

Figure	n	Data structure	Test used	Statistic	P value
1A	Sham+WT=12 Sham+KO=10 TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	F (3, 42) = 203.4	Two-way repeated ANOVA, $p < 0.0001$ Tukey's multiple comparisons test: Pre: Sham+WT vs. Sham+KO: $p = 0.9997$, Sham+WT vs. TBI+WT: $p = 0.8449$, Sham+WT vs. TBI+KO: $p = 0.663$, Sham+KO vs. TBI+WT: $p = 0.754$, Sham+KO vs. TBI+KO: $p = 0.5619$, TBI+WT vs. TBI+KO: $p = 0.963$ 3d: Sham+WT vs. Sham+KO: $p = 0.1165$, Sham+WT vs. TBI+WT: $p < 0.0001$, Sham+WT vs. TBI+KO: $p < 0.0001$, Sham+KO vs. TBI+WT: $p < 0.0001$, Sham+KO vs. TBI+KO: $p < 0.0001$, TBI+WT vs. TBI+KO: $p = 0.0003$ 5d: Sham+WT vs. Sham+KO: $p = 0.9401$, Sham+WT vs. TBI+WT: $p < 0.0001$, Sham+WT vs. TBI+KO: $p < 0.0001$, Sham+KO vs. TBI+WT: $p < 0.0001$, Sham+KO vs. TBI+KO: $p < 0.0001$, TBI+WT vs. TBI+KO: $p = 0.4788$ 7d: Sham+WT vs. Sham+KO: $p > 0.9999$, Sham+WT vs. TBI+WT: $p < 0.0001$, Sham+WT vs. TBI+KO: $p < 0.0001$, Sham+KO vs. TBI+WT: $p < 0.0001$, Sham+KO vs. TBI+KO: $p < 0.0001$, TBI+WT vs. TBI+KO: $p = 0.0751$ 14d: Sham+WT vs. Sham+KO: $p = 0.9633$, Sham+WT vs. TBI+WT: $p < 0.0001$, Sham+WT vs. TBI+KO: $p < 0.0001$, Sham+KO vs. TBI+WT: $p < 0.0001$, Sham+KO vs. TBI+KO: $p < 0.0001$, TBI+WT vs. TBI+KO: $p = 0.0015$ 21d: Sham+WT vs. Sham+KO: $p = 0.175$, Sham+WT vs. TBI+WT: $p < 0.0001$, Sham+WT vs. TBI+KO: $p < 0.0001$, Sham+KO vs. TBI+WT: $p < 0.0001$, Sham+KO vs. TBI+KO: $p < 0.0001$, TBI+WT vs. TBI+KO: $p < 0.0001$ 28d: Sham+WT vs. Sham+KO: $p = 0.8003$, Sham+WT vs. TBI+WT: $p < 0.0001$, Sham+WT vs. TBI+KO: $p < 0.0001$, Sham+KO vs. TBI+WT: $p < 0.0001$, Sham+KO vs. TBI+KO: $p < 0.0001$, TBI+WT vs. TBI+KO: $p = 0.001$
1B	Sham+WT=12 Sham+KO=10 TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	F (3, 42) = 94.31	Two-way repeated ANOVA, $p < 0.0001$ Tukey's multiple comparisons test: Pre: Sham+WT vs. Sham+KO: $p = 0.4384$ Sham+WT vs. TBI+WT: $p = 0.4121$ Sham+WT vs. TBI+KO: $p = 0.5984$ Sham+KO vs. TBI+WT: $p = 0.9996$ Sham+KO vs. TBI+KO: $p = 0.9177$ TBI+WT vs. TBI+KO: $p = 0.932$ 3d: Sham+WT vs. Sham+KO: $p = 0.9413$ Sham+WT vs. TBI+WT: $p < 0.0001$ Sham+WT vs. TBI+KO: $p < 0.0001$ Sham+KO vs. TBI+WT: $p < 0.0001$ Sham+KO vs. TBI+KO: $p < 0.0001$ TBI+WT vs. TBI+KO: $p = 0.0053$

Figure	n	Data structure	Test used	Statistic	P value
					<p>5d: Sham+WT vs. Sham+KO: p=0.6383 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0009</p> <p>7d: Sham+WT vs. Sham+KO: p=0.8685 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0002 TBI+WT vs. TBI+KO: p=0.0014</p> <p>14d: Sham+WT vs. Sham+KO: p=0.8231 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0002 TBI+WT vs. TBI+KO: p=0.0402</p> <p>21d: Sham+WT vs. Sham+KO: p=0.789 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001</p> <p>28d: Sham+WT vs. Sham+KO: p=0.4226 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0005</p>
1C	Sham+WT=12 Sham+KO=10 TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	F (3, 42) = 195.5	<p>Two-way repeated ANOVA, p<0.0001</p> <p>Tukey's multiple comparisons test:</p> <p>Pre: Sham+WT vs. Sham+KO: p=0.3453 Sham+WT vs. TBI+WT: p=0.1904 Sham+WT vs. TBI+KO: p=0.5174 Sham+KO vs. TBI+WT: p=0.9935 Sham+KO vs. TBI+KO: p=0.8629 TBI+WT vs. TBI+KO: p=0.6454</p> <p>3d: Sham+WT vs. Sham+KO: p=0.9992 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0004</p> <p>5d: Sham+WT vs. Sham+KO: p=0.6538 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001</p> <p>7d: Sham+WT vs. Sham+KO: p=0.9961 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001</p> <p>14d: Sham+WT vs. Sham+KO: p=0.8735</p>

Figure	n	Data structure	Test used	Statistic	P value
					Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0008 21d: Sham+WT vs. Sham+KO: p=0.9813 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0001 28d: Sham+WT vs. Sham+KO: p=0.9404 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0033
1D	Sham+WT=12 Sham+KO=10 TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	F (3, 42) = 596.3	Two-way repeated ANOVA, p<0.0001 Tukey's multiple comparisons test: Pre: Sham+WT vs. Sham+KO: p=0.9012 Sham+WT vs. TBI+WT: p=0.9937 Sham+WT vs. TBI+KO: p=0.8869 Sham+KO vs. TBI+WT: p=0.763 Sham+KO vs. TBI+KO: p=0.9992 TBI+WT vs. TBI+KO: p=0.6705 3d: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0012 5d: Sham+WT vs. Sham+KO: p=0.744 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0031 7d: Sham+WT vs. Sham+KO: p=0.7984 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001 14d: Sham+WT vs. Sham+KO: p=0.8801 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001 21d: Sham+WT vs. Sham+KO: p=0.0373 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001 28d: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001

Figure	n	Data structure	Test used	Statistic	P value
					Sham+KO vs. TBI+KO: $p < 0.0001$ TBI+WT vs. TBI+KO: $p < 0.0001$
1E	Sham+WT=12 Sham+KO=10 TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	$F(3, 42) = 686.1$	Two-way repeated ANOVA, $p < 0.0001$ Tukey's multiple comparisons test: Pre: Sham+WT vs. Sham+KO: $p = 0.5639$ Sham+WT vs. TBI+WT: $p = 0.8745$ Sham+WT vs. TBI+KO: $p = 0.9975$ Sham+KO vs. TBI+WT: $p = 0.8665$ Sham+KO vs. TBI+KO: $p = 0.405$ TBI+WT vs. TBI+KO: $p = 0.7142$ 3d: Sham+WT vs. Sham+KO: $p = 0.0964$ Sham+WT vs. TBI+WT: $p < 0.0001$ Sham+WT vs. TBI+KO: $p < 0.0001$ Sham+KO vs. TBI+WT: $p < 0.0001$ Sham+KO vs. TBI+KO: $p < 0.0001$ TBI+WT vs. TBI+KO: $p = 0.0442$ 5d: Sham+WT vs. Sham+KO: $p = 0.3068$ Sham+WT vs. TBI+WT: $p < 0.0001$ Sham+WT vs. TBI+KO: $p < 0.0001$ Sham+KO vs. TBI+WT: $p < 0.0001$ Sham+KO vs. TBI+KO: $p < 0.0001$ TBI+WT vs. TBI+KO: $p = 0.0749$ 7d: Sham+WT vs. Sham+KO: $p = 0.1316$ Sham+WT vs. TBI+WT: $p < 0.0001$ Sham+WT vs. TBI+KO: $p < 0.0001$ Sham+KO vs. TBI+WT: $p < 0.0001$ Sham+KO vs. TBI+KO: $p < 0.0001$ TBI+WT vs. TBI+KO: $p < 0.0001$ 14d: Sham+WT vs. Sham+KO: $p > 0.9999$ Sham+WT vs. TBI+WT: $p < 0.0001$ Sham+WT vs. TBI+KO: $p < 0.0001$ Sham+KO vs. TBI+WT: $p < 0.0001$ Sham+KO vs. TBI+KO: $p < 0.0001$ TBI+WT vs. TBI+KO: $p = 0.006$ 21d: Sham+WT vs. Sham+KO: $p > 0.9999$ Sham+WT vs. TBI+WT: $p < 0.0001$ Sham+WT vs. TBI+KO: $p < 0.0001$ Sham+KO vs. TBI+WT: $p < 0.0001$ Sham+KO vs. TBI+KO: $p < 0.0001$ TBI+WT vs. TBI+KO: $p < 0.0001$ 28d: Sham+WT vs. Sham+KO: $p = 0.7855$ Sham+WT vs. TBI+WT: $p < 0.0001$ Sham+WT vs. TBI+KO: $p < 0.0001$ Sham+KO vs. TBI+WT: $p < 0.0001$ Sham+KO vs. TBI+KO: $p < 0.0001$ TBI+WT vs. TBI+KO: $p < 0.0001$
1G	Sham+WT=12 Sham+KO=10 TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	$F(3, 42) = 30.13$	Two-way repeated ANOVA, $p < 0.0001$ Tukey's multiple comparisons test: 23d: Sham+WT vs. Sham+KO: $p = 0.8881$ Sham+WT vs. TBI+WT: $p = 0.9635$ Sham+WT vs. TBI+KO: $p = 0.8362$ Sham+KO vs. TBI+WT: $p = 0.706$ Sham+KO vs. TBI+KO: $p = 0.5437$ TBI+WT vs. TBI+KO: $p = 0.9852$ 24d: Sham+WT vs. Sham+KO: $p = 0.9962$ Sham+WT vs. TBI+WT: $p = 0.0832$ Sham+WT vs. TBI+KO: $p = 0.976$ Sham+KO vs. TBI+WT: $p = 0.031$ Sham+KO vs. TBI+KO: $p = 0.8912$

Figure	n	Data structure	Test used	Statistic	P value
					TBI+WT vs. TBI+KO: p=0.1429 25d: Sham+WT vs. Sham+KO: p=0.9854 Sham+WT vs. TBI+WT: p=0.0027 Sham+WT vs. TBI+KO: p=0.2485 Sham+KO vs. TBI+WT: p=0.002 Sham+KO vs. TBI+KO: p=0.187 TBI+WT vs. TBI+KO: p=0.1582 26d: Sham+WT vs. Sham+KO: p=0.7178 Sham+WT vs. TBI+WT: p=0.0009 Sham+WT vs. TBI+KO: p=0.4755 Sham+KO vs. TBI+WT: p=0.0002 Sham+KO vs. TBI+KO: p=0.1144 TBI+WT vs. TBI+KO: p=0.0063 27d: Sham+WT vs. Sham+KO: p=0.8918 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0028 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0308 TBI+WT vs. TBI+KO: p<0.0001
1H	Sham+WT=12 Sham+KO=10 TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 42) = 12.54	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.5536 Sham+WT vs. TBI+WT: p=0.0003 Sham+WT vs. TBI+KO: p=0.9989 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.4683 TBI+WT vs. TBI+KO: p=0.0005
1I	Sham+WT=12 Sham+KO=10 TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 42) = 1.200	One-way ANOVA, p=0.3213 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p=0.3528 Sham+WT vs. TBI+KO: p=0.961 Sham+KO vs. TBI+WT: p=0.3992 Sham+KO vs. TBI+KO: p=0.9676 TBI+WT vs. TBI+KO: p=0.6432
1K	Sham+WT=12 Sham+KO=10 TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	Kruskal-Wallis test. Dunn's multiple comparisons test.	Kruskal-Wallis statistic = 23.80	Kruskal-Wallis test, p<0.0001 Dunn's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p=0.001 Sham+WT vs. TBI+KO: p>0.9999 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.5257 TBI+WT vs. TBI+KO: p=0.0201
2B	TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	Unpaired t test	t=2.348, df=22	TBI+WT vs. TBI+KO: p=0.0283
2C	TBI+WT=12 TBI+KO=12	Normal distribution, homogeneity variances	Unpaired t test	t=1.055, df=22 t=1.274, df=22 t=1.087, df=22 t=2.330, df=22 t=1.529, df=22 t=2.983, df=22	TBI+WT vs. TBI+KO Slice 1: p=0.3031 TBI+WT vs. TBI+KO Slice 2: p=0.2160 TBI+WT vs. TBI+KO Slice 3: p=0.2888 TBI+WT vs. TBI+KO Slice 4: p=0.0294 TBI+WT vs. TBI+KO Slice 5: p=0.1404 TBI+WT vs. TBI+KO Slice 6: p=0.0069
2F	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 102.9	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9998 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0002
2G	Sham+WT=6 Sham+KO=6 TBI+WT=6	Normal distribution, homogeneity	One-way ANOVA, Tukey	F (3, 20) = 17.20	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test:

