskers indicates the minimum and maximum. **(A)** Area of gray matter tissue loss in the ipsilateral cerebral hemisphere of mice injected with high and low inoculum dose of bacteria (n = 23 saline; 12 low dose SE, 1.7×10^7 CFU; 23 high dose SE, 3.5×10^7 CFU). Statistical analysis employed the Kruskal-Wallis test with Dunn's Multiple Comparison *post hoc* test (**P < 0.001). **(B)** Area of gray matter tissue loss in the ipsilateral cerebral hemisphere comparing between male (n = 11 saline; 10 SE) and female mice (n = 12 saline; 13 SE, 3.5×10^7 CFU). Statistical analysis comparing mice in saline versus SE treatment groups employed the Mann-Whitney U test (*P < 0.05, **P < 0.01, ***P < 0.001). Two-way ANOVA comparing between male and female mice in the two treatment groups showed no statistical significance.