Figure	n	Data structure	Test used	Statistic	P value
	TBI+KO=6	variances	multiple comparisons test		Sham+WT vs. Sham+KO: p=0.7326 Sham+WT vs. TBI+WT: p=0.0001 Sham+WT vs. TBI+KO: p=0.0713 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0079 TBI+WT vs. TBI+KO: p=0.0405
2H	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 2.082	One-way ANOVA, p= 0.1347 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.7447 Sham+WT vs. TBI+WT: p=0.1574 Sham+WT vs. TBI+KO: p=0.2086 Sham+KO vs. TBI+WT: p=0.6408 Sham+KO vs. TBI+KO: p=0.7375 TBI+WT vs. TBI+KO: p=0.9984
2J	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 19.23	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9994 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0129 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0099 TBI+WT vs. TBI+KO: p=0.0385
2K	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 73.23	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9942 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0001
2L	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 1.510	One-way ANOVA, p=0.2425 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.6022 Sham+WT vs. TBI+WT: p=0.9905 Sham+WT vs. TBI+KO: p=0.8608 Sham+KO vs. TBI+WT: p=0.4278 Sham+KO vs. TBI+KO: p=0.2083 TBI+WT vs. TBI+KO: p=0.9613
3C	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey	F (3, 20) = 269.4	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.0729 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p=0.0018
3D	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 45.91	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9421 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0006 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0002 TBI+WT vs. TBI+KO: p=0.0005
3E	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 55.27	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9572 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0231 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0659 TBI+WT vs. TBI+KO: p<0.0001

Figure	n	Data structure	Test used	Statistic	P value
3G	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 35.74	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9628 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0006 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0019 TBI+WT vs. TBI+KO: p=0.002
3H	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 37.51	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.498 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.003 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0671 TBI+WT vs. TBI+KO: p=<0.0001
3I	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 35.16	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.3926 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0008 TBI+WT vs. TBI+KO: p=0.0459
3J	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 39.82	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.8951 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.4235 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.1414 TBI+WT vs. TBI+KO: p=<0.0001
3K	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 39.51	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9533 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.9177 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.658 TBI+WT vs. TBI+KO: p=<0.0001
3L	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 19.82	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9134 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.1835 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0537 TBI+WT vs. TBI+KO: p=0.0022
3O	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 116.5	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.8034 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001
3P	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 59.00	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.5602 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p0.0011

Figure	n	Data structure	Test used	Statistic	P value
					TBI+WT vs. TBI+KO: p<0.0001
3Q	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 4.120	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9988 Sham+WT vs. TBI+WT: p=0.0361 Sham+WT vs. TBI+KO: p=0.6427 Sham+KO vs. TBI+WT: p=0.0264 Sham+KO vs. TBI+KO: p=0.5535 TBI+WT vs. TBI+KO: p=0.3156
4D	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 107.3	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001
4E	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 102.3	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0002 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0002 TBI+WT vs. TBI+KO: p<0.0001
4F	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 102.8	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001
4I	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 176.8	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001
4J	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 286.4	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001
4M	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 523.3	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001
4N	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 166.0	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001

Figure	n	Data structure	Test used	Statistic	P value
					Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001
5A	Sham+control=10 Sham+antagomir=10 TBI+control=10 TBI+antagomir=10	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	F (3, 36) = 185.0	Two-way repeated ANOVA, p<0.0001 Tukey's multiple comparisons test: Pre: Sham+control vs. Sham+antagomir: p=0.4362 Sham+control vs. TBI+control: p>0.9999 Sham+control vs. TBI+antagomir: p>0.9999 Sham+antagomir vs. TBI+control: p=0.507 Sham+antagomir vs. TBI+antagomir: p=0.4791 TBI+control vs. TBI+antagomir: p=0.9997 3d: Sham+control vs. Sham+antagomir: p=0.9831 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0003 5d: Sham+control vs. Sham+antagomir: p=0.3015 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0003 7d: Sham+control vs. Sham+antagomir: p=0.9592 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0057 14d: Sham+control vs. Sham+antagomir: p=0.4445 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0088 21d: Sham+control vs. Sham+antagomir: p=0.9863 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0031 28d: Sham+control vs. Sham+antagomir: p=0.9894 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0014
5B	Sham+control=10 Sham+antagomir=10 TBI+control=10 TBI+antagomir=10	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	F (3, 36) = 540.2	Two-way repeated ANOVA, p<0.0001 Tukey's multiple comparisons test: Pre: Sham+control vs. Sham+antagomir: p=0.8123 Sham+control vs. TBI+control: p=0.3724 Sham+control vs. TBI+antagomir: p=0.667 Sham+antagomir vs. TBI+control: p=0.9004 Sham+antagomir vs. TBI+antagomir: p=0.9988 TBI+control vs. TBI+antagomir: p=0.9277 3d: Sham+control vs. Sham+antagomir: p=0.9256 Sham+control vs. TBI+control: p<0.0001

Figure	n	Data structure	Test used	Statistic	P value
					<p>Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001</p> <p>5d: Sham+control vs. Sham+antagomir: p=0.9904 Sham+control vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001</p> <p>7d: Sham+control vs. Sham+antagomir: p=0.9993 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001</p> <p>14d: Sham+control vs. Sham+antagomir: p=0.9059 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001</p> <p>21d: Sham+control vs. Sham+antagomir: p=0.9156 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0009</p> <p>28d: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0005</p>
5C	Sham+control=10 Sham+antagomir=10 TBI+control=10 TBI+antagomir=10	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	F (3, 36) = 574.6	<p>Two-way repeated ANOVA, p<0.0001</p> <p>Tukey's multiple comparisons test:</p> <p>Pre: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p=0.9532 Sham+control vs. TBI+antagomir: p>0.9999 Sham+antagomir vs. TBI+control: p=0.9102 Sham+antagomir vs. TBI+antagomir: p>0.9999 TBI+control vs. TBI+antagomir: p=0.9103</p> <p>3d: Sham+control vs. Sham+antagomir: p=0.828 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001</p> <p>5d: Sham+control vs. Sham+antagomir: p=0.5959 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001</p> <p>7d: Sham+control vs. Sham+antagomir: p=0.6212 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001</p>

Figure	n	Data structure	Test used	Statistic	P value
					<p>TBI+control vs. TBI+antagomir: $p<0.0001$</p> <p>14d: Sham+control vs. Sham+antagomir: $p=0.5845$ Sham+control vs. TBI+control: $p<0.0001$ Sham+control vs. TBI+antagomir: $p<0.0001$ Sham+antagomir vs. TBI+control: $p<0.0001$ Sham+antagomir vs. TBI+antagomir: $p<0.0001$ TBI+control vs. TBI+antagomir: $p=0.0001$</p> <p>21d: Sham+control vs. Sham+antagomir: $p=0.8475$ Sham+control vs. TBI+control: $p<0.0001$ Sham+control vs. TBI+antagomir: $p<0.0001$ Sham+antagomir vs. TBI+control: $p<0.0001$ Sham+antagomir vs. TBI+antagomir: $p<0.0001$ TBI+control vs. TBI+antagomir: $p=0.0002$</p> <p>28d: Sham+control vs. Sham+antagomir: $p=0.946$ Sham+control vs. TBI+control: $p<0.0001$ Sham+control vs. TBI+antagomir: $p<0.0001$ Sham+antagomir vs. TBI+control: $p<0.0001$ Sham+antagomir vs. TBI+antagomir: $p<0.0001$ TBI+control vs. TBI+antagomir: $p<0.0001$</p>
5D	Sham+control=10 Sham+antagomir=10 TBI+control=10 TBI+antagomir=10	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	$F(3, 36) = 955.2$	<p>Two-way repeated ANOVA, $p<0.0001$</p> <p>Tukey's multiple comparisons test:</p> <p>Pre: Sham+control vs. Sham+antagomir: $p=0.9076$ Sham+control vs. TBI+control: $p>0.9999$ Sham+control vs. TBI+antagomir: $p=0.7505$ Sham+antagomir vs. TBI+control: $p=0.8624$ Sham+antagomir vs. TBI+antagomir: $p=0.9846$ TBI+control vs. TBI+antagomir: $p=0.6602$</p> <p>3d: Sham+control vs. Sham+antagomir: $p>0.9999$ Sham+control vs. TBI+control: $p<0.0001$ Sham+control vs. TBI+antagomir: $p<0.0001$ Sham+antagomir vs. TBI+control: $p<0.0001$ Sham+antagomir vs. TBI+antagomir: $p<0.0001$ TBI+control vs. TBI+antagomir: $p=0.0161$</p> <p>5d: Sham+control vs. Sham+antagomir: $p=0.3139$ Sham+control vs. TBI+control: $p<0.0001$ Sham+control vs. TBI+antagomir: $p<0.0001$ Sham+antagomir vs. TBI+control: $p<0.0001$ Sham+antagomir vs. TBI+antagomir: $p<0.0001$ TBI+control vs. TBI+antagomir: $p=0.0009$</p> <p>7d: Sham+control vs. Sham+antagomir: $p=0.6088$ Sham+control vs. TBI+control: $p<0.0001$ Sham+control vs. TBI+antagomir: $p<0.0001$ Sham+antagomir vs. TBI+control: $p<0.0001$ Sham+antagomir vs. TBI+antagomir: $p<0.0001$ TBI+control vs. TBI+antagomir: $p=0.0019$</p> <p>14d: Sham+control vs. Sham+antagomir: $p=0.7498$ Sham+control vs. TBI+control: $p<0.0001$ Sham+control vs. TBI+antagomir: $p<0.0001$ Sham+antagomir vs. TBI+control: $p<0.0001$ Sham+antagomir vs. TBI+antagomir: $p<0.0001$ TBI+control vs. TBI+antagomir: $p=0.0002$</p> <p>21d: Sham+control vs. Sham+antagomir: $p=0.9937$ Sham+control vs. TBI+control: $p<0.0001$ Sham+control vs. TBI+antagomir: $p<0.0001$ Sham+antagomir vs. TBI+control: $p<0.0001$ Sham+antagomir vs. TBI+antagomir: $p<0.0001$ TBI+control vs. TBI+antagomir: $p<0.0001$</p> <p>28d:</p>

Figure	n	Data structure	Test used	Statistic	P value
					Sham+control vs. Sham+antagomir: p=0.7877 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
5E	Sham+control=10 Sham+antagomir=10 TBI+control=10 TBI+antagomir=10	Normal distribution, homogeneity variances n	Two-way repeated ANOVA, Tukey multiple comparisons test	F (3, 36) = 813.1	Two-way repeated ANOVA, p<0.0001 Tukey's multiple comparisons test: Pre: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p=0.6688 Sham+control vs. TBI+antagomir: p=0.5535 Sham+antagomir vs. TBI+control: p=0.8379 Sham+antagomir vs. TBI+antagomir: p=0.754 TBI+control vs. TBI+antagomir: p=0.9964 3d: Sham+control vs. Sham+antagomir: p=0.6525 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0013 5d: Sham+control vs. Sham+antagomir: p=0.6765 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0083 7d: Sham+control vs. Sham+antagomir: p=0.9421 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0302 14d: Sham+control vs. Sham+antagomir: p=0.7063 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0004 21d: Sham+control vs. Sham+antagomir: p=0.9938 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0005 28d: Sham+control vs. Sham+antagomir: p=0.8951 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
5G	Sham+control=10 Sham+antagomir=10 TBI+control=10 TBI+antagomir=10	Normal distribution, homogeneity variances	Two-way repeated ANOVA, Tukey multiple comparisons test	F (3, 36) = 51.17	Two-way repeated ANOVA, p<0.0001 Tukey's multiple comparisons test: 22d: Sham+control vs. Sham+antagomir: p=0.8242 Sham+control vs. TBI+control: p=0.1248 Sham+control vs. TBI+antagomir: p=0.9998 Sham+antagomir vs. TBI+control: p=0.0591 Sham+antagomir vs. TBI+antagomir: p=0.8739 TBI+control vs. TBI+antagomir: p=0.1509 33d:

Figure	n	Data structure	Test used	Statistic	P value
					<p>Sham+control vs. Sham+antagomir: p=0.9996 Sham+control vs. TBI+control: p=0.0001 Sham+control vs. TBI+antagomir: p=0.1825 Sham+antagomir vs. TBI+control: p=0.0017 Sham+antagomir vs. TBI+antagomir: p=0.2739 TBI+control vs. TBI+antagomir: p=0.006</p> <p>24d: Sham+control vs. Sham+antagomir: p=0.4085 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.2019 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.0276 TBI+control vs. TBI+antagomir: p=0.0005</p> <p>25d: Sham+control vs. Sham+antagomir: p=0.9992 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.5635 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.5211 TBI+control vs. TBI+antagomir: p=0.0005</p> <p>26d: Sham+control vs. Sham+antagomir: p=0.2193 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.2345 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.009 TBI+control vs. TBI+antagomir: p<0.0001</p>
5H	Sham+control=10 Sham+antagomir=10 TBI+control=10 TBI+antagomir=10	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 36) = 18.25	<p>One-way ANOVA, p<0.0001</p> <p>Tukey's multiple comparisons test:</p> <p>Sham+control vs. Sham+antagomir: p=0.9306 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.0383 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.1412 TBI+control vs. TBI+antagomir: p=0.0024</p>
5I	Sham+control=10 Sham+antagomir=10 TBI+control=10 TBI+antagomir=10	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 36) = 1.243	<p>One-way ANOVA, p=0.3086</p> <p>Tukey's multiple comparisons test:</p> <p>Sham+control vs. Sham+antagomir: p=0.3278 Sham+control vs. TBI+control: p=0.992 Sham+control vs. TBI+antagomir: p=0.6745 Sham+antagomir vs. TBI+control: p=0.484 Sham+antagomir vs. TBI+antagomir: p=0.9337 TBI+control vs. TBI+antagomir: p=0.8319</p>
5K	Sham+control=10 Sham+antagomir=10 TBI+control=10 TBI+antagomir=10	Non-normal distribution	Kruskal-Wallis test. Dunn's multiple comparisons test.	Kruskal-Wallis statistic = 22.56	<p>Kruskal-Wallis test, p<0.0001</p> <p>Dunn's multiple comparisons test:</p> <p>Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p=0.0004 Sham+control vs. TBI+antagomir: p>0.9999 Sham+antagomir vs. TBI+control: p=0.0003 Sham+antagomir vs. TBI+antagomir: p>0.9999 TBI+control vs. TBI+antagomir: p=0.0039</p>
5M	TBI+control=10 TBI+antagomir=10	Normal distribution	Unpaired t test	t=3.027, df=18	TBI+control vs. TBI+antagomir: p=0.0073
5O	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 94.31	<p>One-way ANOVA, p<0.0001</p> <p>Tukey's multiple comparisons test:</p> <p>Sham+control vs. Sham+antagomir: p=0.9915 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001</p>
5P	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 30.49	<p>One-way ANOVA, p<0.0001</p> <p>Tukey's multiple comparisons test:</p> <p>Sham+control vs. Sham+antagomir: p=0.9725 Sham+control vs. TBI+control: p<0.0001</p>

Figure	n	Data structure	Test used	Statistic	P value
					Sham+control vs. TBI+antagomir: p=0.0007 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.0003 TBI+control vs. TBI+antagomir: p=0.0356
5Q	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 1.209	One-way ANOVA, p= 0.3320 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9807 Sham+control vs. TBI+control: p=0.5685 Sham+control vs. TBI+antagomir: p=0.9935 Sham+antagomir vs. TBI+control: p=0.3552 Sham+antagomir vs. TBI+antagomir: p=0.9994 TBI+control vs. TBI+antagomir: p=0.4172
6C	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 85.56	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.7345 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
6D	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 174.5	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9991 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
6E	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 65.39	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9992 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.0001 TBI+control vs. TBI+antagomir: p<0.0001
6G	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 59.54	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.7487 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0029
6H	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 87.53	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.8284 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
6I	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 33.79	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9996 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.0235 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.0292 TBI+control vs. TBI+antagomir: p<0.0001
6J	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple	F (3, 20) = 49.58	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test:

Figure	n	Data structure	Test used	Statistic	P value
			comparisons test		Sham+control vs. Sham+antagomir: p=0.9989 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.001
6K	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 9.988	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9997 Sham+control vs. TBI+control: p=0.0006 Sham+control vs. TBI+antagomir: p=0.539 Sham+antagomir vs. TBI+control: p=0.0008 Sham+antagomir vs. TBI+antagomir: p=0.5942 TBI+control vs. TBI+antagomir: p=0.0133
6L	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 78.28	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9701 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.0285 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.071 TBI+control vs. TBI+antagomir: p<0.0001
6N	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 103.7	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.6795 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p=0.0002
6O	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 75.36	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.915 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
6P	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 3.595	One-way ANOVA, p=0.0316 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9999 Sham+control vs. TBI+control: p=0.0875 Sham+control vs. TBI+antagomir: p=0.1659 Sham+antagomir vs. TBI+control: p=0.1001 Sham+antagomir vs. TBI+antagomir: p=0.1872 TBI+control vs. TBI+antagomir: p=0.9852
7D	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 137.1	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
7E	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 161.1	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9315 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
7F	Sham+control=6 Sham+antagomir=6	Normal distribution,	One-way ANOVA,	F (3, 20) = 125.3	One-way ANOVA, p<0.0001

Figure	n	Data structure	Test used	Statistic	P value
	TBI+control=6 TBI+antagomir=6	homogeneity variances	Tukey multiple comparisons test		Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.999 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
7I	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 408.1	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
7J	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 173.9	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
7M	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 303.9	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
7N	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 545.1	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
8C: BLC	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Non-normal distribution	Kruskal- Wallis test, Dunn's multiple comparisons test	Kruskal-Wallis statistic=10.92	Kruskal-Wallis test, p=0.0017 Dunn's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p=0.0856 Sham+WT vs. TBI+KO: p>0.9999 Sham+KO vs. TBI+WT: p=0.0109 Sham+KO vs. TBI+KO: p=0.7133 TBI+WT vs. TBI+KO: p=0.7133
8C: CD30L	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 19.71	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9636 Sham+WT vs. TBI+WT: p=0.0001 Sham+WT vs. TBI+KO: p=0.6262 Sham+KO vs. TBI+WT: p=0.0002 Sham+KO vs. TBI+KO: p=0.8759 TBI+WT vs. TBI+KO: p=0.0006
8C: Eotaxin	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 14.39	One-way ANOVA, p=0.0003 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9104 Sham+WT vs. TBI+WT: p=0.0009 Sham+WT vs. TBI+KO: p=0.2981 Sham+KO vs. TBI+WT: p=0.0003 Sham+KO vs. TBI+KO: p=0.1087

Figure	n	Data structure	Test used	Statistic	P value
					TBI+WT vs. TBI+KO: p=0.0208
8C: Eotaxin-2	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 38.59	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9985 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.1185 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.1527 TBI+WT vs. TBI+KO: p=<0.0001
8C: Fas ligand	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Non-normal distribution	Kruskal-Wallis test, Dunn's multiple comparisons test	Kruskal-Wallis statistic=8.890	Kruskal-Wallis test, p=0.0144 Dunn's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p=0.1876 Sham+WT vs. TBI+KO: p>0.9999 Sham+KO vs. TBI+WT: p=0.036 Sham+KO vs. TBI+KO: p>0.9999 TBI+WT vs. TBI+KO: p=0.1554
8C: Fractalkine	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 2.470	One-way ANOVA, p=0.1119 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9998 Sham+WT vs. TBI+WT: p=0.2293 Sham+WT vs. TBI+KO: p=0.9624 Sham+KO vs. TBI+WT: p=0.2575 Sham+KO vs. TBI+KO: p=0.9425 TBI+WT vs. TBI+KO: p=0.1082
8C: G-CSF	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, heterogeneous variances	Welch's ANOVA test, Dunnett's T3 multiple comparisons test	W (3,000, 7.152) = 199.8	Welch's ANOVA test, p<0.0001 Dunnett's T3 multiple comparisons test: Sham+WT vs. Sham+KO: p=0.1647 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.5025 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.1542 TBI+WT vs. TBI+KO: p=0.0049
8C: GM-CSF	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 23.27	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.7327 Sham+WT vs. TBI+WT: p=0.0001 Sham+WT vs. TBI+KO: p=0.5364 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.1277 TBI+WT vs. TBI+KO: p=0.001
8C: IFN- γ	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 7.198	One-way ANOVA, p=0.0051 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9986 Sham+WT vs. TBI+WT: p=0.0668 Sham+WT vs. TBI+KO: p=0.3341 Sham+KO vs. TBI+WT: p=0.0511 Sham+KO vs. TBI+KO: p=0.4087 TBI+WT vs. TBI+KO: p=0.0031
8C: IL1- α	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Non-normal distribution	Kruskal-Wallis test, Dunn's multiple comparisons test	Kruskal-Wallis statistic=11.93	Kruskal-Wallis test, p=0.0003 Dunn's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p=0.0227 Sham+WT vs. TBI+KO: p=0.0561 Sham+KO vs. TBI+WT: p=0.1876 Sham+KO vs. TBI+KO: p=0.3803 TBI+WT vs. TBI+KO: p>0.9999

Figure	n	Data structure	Test used	Statistic	P value
8D: IL1-β	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 10.51	One-way ANOVA, p=0.0011 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9972 Sham+WT vs. TBI+WT: p=0.002 Sham+WT vs. TBI+KO: p=0.9005 Sham+KO vs. TBI+WT: p=0.0027 Sham+KO vs. TBI+KO: p=0.9599 TBI+WT vs. TBI+KO: p=0.0063
8D: IL2	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 10.21	One-way ANOVA, p=0.0013 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9814 Sham+WT vs. TBI+WT: p=0.0091 Sham+WT vs. TBI+KO: p=0.7034 Sham+KO vs. TBI+WT: p=0.0048 Sham+KO vs. TBI+KO: p=0.8895 TBI+WT vs. TBI+KO: p=0.0014
8D: IL3	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 24.45	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9555 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.472 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.7618 TBI+WT vs. TBI+KO: p=0.0003
8D: IL4	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 0.477	One-way ANOVA, p=.07040 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.7105 Sham+WT vs. TBI+WT: p=0.9997 Sham+WT vs. TBI+KO: p=0.9885 Sham+KO vs. TBI+WT: p=0.7598 Sham+KO vs. TBI+KO: p=0.8712 TBI+WT vs. TBI+KO: p=0.9956
8D: IL6	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 16.63	One-way ANOVA, p=0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.1166 Sham+WT vs. TBI+WT: p=0.004 Sham+WT vs. TBI+KO: p=0.4598 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0085 TBI+WT vs. TBI+KO: p=0.0552
8D: IL9	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 41.07	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.816 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0071 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0016 TBI+WT vs. TBI+KO: p=0.0016
8D: IL10	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 19.95	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.2647 Sham+WT vs. TBI+WT: p=0.0007 Sham+WT vs. TBI+KO: p=0.7422 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0513 TBI+WT vs. TBI+KO: p=0.0035

Figure	n	Data structure	Test used	Statistic	P value
8D: IL12-p40/p70	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 16.88	One-way ANOVA, p=0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.2123 Sham+WT vs. TBI+WT: p=0.0024 Sham+WT vs. TBI+KO: p=0.9917 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.3186 TBI+WT vs. TBI+KO: p=0.0015
8D: IL12-p70	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 1.923	One-way ANOVA, p=0.1797 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9765 Sham+WT vs. TBI+WT: p=0.3465 Sham+WT vs. TBI+KO: p=0.7169 Sham+KO vs. TBI+WT: p=0.1941 Sham+KO vs. TBI+KO: p=0.4843 TBI+WT vs. TBI+KO: p=0.904
8D: IL13	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 14.29	One-way ANOVA, p=0.0003 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9745 Sham+WT vs. TBI+WT: p=0.0004 Sham+WT vs. TBI+KO: p=0.1627 Sham+KO vs. TBI+WT: p=0.0007 Sham+KO vs. TBI+KO: p=0.302 TBI+WT vs. TBI+KO: p=0.0164
8E: IL17	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Non-normal distribution	Kruskal-Wallis test, Dunn's multiple comparisons test	Kruskal-Wallis statistic=10.68	Kruskal-Wallis test, p=0.0023 Dunn's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.8249 Sham+WT vs. TBI+WT: p=0.6139 Sham+WT vs. TBI+KO: p>0.9999 Sham+KO vs. TBI+WT: p=0.0109 Sham+KO vs. TBI+KO: p>0.9999 TBI+WT vs. TBI+KO: p=0.1049
8E: I-TAC	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Non-normal distribution	Kruskal-Wallis test, Dunn's multiple comparisons test	Kruskal-Wallis statistic=10.15	Kruskal-Wallis test, p=0.0041 Dunn's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p>0.9999 Sham+WT vs. TBI+KO: p0.6139 Sham+KO vs. TBI+WT: p0.0694 Sham+KO vs. TBI+KO: p>0.9999 TBI+WT vs. TBI+KO: p=0.0286
8E: KC	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 8.836	One-way ANOVA, p=0.0023 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.38 Sham+WT vs. TBI+WT: p=0.0284 Sham+WT vs. TBI+KO: p=0.9927 Sham+KO vs. TBI+WT: p=0.0016 Sham+KO vs. TBI+KO: p=0.5235 TBI+WT vs. TBI+KO: p=0.0177
8E: Leptin	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 13.21	One-way ANOVA, p=0.0004 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.3755 Sham+WT vs. TBI+WT: p=0.0042 Sham+WT vs. TBI+KO: p=0.971 Sham+KO vs. TBI+WT: p=0.0003 Sham+KO vs. TBI+KO: p=0.2033 TBI+WT vs. TBI+KO: p=0.0089

Figure	n	Data structure	Test used	Statistic	P value
8E: LIX	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 11.50	One-way ANOVA, p=0.0008 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.7412 Sham+WT vs. TBI+WT: p=0.004 Sham+WT vs. TBI+KO: p=0.0023 Sham+KO vs. TBI+WT: p=0.0235 Sham+KO vs. TBI+KO: p=0.0129 TBI+WT vs. TBI+KO: p=0.9858
8E: Lymphotactin	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 7.926	One-way ANOVA, p=0.0035 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.4125 Sham+WT vs. TBI+WT: p=0.051 Sham+WT vs. TBI+KO: p=0.3626 Sham+KO vs. TBI+WT: p=0.0032 Sham+KO vs. TBI+KO: p=0.0276 TBI+WT vs. TBI+KO: p=0.6082
8E: MCP-1	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Non-normal distribution	Kruskal-Wallis test, Dunn's multiple comparisons test	Kruskal-Wallis statistic=12.90	Kruskal-Wallis test, p<0.0001 Dunn's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p=0.0084 Sham+WT vs. TBI+KO: p=0.2697 Sham+KO vs. TBI+WT: p=0.036 Sham+KO vs. TBI+KO: p=0.7133 TBI+WT vs. TBI+KO: p>0.9999
8E: M-CSF	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 5.607	One-way ANOVA, p=0.0122 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9273 Sham+WT vs. TBI+WT: p=0.0301 Sham+WT vs. TBI+KO: p=0.0414 Sham+KO vs. TBI+WT: p=0.0858 Sham+KO vs. TBI+KO: p=0.1163 TBI+WT vs. TBI+KO: p=0.9977
8E: MIG	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 7.466	One-way ANOVA, p=0.0044 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.3492 Sham+WT vs. TBI+WT: p=0.1042 Sham+WT vs. TBI+KO: p=0.5475 Sham+KO vs. TBI+WT: p=0.0052 Sham+KO vs. TBI+KO: p=0.9807 TBI+WT vs. TBI+KO: p=0.01
8E: MIP-1 α	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 79.74	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.0129 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.9375 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0354 TBI+WT vs. TBI+KO: p<0.0001
8F: MIP-1 γ	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 112.1	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.3092 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0017 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0001 TBI+WT vs. TBI+KO: p<0.0001
8F: RANTES	Sham+WT=4 Sham+KO=4	Normal distribution,	One-way ANOVA,	F (3, 12) = 6.697	One-way ANOVA, p=0.0066

Figure	n	Data structure	Test used	Statistic	P value
	TBI+WT=4 TBI+KO=4	homogeneity variances	Tukey multiple comparisons test		Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9341 Sham+WT vs. TBI+WT: p=0.019 Sham+WT vs. TBI+KO: p=0.5016 Sham+KO vs. TBI+WT: p=0.0068 Sham+KO vs. TBI+KO: p=0.2327 TBI+WT vs. TBI+KO: p=0.2121
8F: SDF-1	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 11.50	One-way ANOVA, p=0.0008 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.324 Sham+WT vs. TBI+WT: p=0.0092 Sham+WT vs. TBI+KO: p=0.9811 Sham+KO vs. TBI+WT: p=0.0005 Sham+KO vs. TBI+KO: p=0.188 TBI+WT vs. TBI+KO: p=0.0178
8F: TCA-3	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 5.317	One-way ANOVA, p=0.0146 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.6914 Sham+WT vs. TBI+WT: p=0.0708 Sham+WT vs. TBI+KO: p=0.0158 Sham+KO vs. TBI+WT: p=0.3856 Sham+KO vs. TBI+KO: p=0.1067 TBI+WT vs. TBI+KO: p=0.8233
8F: TECK	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 8.113	One-way ANOVA, p=0.0032 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.7941 Sham+WT vs. TBI+WT: p=0.0131 Sham+WT vs. TBI+KO: p=0.8501 Sham+KO vs. TBI+WT: p=0.0027 Sham+KO vs. TBI+KO: p=0.3521 TBI+WT vs. TBI+KO: p=0.0537
8F: TIMP1	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 2.161	One-way ANOVA, p=0.1457 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.1119 Sham+WT vs. TBI+WT: p=0.8533 Sham+WT vs. TBI+KO: p=0.7329 Sham+KO vs. TBI+WT: p=0.3687 Sham+KO vs. TBI+KO: p=0.4907 TBI+WT vs. TBI+KO: p=0.9951
8F: TIMP2	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 4.244	One-way ANOVA, p=0.0292 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.2421 Sham+WT vs. TBI+WT: p=0.5645 Sham+WT vs. TBI+KO: p=0.618 Sham+KO vs. TBI+WT: p=0.0269 Sham+KO vs. TBI+KO: p=0.8697 TBI+WT vs. TBI+KO: p=0.0998
8F: TNF- α	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 6.464	One-way ANOVA, p=0.0075 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.5246 Sham+WT vs. TBI+WT: p=0.0614 Sham+WT vs. TBI+KO: p=0.9979 Sham+KO vs. TBI+WT: p=0.0054 Sham+KO vs. TBI+KO: p=0.6277 TBI+WT vs. TBI+KO: p=0.0452
8F: sTNF RI	Sham+WT=4 Sham+KO=4 TBI+WT=4	Normal distribution, homogeneity	One-way ANOVA, Tukey	F (3, 12) = 10.38	One-way ANOVA, p=0.0012 Tukey's multiple comparisons test:

Figure	n	Data structure	Test used	Statistic	P value
	TBI+KO=4	variances	multiple comparisons test		Sham+WT vs. Sham+KO: p=0.9965 Sham+WT vs. TBI+WT: p=0.0024 Sham+WT vs. TBI+KO: p=0.0477 Sham+KO vs. TBI+WT: p=0.0035 Sham+KO vs. TBI+KO: p=0.0685 TBI+WT vs. TBI+KO: p=0.3566
8F: sTNF RII	Sham+WT=4 Sham+KO=4 TBI+WT=4 TBI+KO=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 27.06	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9968 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.209 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.2815 TBI+WT vs. TBI+KO: p=0.0004
8I: BLC	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 13.93	One-way ANOVA, p=0.0003 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9928 Sham+control vs. TBI+control T: p=0.0033 Sham+control vs. TBI+antagomir: p=0.4738 Sham+antagomir vs. TBI+control: p=0.0021 Sham+antagomir vs. TBI+antagomir: p=0.6279 TBI+control vs. TBI+antagomir: p=0.0003
8I: CD30L	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 7.541	One-way ANOVA, p=0.0043 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.991 Sham+control vs. TBI+control: p=0.3725 Sham+control vs. TBI+antagomir: p=0.0469 Sham+antagomir vs. TBI+control: p=0.2501 Sham+antagomir vs. TBI+antagomir: p=0.077 TBI+control vs. TBI+antagomir: p=0.0025
8I: Eotaxin	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 3.360	One-way ANOVA, p=0.0551 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9896 Sham+control vs. TBI+control: p=0.1015 Sham+control vs. TBI+antagomir: p=0.9842 Sham+antagomir vs. TBI+control: p=0.0606 Sham+antagomir vs. TBI+antagomir: p=0.9105 TBI+control vs. TBI+antagomir: p=0.1788
8I: Eotaxin-2	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 9.033	One-way ANOVA, p=0.0021 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.7478 Sham+control vs. TBI+control: p=0.0095 Sham+control vs. TBI+antagomir: p=0.7307 Sham+antagomir vs. TBI+control: p=0.0017 Sham+antagomir vs. TBI+antagomir: p=0.2249 TBI+control vs. TBI+antagomir: p=0.0584
8I: Fas ligand	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 2.171	One-way ANOVA, p=0.1445 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9981 Sham+control vs. TBI+control: p=0.1551 Sham+control vs. TBI+antagomir: p=0.8095 Sham+antagomir vs. TBI+control: p=0.2024 Sham+antagomir vs. TBI+antagomir: p=0.8876 TBI+control vs. TBI+antagomir: p=0.5236
8I: Fractalkine	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple	F (3, 12) = 5.097	One-way ANOVA, p=0.0167 Tukey's multiple comparisons test:

Figure	n	Data structure	Test used	Statistic	P value
			comparisons test		Sham+control vs. Sham+antagomir: p=0.9972 Sham+control vs. TBI+control: p=0.5078 Sham+control vs. TBI+antagomir: p=0.1225 Sham+antagomir vs. TBI+control: p=0.4036 Sham+antagomir vs. TBI+antagomir: p=0.1673 TBI+control vs. TBI+antagomir: p=0.0105
8I: G-CSF	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 13.15	One-way ANOVA, p=0.0004 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.7322 Sham+control vs. TBI+control: p=0.0021 Sham+control vs. TBI+antagomir: p=0.9413 Sham+antagomir vs. TBI+control: p=0.0004 Sham+antagomir vs. TBI+antagomir: p=0.4151 TBI+control vs. TBI+antagomir: p=0.0055
8I: GM-CSF	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 22.50	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.7734 Sham+control vs. TBI+control: p=0.0004 Sham+control vs. TBI+antagomir: p=0.6526 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.9963 TBI+control vs. TBI+antagomir: p<0.0001
8I: IFN- γ	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 15.99	One-way ANOVA, p=0.0002 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.7499 Sham+control vs. TBI+control: p=0.0008 Sham+control vs. TBI+antagomir: p=0.8415 Sham+antagomir vs. TBI+control: p=0.0002 Sham+antagomir vs. TBI+antagomir: p=0.3071 TBI+control vs. TBI+antagomir: p=0.0031
8I: IL1- α	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 9.266	One-way ANOVA, p=0.0019 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9394 Sham+control vs. TBI+control: p=0.0054 Sham+control vs. TBI+antagomir: p=0.7395 Sham+antagomir vs. TBI+control: p=0.002 Sham+antagomir vs. TBI+antagomir: p=0.4184 TBI+control vs. TBI+antagomir: p=0.032
8J: IL1- β	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 28.52	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.5874 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.412 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.057 TBI+control vs. TBI+antagomir: p=0.0005
8J: IL2	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 11.59	One-way ANOVA, p=0.0007 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9928 Sham+control vs. TBI+control: p=0.0027 Sham+control vs. TBI+antagomir: p=0.9983 Sham+antagomir vs. TBI+control: p=0.0017 Sham+antagomir vs. TBI+antagomir: p=0.9996 TBI+control vs. TBI+antagomir: p=0.002
8J: IL3	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Non-normal distribution	Kruskal-Wallis test, Dunn's multiple comparisons	Kruskal-Wallis statistic=10.68	Kruskal-Wallis test, p=0.0023 Dunn's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999

Figure	n	Data structure	Test used	Statistic	P value
			test		Sham+control vs. TBI+control: p=0.1049 Sham+control vs. TBI+antagomir: p>0.9999 Sham+antagomir vs. TBI+control: p=0.0109 Sham+antagomir vs. TBI+antagomir: p=0.8249 TBI+control vs. TBI+antagomir: p=0.6139
8J: IL4	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 2.707	One-way ANOVA, p=0.0920 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9326 Sham+control vs. TBI+control: p=0.1187 Sham+control vs. TBI+antagomir: p=0.23 Sham+antagomir vs. TBI+control: p=0.2928 Sham+antagomir vs. TBI+antagomir: p=0.5 TBI+control vs. TBI+antagomir: p=0.9733
8J: IL6	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 17.61	One-way ANOVA, p=0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9401 Sham+control vs. TBI+control: p=0.0004 Sham+control vs. TBI+antagomir: p=0.8561 Sham+antagomir vs. TBI+control: p=0.0002 Sham+antagomir vs. TBI+antagomir: p=0.5453 TBI+control vs. TBI+antagomir: p=0.0013
8J: IL9	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Non-normal distribution	Kruskal-Wallis test, Dunn's multiple comparisons test	Kruskal-Wallis statistic=7.16	Kruskal-Wallis test, p=0.0524 Dunn's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p=0.6139 Sham+control vs. TBI+antagomir: p>0.9999 Sham+antagomir vs. TBI+control: p=0.1876 Sham+antagomir vs. TBI+antagomir: p>0.9999 TBI+control vs. TBI+antagomir: p=0.0856
8J: IL10	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 35.79	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9211 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.0901 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.0306 TBI+control vs. TBI+antagomir: p=0.0003
8J: IL12-p40/p70	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 14.27	One-way ANOVA, p=0.0003 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9993 Sham+control vs. TBI+control: p=0.0006 Sham+control vs. TBI+antagomir: p=0.3692 Sham+antagomir vs. TBI+control: p=0.0005 Sham+antagomir vs. TBI+antagomir: p=0.314 TBI+control vs. TBI+antagomir: p=0.0096
8J: IL12-p70	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 6.351	One-way ANOVA, p=0.0080 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9666 Sham+control vs. TBI+control: p=0.0213 Sham+control vs. TBI+antagomir: p=0.3682 Sham+antagomir vs. TBI+control: p=0.0096 Sham+antagomir vs. TBI+antagomir: p=0.192 TBI+control vs. TBI+antagomir: p=0.336
8J: IL13	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 20.07	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.836 Sham+control vs. TBI+control: p=0.0004

Figure	n	Data structure	Test used	Statistic	P value
					Sham+control vs. TBI+antagomir: p=0.9441 Sham+antagomir vs. TBI+control: p=0.0001 Sham+antagomir vs. TBI+antagomir: p=0.9915 TBI+control vs. TBI+antagomir: p=0.0002
8K: IL17	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 28.66	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9913 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.841 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.6884 TBI+control vs. TBI+antagomir: p<0.0001
8K: I-TAC	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 20.76	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9995 Sham+control vs. TBI+control: p=0.0001 Sham+control vs. TBI+antagomir: p=0.4452 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.3887 TBI+control vs. TBI+antagomir: p=0.0011
8K: KC	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 16.38	One-way ANOVA, p=0.0002 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9998 Sham+control vs. TBI+control: p=0.0006 Sham+control vs. TBI+antagomir: p=0.9698 Sham+antagomir vs. TBI+control: p=0.0006 Sham+antagomir vs. TBI+antagomir: p=0.9828 TBI+control vs. TBI+antagomir: p=0.0003
8K: Leptin	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 27.79	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9976 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.2706 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.206 TBI+control vs. TBI+antagomir: p=0.0004
8K: LIX	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Non-normal distribution	Kruskal-Wallis test, Dunn's multiple comparisons test	Kruskal-Wallis statistic=8.49	Kruskal-Wallis test, p=0.0208 Dunn's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p=0.036 Sham+control vs. TBI+antagomir: p=0.9495 Sham+antagomir vs. TBI+control: p=0.1876 Sham+antagomir vs. TBI+antagomir: p>0.9999 TBI+control vs. TBI+antagomir: p>0.9999
8K: Lymphotactin	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 7.922	One-way ANOVA, p=0.0035 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9685 Sham+control vs. TBI+control: p=0.0126 Sham+control vs. TBI+antagomir: p=0.9985 Sham+antagomir vs. TBI+control: p=0.0058 Sham+antagomir vs. TBI+antagomir: p=0.9911 TBI+control vs. TBI+antagomir: p=0.0095
8K: MCP-1	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 6.168	One-way ANOVA, p=0.0088 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9994 Sham+control vs. TBI+control: p=0.0184 Sham+control vs. TBI+antagomir: p=0.9952

Figure	n	Data structure	Test used	Statistic	P value
					Sham+antagomir vs. TBI+control: p=0.0151 Sham+antagomir vs. TBI+antagomir: p=0.9848 TBI+control vs. TBI+antagomir: p=0.0278
8K: M-CSF	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 7.621	One-way ANOVA, p=0.0041 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9452 Sham+control vs. TBI+control: p=0.0043 Sham+control vs. TBI+antagomir: p=0.2954 Sham+antagomir vs. TBI+control: p=0.011 Sham+antagomir vs. TBI+antagomir: p=0.5747 TBI+control vs. TBI+antagomir: p=0.1062
8K: MIG	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 10.10	One-way ANOVA, p=0.0013 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9668 Sham+control vs. TBI+control: p=0.0046 Sham+control vs. TBI+antagomir: p=0.106 Sham+antagomir vs. TBI+control: p=0.0021 Sham+antagomir vs. TBI+antagomir: p=0.0488 TBI+control vs. TBI+antagomir: p=0.3145
8K: MIP-1 α	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 6.304	One-way ANOVA, p=0.0082 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p=0.0133 Sham+control vs. TBI+antagomir: p=0.9103 Sham+antagomir vs. TBI+control: p=0.0139 Sham+antagomir vs. TBI+antagomir: p=0.9182 TBI+control vs. TBI+antagomir: p=0.0423
8L: MIP-1 γ	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 24.41	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.1868 Sham+antagomir vs. TBI+control: p=<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.1768 TBI+control vs. TBI+antagomir: p=0.0011
8L: RANTES	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 8.126	One-way ANOVA, p=0.0032 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9989 Sham+control vs. TBI+control: p=0.0058 Sham+control vs. TBI+antagomir: p=0.5823 Sham+antagomir vs. TBI+control: p=0.0046 Sham+antagomir vs. TBI+antagomir: p=0.5011 TBI+control vs. TBI+antagomir: p=0.0557
8L: SDF-1	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 13.50	One-way ANOVA, p=0.0004 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.5955 Sham+control vs. TBI+control: p=0.0041 Sham+control vs. TBI+antagomir: p=0.8661 Sham+antagomir vs. TBI+control: p=0.0005 Sham+antagomir vs. TBI+antagomir: p=0.9569 TBI+control vs. TBI+antagomir: p=0.0011
8L: TCA-3	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 6.399	One-way ANOVA, p=0.0078 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9466 Sham+control vs. TBI+control: p=0.0078 Sham+control vs. TBI+antagomir: p=0.5369 Sham+antagomir vs. TBI+control: p=0.0201

Figure	n	Data structure	Test used	Statistic	P value
					Sham+antagomir vs. TBI+antagomir: p=0.8386 TBI+control vs. TBI+antagomir: p=0.0849
8L: TECK	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 15.43	One-way ANOVA, p=0.0002 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9534 Sham+control vs. TBI+control: p=0.0003 Sham+control vs. TBI+antagomir: p=0.7021 Sham+antagomir vs. TBI+control: p=0.0007 Sham+antagomir vs. TBI+antagomir: p=0.9383 TBI+control vs. TBI+antagomir: p=0.0017
8L: TIMP1	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 23.57	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9998 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.9155 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.8835 TBI+control vs. TBI+antagomir: p=0.0002
8L: TIMP2	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Non-normal distribution	Kruskal-Wallis test, Dunn's multiple comparisons test	Kruskal-Wallis statistic=10.85	Kruskal-Wallis test, p=0.0019 Dunn's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p=0.3211 Sham+control vs. TBI+antagomir: p>0.9999 Sham+antagomir vs. TBI+control: p=0.3211 Sham+antagomir vs. TBI+antagomir: p>0.9999 TBI+control vs. TBI+antagomir: p=0.0065
8L: TNF- α	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 9.789	One-way ANOVA, p=0.0015 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9976 Sham+control vs. TBI+control: p=0.0072 Sham+control vs. TBI+antagomir: p=0.8028 Sham+antagomir vs. TBI+control: p=0.0099 Sham+antagomir vs. TBI+antagomir: p=0.7022 TBI+control vs. TBI+antagomir: p=0.0016
8L: sTNF RI	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 19.83	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9985 Sham+control vs. TBI+control: p=0.0001 Sham+control vs. TBI+antagomir: p=0.1092 Sham+antagomir vs. TBI+control: p=0.0001 Sham+antagomir vs. TBI+antagomir: p=0.0837 TBI+control vs. TBI+antagomir: p=0.0072
8L: sTNF RII	Sham+control=4 Sham+antagomir=4 TBI+control=4 TBI+antagomir=4	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 12) = 10.70	One-way ANOVA, p=0.0010 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9982 Sham+control vs. TBI+control: p=0.0047 Sham+control vs. TBI+antagomir: p=0.9218 Sham+antagomir vs. TBI+control: p=0.0035 Sham+antagomir vs. TBI+antagomir: p=0.967 TBI+control vs. TBI+antagomir: p=0.0016
S2B	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 76.42	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.6719 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0726 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.044

Figure	n	Data structure	Test used	Statistic	P value
					TBI+WT vs. TBI+KO: p<0.0001
S2C	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 62.14	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9921 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.832 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.6787 TBI+WT vs. TBI+KO: p<0.0001
S2D	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 17.85	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.995 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.9363 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.8434 TBI+WT vs. TBI+KO: p=0.0001
S3B	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 70.79	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.007 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.007 TBI+WT vs. TBI+KO: p<0.0001
S3C	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 35.98	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.88 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.9633 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.6241 TBI+WT vs. TBI+KO: p<0.0001
S3D	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 73.53	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p=0.0068 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p=0.0059 TBI+WT vs. TBI+KO: p<0.0001
S3G	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 191.5	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+WT vs. Sham+KO: p=0.9997 Sham+WT vs. TBI+WT: p<0.0001 Sham+WT vs. TBI+KO: p<0.0001 Sham+KO vs. TBI+WT: p<0.0001 Sham+KO vs. TBI+KO: p<0.0001 TBI+WT vs. TBI+KO: p<0.0001
S3H	Sham+WT=6 Sham+KO=6 TBI+WT=6 TBI+KO=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	Kruskal-Wallis statistic=4.362	Kruskal-Wallis test, p=0.22249 Dunn's multiple comparisons test: Sham+WT vs. Sham+KO: p>0.9999 Sham+WT vs. TBI+WT: p=0.2523 Sham+WT vs. TBI+KO: p>0.9999 Sham+KO vs. TBI+WT: p=0.9166 Sham+KO vs. TBI+KO: p>0.9999 TBI+WT vs. TBI+KO: p>0.9999
S4B	Pre=3	Normal	One-way	F (5, 12) = 21.18	One-way ANOVA, p<0.0001

Figure	n	Data structure	Test used	Statistic	P value
	1d=3 2d=3 3d=3 5d=3 7d=3	distribution, homogeneity variances	ANOVA, Dunnett's multiple comparisons test		Dunnett's multiple comparisons test Pre vs. 1d: p<0.0001 Pre vs. 2d: p=0.0004 Pre vs. 3d: p<0.0001 Pre vs. 5d: p<0.0001 Pre vs. 7d: p=0.0002
S4C	Pre=3 1d=3 2d=3 3d=3 5d=3 7d=3	Normal distribution, homogeneity variances	One-way ANOVA, Dunnett's multiple comparisons test	F (5, 12) = 16.39	One-way ANOVA, p<0.0001 Dunnett's multiple comparisons test Pre vs. 1d: p=0.0016 Pre vs. 2d: p=0.0111 Pre vs. 3d: p<0.0001 Pre vs. 5d: p<0.0001 Pre vs. 7d: p=0.0003
S4D	Pre=3 1d=3 2d=3 3d=3 5d=3 7d=3	Normal distribution, homogeneity variances	One-way ANOVA, Dunnett's multiple comparisons test	F (5, 12) = 14.86	One-way ANOVA, p<0.0001 Dunnett's multiple comparisons test Pre vs. 1d: p<0.0001 Pre vs. 2d: p<0.0001 Pre vs. 3d: p=0.01 Pre vs. 5d: p=0.0104 Pre vs. 7d: p=0.0008
S4E	Pre=3 1d=3 2d=3 3d=3 5d=3 7d=3	Normal distribution, homogeneity variances	One-way ANOVA, Dunnett's multiple comparisons test	F (5, 12) = 13.22	One-way ANOVA, p<0.0001 Dunnett's multiple comparisons test Pre vs. 1d: p<0.0001 Pre vs. 2d: p=0.0023 Pre vs. 3d: p=0.0009 Pre vs. 5d: p=0.1475 Pre vs. 7d: p=0.1495
S6A	TBI+control=10 TBI+antagomir=10	Non- normal/Normal distribution, homogeneity variances	Unpaired t test or Mann Whitney test	t=2.590, df=18 U=35 t=1.055, df=18 t=1.063, df=18 t=1.689, df=18 t=2.541, df=18	TBI+control vs. TBI+antagomir Slice 1: p=0.0185 TBI+control vs. TBI+antagomir Slice 2: p=0.2799 TBI+control vs. TBI+antagomir Slice 3: p=0.3054 TBI+control vs. TBI+antagomir Slice 4: p=0.3021 TBI+control vs. TBI+antagomir Slice 5: p=0.1085 TBI+control vs. TBI+antagomir Slice 6: p=0.0205
S6D	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 133.3	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
S6E	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 129.1	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.8004 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
S6F	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 0.6869	One-way ANOVA, p= 0.5705 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.7562 Sham+control vs. TBI+control: p=0.9948 Sham+control vs. TBI+antagomir: p=0.6189 Sham+antagomir vs. TBI+control: p=0.8762 Sham+antagomir vs. TBI+antagomir: p=0.9953 TBI+control vs. TBI+antagomir: p=0.7608
S7B	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 144.1	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9979 Sham+control vs. TBI+control: p<0.0001

Figure	n	Data structure	Test used	Statistic	P value
					Sham+control vs. TBI+antagomir: p<0.0001 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p<0.0001 TBI+control vs. TBI+antagomir: p<0.0001
S7C	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 13.48	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p>0.9999 Sham+control vs. TBI+control: p=0.0001 Sham+control vs. TBI+antagomir: p=0.622 Sham+antagomir vs. TBI+control: p=0.0001 Sham+antagomir vs. TBI+antagomir: p=0.6399 TBI+control vs. TBI+antagomir: p=0.002
S7D	Sham+control=6 Sham+antagomir=6 TBI+control=6 TBI+antagomir=6	Normal distribution, homogeneity variances	One-way ANOVA, Tukey multiple comparisons test	F (3, 20) = 67.78	One-way ANOVA, p<0.0001 Tukey's multiple comparisons test: Sham+control vs. Sham+antagomir: p=0.9965 Sham+control vs. TBI+control: p<0.0001 Sham+control vs. TBI+antagomir: p=0.2106 Sham+antagomir vs. TBI+control: p<0.0001 Sham+antagomir vs. TBI+antagomir: p=0.2945 TBI+control vs. TBI+antagomir: p<0.0001

Supplementary information

Loss-of-microRNA-15a/16-1 function promotes neuropathological and functional recovery in experimental traumatic brain injury

Chao Zhou^{1,2}; Shun Li^{1,2}; Na Qiu^{1,2}; Ping Sun^{1,2}; Milton H. Hamblin³; C. Edward Dixon^{2,4}; Jun Chen^{1,2}; Ke-Jie Yin^{1,2*}.

1. Department of Neurology, University of Pittsburgh School of Medicine, Pittsburgh, PA 15213, USA

2. Geriatric Research Education and Clinical Center, Veterans Affairs Pittsburgh Healthcare System, Pittsburgh, PA 15240, USA

3. Division of Biomedical Sciences, School of Medicine, University of California Riverside, Riverside, CA 92521, USA

4. Department of Neurosurgery, University of Pittsburgh School of Medicine, Pittsburgh, PA, 15213, USA

***Correspondence addressed to:** Ke-Jie Yin, M.D., Ph.D.

Department of Neurology, University of Pittsburgh School of Medicine, S514 BST, 200 Lothrop Street, Pittsburgh, PA 15213

Email: yink2@upmc.edu

Tel: 412-383-6038

Fax: 412-648-8081

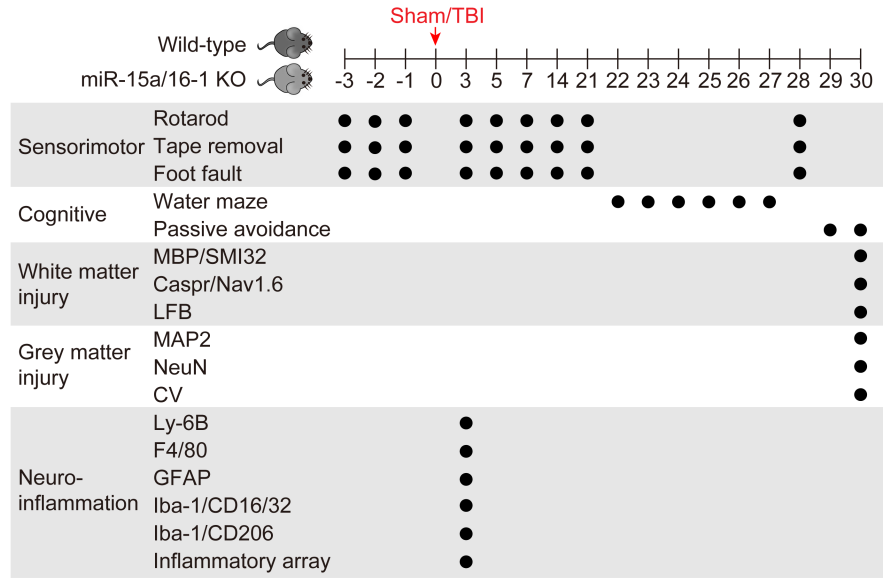


Figure S1 Schematic diagram of experimental design. MiR-15a/16-1 KO and WT mice were subjected to TBI or sham operation. Long-term sensorimotor function was examined by rotarod test, adhesive tape removal test, and foot fault test in experimental mice before and up to 28 d after operation. Cognitive function was examined by Morris water maze test and passive avoidance test in mice 23-30 d after operation. White matter injury was evaluated by histological staining of LFB, double immunostaining of MBP/SMI32, and Caspr/Nav1.6 in mouse brain sections at 30 d after operation. Grey matter injury was evaluated by histological staining of CV, and immunostaining of MAP2 and NeuN. Neuroinflammation was examined by Ly-6B, F4/80, GFAP, Iba-1/CD16/32, Iba-1/CD206 immunostaining, and inflammatory array.

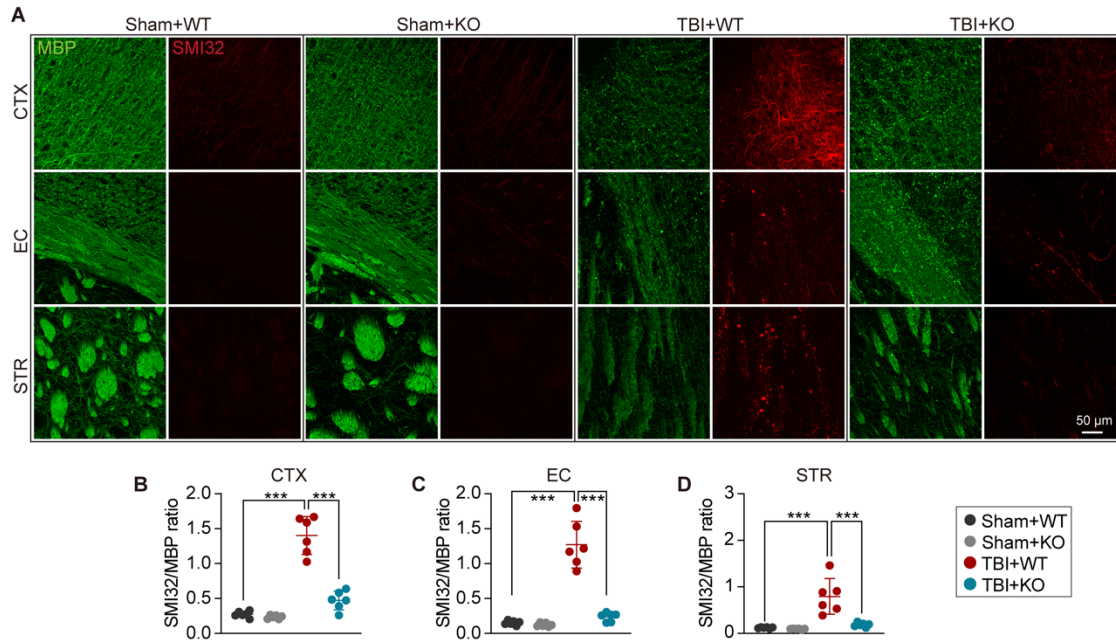


Figure S2 Genetic deletion of the miR-15a/16-1 cluster reduces axonal damage in mouse brains at 30 d after TBI. (A) Representative immunofluorescence staining images of MBP (green) and SMI32 (red) in peri-lesional cerebral cortex (CTX), external capsule (EC), and striatum (STR) areas. (B-D). Quantitative analysis of the SMI32/MBP ratio in peri-lesional CTX, EC, and STR areas showed less axonal damage in miR-15a/16-1 KO mice 30 d after TBI compared with WT controls. Data are represented as mean \pm SD, $n=6$ /group. * $p<0.05$, ** $p<0.01$, or *** $p<0.001$ versus TBI+WT group. Statistical analyses were performed by one-way ANOVA and Tukey's tests. Related to Figure 3

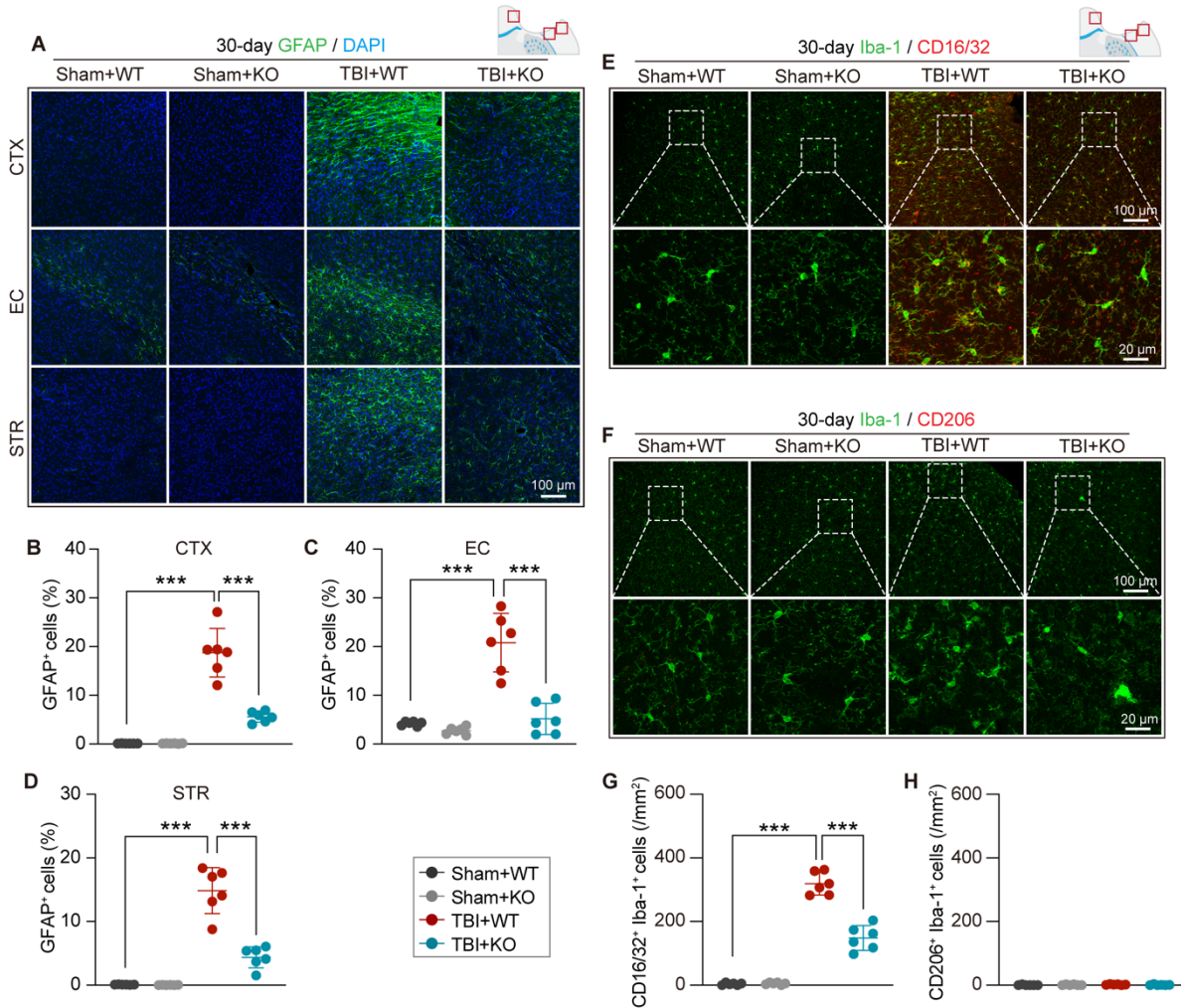


Figure S3 Genetic deletion of miR-15a/16-1 reduced astrocytic activation and the polarization of pro-inflammatory microglia/macrophages 30 d after TBI. (A) Representative immunofluorescence staining images of GFAP (green) / DAPI (blue) in peri-lesional cerebral cortex (CTX), external capsule (EC), and striatum (STR) areas. (B-D) Quantitative analysis of GFAP-positive cells in peri-lesional CTX, EC, and STR areas. (E, F) Representative immunofluorescence staining images of Iba-1 (green) / CD16/32 (red) and Iba-1 (green) / CD206 (red). (G, H) Quantitative analysis of Iba-1&CD16/32-positive cells and Iba-1&CD206-positive cells in peri-lesional regions. Data are represented as mean \pm SD, n=6/group. *p<0.05, **p<0.01, or ***p<0.001 versus TBI+WT group. Statistical analyses were performed by one-way ANOVA and Tukey's tests.

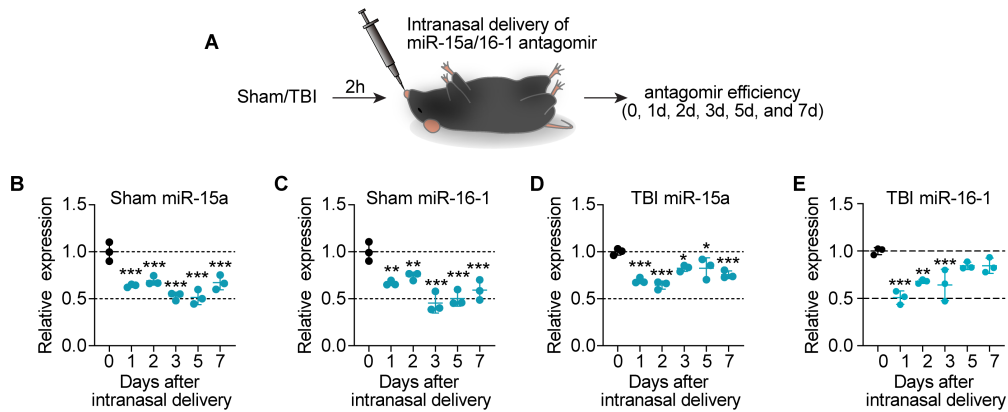


Figure S4 Intranasal delivery of the miR-15a/16-1 antagomir reduces cerebral miR-15a/16-1 expression under sham or TBI conditions. (A) A total of 1 nmol (8.1 μ g)/24 μ l miR-15a/16-1 antagomir was intranasally delivered to C57BL/6J mice 2 h after TBI/sham operation and the miR-15a/16-1 inhibitory efficiency was examined in mouse brains up to 7 d after administration. Quantitative PCR was used to detect the relative expression of miR-15a and miR-16-1 in mouse brains at pre, 1, 2, 3, 5, and 7 d after intranasal delivery of the miR-15a/16-1 antagomir. (B, C) Quantitative analysis of the relative expression of miR-15a and miR-16-1 in mouse brains under sham conditions. (D, E) Quantitative analysis of the relative expression of miR-15a and miR-16-1 in mouse brains under TBI conditions.

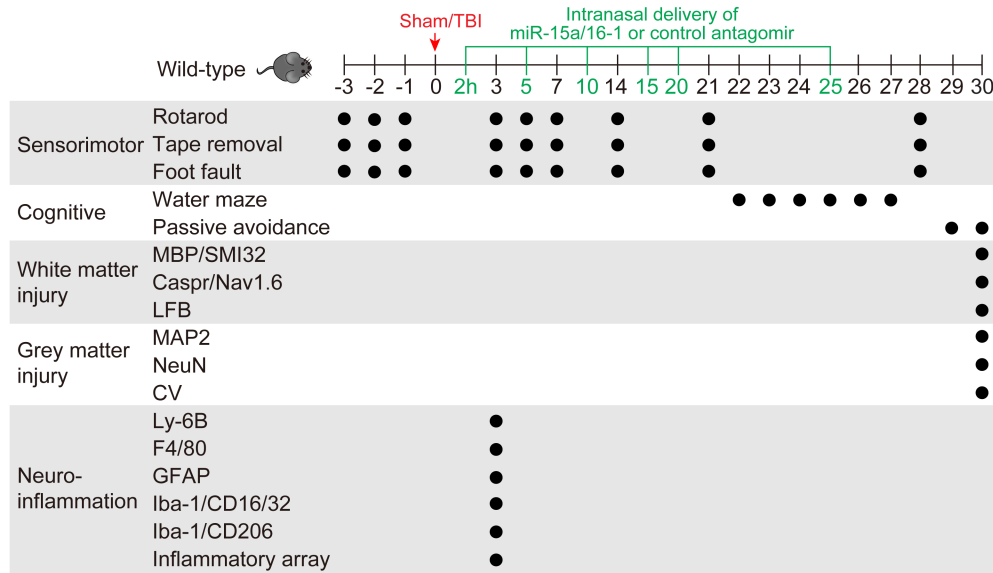


Figure S5 Schematic diagram of experimental design. C57BL/6J mice were subjected to TBI or sham operation. MiR-15a/16-1 antagomir or control antagomir was intranasally delivered to the mice at 2 h, 5 d, 10 d, 15 d, 20 d, and 25 d after CCI surgery. Long-term sensorimotor function was examined by rotarod test, adhesive tape removal test, and foot fault test in experimental mice before and up to 28 d after operation. Cognitive function was examined by the Morris water maze test and passive avoidance test in mice 23-30 d after operation. White matter injury was evaluated by histological staining of LFB, double immunostaining of MBP/SMI32, and Caspr/Nav1.6 in mouse brain sections at 30 d after operation. Grey matter injury was evaluated by histological staining of CV, and immunostaining of MAP2 and NeuN. Neuroinflammation was examined by Ly-6B, F4/80, GFAP, Iba-1/CD16/32, Iba-1/CD206 immunostaining, and inflammatory array.

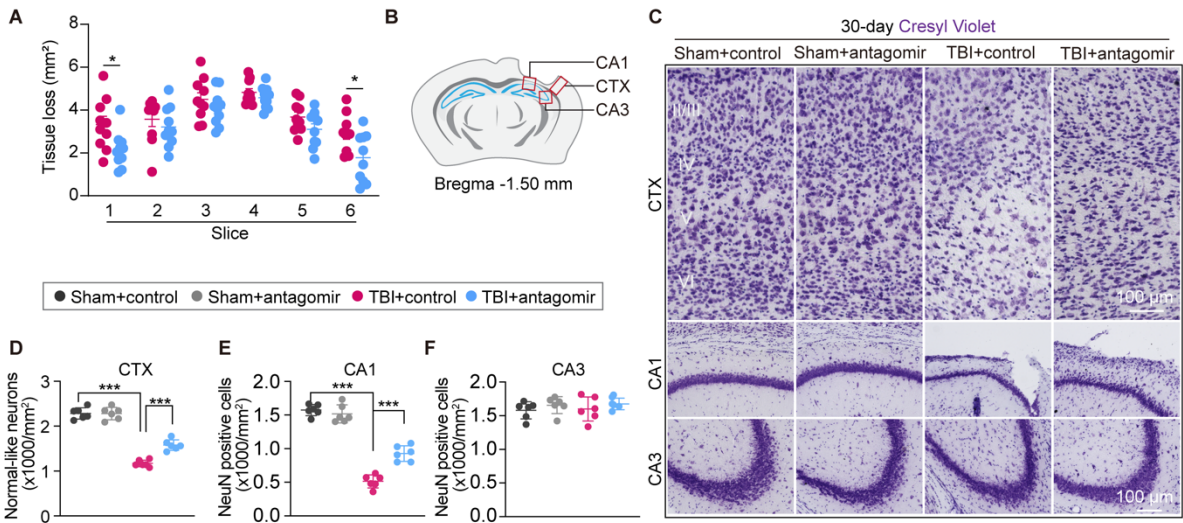


Figure S6 Intranasal delivery of miR-15a/16-1 antagomir reduces TBI-induced neuronal loss. C57BL/6J mice were subjected to experimental TBI and intranasally treated with miR-15a/16-1 antagomir or control antagomir at 2 h, 5 d, 10 d, 15 d, 20 d, and 25 d after CCI surgery. MAP2 immunostaining and CV staining were performed to examine brain tissue loss and neuronal loss in the peri-lesional cerebral cortex (CTX), and hippocampal CA1 and CA3 areas at 30 d after TBI. (A) Quantitative analysis of brain tissue loss in each cross-sectional area immunostained by MAP2. (B) Coordinates and brain regions for CV staining. (C) Representative images of CV staining in peri-lesional CTX, CA1, and CA3 regions. (D-F) Quantitative analysis of CV-stained cells in peri-lesional CTX, CA1, and CA3 regions.

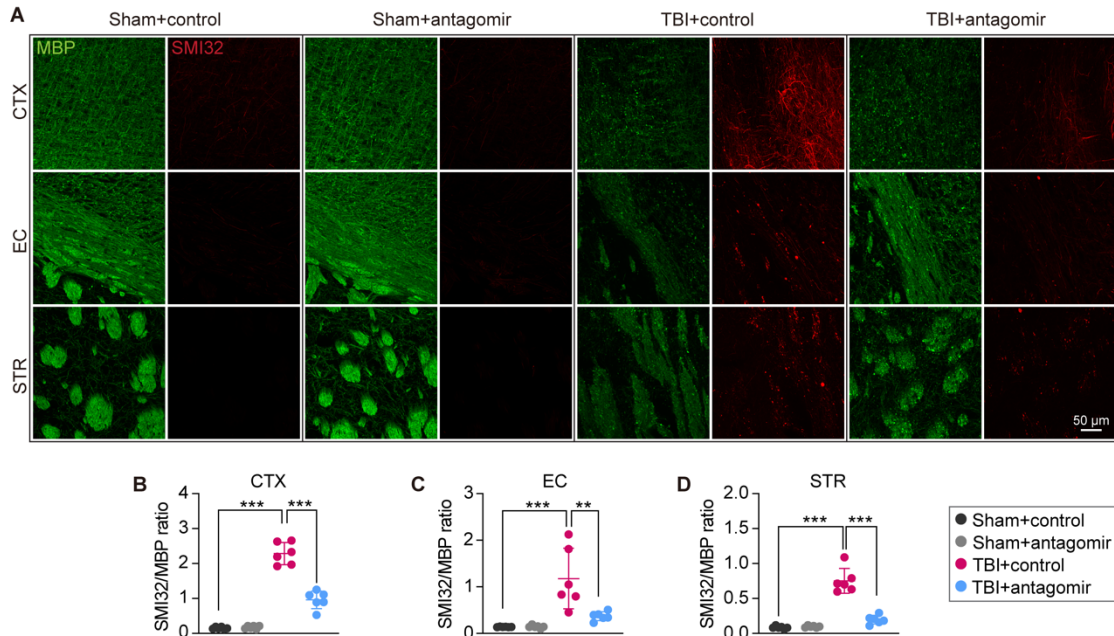


Figure S7 Intranasal delivery of the miR-15a/16-1 antagomir reduces axonal damage in mouse brains at 30 d after TBI. (A) Representative immunofluorescence staining images of MBP (green) and SMI32 (red) in the peri-lesional cerebral cortex (CTX), external capsule (EC), and striatum (STR) areas. (B-D). Quantitative analysis of the SMI32/MBP ratio in peri-lesional CTX, EC, and STR areas showed less axonal damage in miR-15a/16-1 antagomir-treated mice 30 d after TBI compared with control antagomir-treated mice. Data are represented as mean \pm SD, $n=6$ /group. * $p<0.05$, ** $p<0.01$, or *** $p<0.001$ versus TBI+control antagomir group. Statistical analyses were performed by one-way ANOVA and Tukey's tests. Related to Figure 6.

A	RANTES	IL13	GM-CSF	POS	1
B	SDF-1	IL17	IFN- γ	POS	2
C	TCA-3	I-TAC	IL-1 α	NEG	3
D	TECK	KC	IL-1 β	NEG	4
E	TIMP-1	Leptin	IL2	Blank	5
F	TIMP-2	LIX	IL3	BLC	6
G	TNF- α	Lympho- -factin	IL4	CD30L	7
H	sTNF RI	MCP-1	IL6	Eotaxin	8
I	sTNF RII	M-CSF	IL9	Eotaxin-2	9
J	Blank	MIG	IL10	FAS ligand	10
K	Blank	MIP-1- α	IL12-p40/ p70	Fractal- -kine	11
L	POS	MIP-1- γ	IL12-p70	G-CSF	12

Figure S8 Array map of 40 inflammatory mediators. Related to Figure 8.

Table S1. List of primary antibodies used in this study

Antibody	Host species	Dilution	Company	Cat #
MAP2	Rabbit	1:500	Millipore	AB5622
NeuN	Rabbit	1:500	EMD Millipore	ABN78
MBP	Rabbit	1:500	Abcam	Ab40390
SMI32	Mouse	1:500	BioLegend	801701
Caspr	Mouse	1:200	EMD Millipore	MABN69
Nav1.6	Rabbit	1:200	Millipore	AB5580-50UL
GFAP	Rabbit	1:500	Sigma-Aldrich	G9269
Iba-1	Rabbit	1:500	Wako	019-19741
CD16/32	Mouse	1:200	BD Biosciences	553124
CD206	Goat	1:200	R&D Systems	AF2535
Ly-6B	Rat	1:100	Abcam	Ab53453
F4/80	Mouse	1:200	BioLegend	123102

Table S2. Pearson correlation analysis (r value) in Figure 2

	Latency to fall	Time to touch	Time to remove	Forepaw foot fault	Hindpaw foot fault	Latency to platform	Target time	Latency to dark
CV-CTX	0.86706	-0.79914	-0.85740	-0.80001	-0.82078	-0.70096	0.47817	0.58136
CV-CA1	0.89831	-0.92213	-0.87595	-0.91672	-0.87386	-0.85406	0.62714	0.71896
CV-CA3	0.16612	-0.06261	-0.21223	-0.18359	-0.20059	-0.04923	0.15444	0.38573
NeuN-CTX	0.87773	-0.88180	-0.89025	-0.90132	-0.88108	-0.81867	0.60380	0.73205
NeuN-CA1	0.90530	-0.80652	-0.82693	-0.78134	-0.81959	-0.63697	0.63905	0.73602
NeuN-CA3	0.31180	-0.34527	-0.52110	-0.32519	-0.34287	-0.27249	-0.05297	0.31715

Table S3. Pearson correlation analysis (p value) in Figure 2

	Latency to fall	Time to touch	Time to remove	Forepaw foot fault	Hindpaw foot fault	Latency to platform	Target time	Latency to dark
CV-CTX	4.22E-08	2.82E-06	8.70E-08	2.71E-06	8.98E-07	0.00013603	0.01810675	0.00288747
CV-CA1	2.57E-09	1.53E-10	2.05E-08	3.12E-10	2.45E-08	1.10E-07	0.00103854	7.55E-05
CV-CA3	0.43787916	0.77131998	0.31944405	0.39050289	0.34731557	0.81928733	0.47118979	0.06266417
NeuN-CTX	1.77E-08	1.24E-08	5.72E-09	1.88E-09	1.32E-08	1.01E-06	0.00178284	4.78E-05
NeuN-CA1	1.22E-09	1.94E-06	6.30E-07	6.57E-06	9.60E-07	0.00081651	0.00077513	4.14E-05
NeuN-CA3	0.13801319	0.09844227	0.00902517	0.12101023	0.10096218	0.19768005	0.8058364	0.1310258

Table S4. Pearson correlation analysis (r value) in Figure 3

	Latency to fall	Time to touch	Time to remove	Forepaw foot fault	Hindpaw foot fault	Latency to platform	Target time	Latency to dark
LFB-CTX	0.863232	-0.86484	-0.85019	-0.87763	-0.84367	-0.76888	0.592332	0.666777
LFB-EC	0.899337	-0.86566	-0.80047	-0.87721	-0.86472	-0.79596	0.643032	0.820506
LFB-STR	0.865641	-0.85245	-0.83466	-0.86384	-0.91838	-0.80759	0.647759	0.654122
MBP-CTX	0.850161	-0.90457	-0.86175	-0.83624	-0.88277	-0.79752	0.653146	0.587781
MBP-EC	0.897282	-0.9075	-0.84445	-0.82299	-0.87717	-0.74958	0.636873	0.687698
MBP-STR	0.858782	-0.80766	-0.77746	-0.81569	-0.81134	-0.74908	0.588445	0.628437
SMI32-CTX	-0.85907	0.778746	0.785814	0.905284	0.866624	0.849342	-0.69787	-0.669
SMI32-EC	-0.82218	0.821646	0.738757	0.884964	0.89308	0.887689	-0.74307	-0.69979
SMI32-STR	-0.79243	0.846477	0.73011	0.730578	0.833625	0.691158	-0.64264	-0.6924
SMI32/MBP ratio-CTX	-0.88523	0.836236	0.841945	0.914872	0.903435	0.864767	-0.70525	-0.6644
SMI32/MBP ratio-EC	-0.84391	0.863386	0.757162	0.873439	0.904244	0.874154	-0.73936	-0.71122
SMI32/MBP ratio-STR	-0.72316	0.792744	0.685113	0.683667	0.781045	0.68314	-0.60691	-0.58597
Number of NOR	0.904024	-0.93031	-0.87743	-0.88967	-0.89668	-0.84476	0.65075	0.665149
Paranode length	0.84846	-0.90487	-0.88875	-0.89932	-0.88921	-0.87335	0.621393	0.696302

Length of paranode gap	-0.61963	0.635958	0.585451	0.523172	0.57521	0.407121	-0.48093	-0.60414
------------------------	----------	----------	----------	----------	---------	----------	----------	----------

Table S5. Pearson correlation analysis (p value) in Figure 3

	Latency to fall	Time to touch	Time to remove	Forepaw foot fault	Hindpaw foot fault	Latency to platform	Target time	Latency to dark
LFB-CTX	5.65E-08	5.00E-08	1.45E-07	1.78E-08	2.24E-07	1.14E-05	0.002291	0.000373
LFB-EC	2.31E-09	4.70E-08	2.64E-06	1.85E-08	5.05E-08	3.30E-06	0.000701	9.12E-07
LFB-STR	4.71E-08	1.24E-07	3.96E-07	5.40E-08	2.52E-10	1.84E-06	0.000621	0.000526
MBP-CTX	1.45E-07	1.32E-09	6.32E-08	3.59E-07	1.14E-08	3.06E-06	0.00054	0.002524
MBP-EC	2.86E-09	9.48E-10	2.13E-07	7.92E-07	1.85E-08	2.49E-05	0.000818	0.000204
MBP-STR	7.87E-08	1.83E-06	7.82E-06	1.19E-06	1.51E-06	2.53E-05	0.002489	0.001007
SMI32-CTX	7.70E-08	7.39E-06	5.36E-06	1.22E-09	4.36E-08	1.53E-07	0.00015	0.000351
SMI32-EC	8.29E-07	8.55E-07	3.74E-05	9.36E-09	4.35E-09	7.29E-09	3.19E-05	0.000141
SMI32-STR	3.92E-06	1.86E-07	5.12E-05	5.04E-05	4.22E-07	0.000184	0.000708	0.000177
SMI32/MBP ratio-CTX	9.14E-09	3.59E-07	2.50E-07	3.94E-10	1.49E-09	5.03E-08	0.000119	0.000399
SMI32/MBP ratio-EC	2.20E-07	5.59E-08	1.84E-05	2.53E-08	1.37E-09	2.39E-08	3.66E-05	9.77E-05
SMI32/MBP ratio-STR	6.54E-05	3.86E-06	0.000221	0.00023	6.66E-06	0.000234	0.001663	0.002623
Number of NOR	1.40E-09	4.69E-11	1.81E-08	6.05E-09	3.04E-09	2.08E-07	0.000575	0.000391
Paranode length	1.63E-07	1.27E-09	6.60E-09	2.32E-09	6.32E-09	2.55E-08	0.001191	0.000157
Length of paranode gap	0.001241	0.000837	0.002651	0.008707	0.003276	0.048326	0.017358	0.001769

Table S6. Pearson correlation analysis (r value) in Figure 5

	Latency to fall	Time to touch	Time to remove	Forepaw foot fault	Hindpaw foot fault	Latency to platform	Target time	Latency to dark
CV-CTX	0.90772	-0.88519	-0.91923	-0.95170	-0.93755	-0.78547	0.77350	0.76386
CV-CA1	0.80187	-0.83018	-0.84218	-0.86008	-0.91102	-0.68542	0.61121	0.62419
CV-CA3	0.42378	-0.25336	-0.29438	-0.39200	-0.33771	-0.40436	0.32606	0.50319

NeuN-CTX	0.89929	-0.91071	-0.93377	-0.93444	-0.95229	-0.78147	0.74774	0.70779
NeuN-CA1	0.90834	-0.89306	-0.91729	-0.95125	-0.94676	-0.77581	0.73029	0.74079
NeuN-CA3	0.09714	0.09747	0.08542	-0.00440	-0.08921	-0.08876	-0.05075	0.09244

Table S7. Pearson correlation analysis (p value) in Figure 5

	Latency to fall	Time to touch	Time to remove	Forepaw foot fault	Hindpaw foot fault	Latency to platform	Target time	Latency to dark
CV-CTX	9.24E-10	9.17E-09	2.26E-10	9.20E-13	1.45E-11	5.44E-06	9.31E-06	1.40E-05
CV-CA1	2.46E-06	5.20E-07	2.46E-07	7.15E-08	6.29E-10	0.00021884	0.00150879	0.00111471
CV-CA3	0.0390509	0.23225277	0.16261237	0.05815806	0.10654572	0.05001383	0.11996526	0.01219456
NeuN-CTX	2.32E-09	6.53E-10	2.72E-11	2.44E-11	8.04E-13	6.53E-06	2.67E-05	0.00010934
NeuN-CA1	8.61E-10	4.36E-09	2.90E-10	1.02E-12	2.62E-12	8.41E-06	5.09E-05	3.47E-05
NeuN-CA3	0.65158947	0.65049415	0.69145967	0.98371735	0.6784971	0.68001553	0.81383077	0.66749596

Table S8. Pearson correlation analysis (r value) in Figure 6

	Latency to fall	Time to touch	Time to remove	Forepaw foot fault	Hindpaw foot fault	Latency to platform	Target time	Latency to dark
LFB-CTX	0.898301	-0.87988	-0.92187	-0.93185	-0.92679	-0.7834	0.717602	0.745231
LFB-EC	0.925555	-0.92439	-0.94334	-0.95204	-0.95139	-0.79168	0.738511	0.774838
LFB-STR	0.915822	-0.89372	-0.91218	-0.93322	-0.91161	-0.79213	0.688876	0.780024
MBP-CTX	0.868032	-0.89052	-0.91431	-0.90433	-0.8987	-0.76754	0.671694	0.661861
MBP-EC	0.9075	-0.92144	-0.93302	-0.95453	-0.93058	-0.82173	0.737293	0.765639
MBP-STR	0.86401	-0.85606	-0.89456	-0.86867	-0.85964	-0.81266	0.690281	0.758786
SMI32-CTX	-0.91689	0.861622	0.89266	0.932901	0.917276	0.73467	-0.77713	-0.73852
SMI32-EC	-0.67055	0.803759	0.758704	0.699539	0.69381	0.53942	-0.54828	-0.59039
SMI32-STR	-0.88636	0.930092	0.932197	0.878643	0.853788	0.864338	-0.79471	-0.75361
SMI32/MBP ratio-CTX	-0.92546	0.908066	0.956562	0.940657	0.916054	0.853767	-0.82715	-0.82617
SMI32/MBP ratio-EC	-0.71712	0.821077	0.787198	0.738916	0.723701	0.604065	-0.57165	-0.67405
SMI32/MBP ratio-STR	-0.85875	0.897988	0.910239	0.858246	0.836226	0.853579	-0.79572	-0.75751
Number of NOR	0.882345	-0.90854	-0.92541	-0.93198	-0.93061	-0.7586	0.771114	0.696569
Paranode length	0.90686	-0.89759	-0.92943	-0.94166	-0.93256	-0.79654	0.732753	0.8276

Length of paranode gap	-0.52336	0.363205	0.475748	0.545272	0.545995	0.466124	-0.35985	-0.41916
------------------------	----------	----------	----------	----------	----------	----------	----------	----------

Table S9. Pearson correlation analysis (p value) in Figure 6

	Latency to fall	Time to touch	Time to remove	Forepaw foot fault	Hindpaw foot fault	Latency to platform	Target time	Latency to dark
LFB-CTX	2.57E-09	1.47E-08	1.59E-10	3.70E-11	7.93E-11	5.98E-06	7.90E-05	2.94E-05
LFB-EC	9.48E-11	1.12E-10	5.12E-12	8.51E-13	9.84E-13	4.06E-06	3.78E-05	8.78E-06
LFB-STR	3.50E-10	4.09E-09	5.47E-10	2.97E-11	5.86E-10	3.98E-06	0.000197	6.97E-06
MBP-CTX	3.91E-08	5.58E-09	4.22E-10	1.35E-09	2.47E-09	1.20E-05	0.000325	0.000427
MBP-EC	9.48E-10	1.68E-10	3.07E-11	4.79E-13	4.50E-11	8.51E-07	3.95E-05	1.30E-05
MBP-STR	5.33E-08	9.58E-08	3.76E-09	3.72E-08	7.39E-08	1.40E-06	0.000189	1.73E-05
SMI32-CTX	3.05E-10	6.38E-08	4.54E-09	3.13E-11	2.91E-10	4.35E-05	7.93E-06	3.78E-05
SMI32-EC	0.000336	2.24E-06	1.73E-05	0.000142	0.00017	0.006523	0.005539	0.002388
SMI32-STR	8.25E-09	4.85E-11	3.50E-11	1.64E-08	1.13E-07	5.20E-08	3.51E-06	2.12E-05
SMI32/MBP ratio-CTX	9.61E-11	8.88E-10	2.93E-13	8.41E-12	3.40E-10	1.13E-07	6.22E-07	6.59E-07
SMI32/MBP ratio-EC	8.03E-05	8.83E-07	5.02E-06	3.72E-05	6.42E-05	0.001772	0.00352	0.000304
SMI32/MBP ratio-STR	7.89E-08	2.66E-09	6.90E-10	8.18E-08	3.60E-07	1.14E-07	3.34E-06	1.82E-05
Number of NOR	1.18E-08	8.41E-10	9.67E-11	3.62E-11	4.48E-11	1.74E-05	1.03E-05	0.000156
Paranode length	1.02E-09	2.77E-09	5.36E-11	6.99E-12	3.30E-11	3.21E-06	4.66E-05	6.06E-07
Length of paranode gap	0.008679	0.081074	0.018784	0.005857	0.005779	0.021687	0.084137	0.041465