

Figure 1-1

Figure 1	panel	animal #	sex	experimental group	time point	total n number	n male/ female	mouse strain	
a			M	1x TBI 50cm			36	Aldh111-eGFP/FVB/N	
			M	3x TBI 70cm 24 hours			3	Aldh111-eGFP/FVB/N	
			M	3x Sham 24 hours			4	Aldh111-eGFP/FVB/N	
			M	3x TBI 50cm 24 hours			4	Aldh111-eGFP/FVB/N	
			M	3x Sham 45 min			12	Aldh111-eGFP/FVB/N	
			M	3x TBI 50cm 45 min			32	Aldh111-eGFP/FVB/N	
			M	3x TBI 60cm 45 min			2	Aldh111-eGFP/FVB/N	
			M	1x TBI 60cm			5	C57BL/6	
			M	1x Sham			3	C57BL/6	
			M	3x TBI 60cm 24 hours			8	C57BL/6	
			M	3x Sham 24 hours			8	C57BL/6	
			M	3x Sham 45 min			8	C57BL/6	
			M	3x 50cm 45 min			24	C57BL/6	
			F	3x TBI 70cm 24 hours			4	Aldh111-eGFP/FVB/N	
			F	3x Sham 45 min			16	Aldh111-eGFP/FVB/N	
			F	3x TBI 50cm 45 min			32	Aldh111-eGFP/FVB/N	
			F	3x TBI 60cm 45 min			3	Aldh111-eGFP/FVB/N	
			F	1x TBI 60cm			17	C57BL/6	
			F	1x Sham			35	C57BL/6	
			F	3x TBI 60cm 24 hours			30	C57BL/6	
			F	3x Sham 24 hours			13	C57BL/6	
			F	3x Sham 45 min			7	C57BL/6	
			F	3x 50cm 45 min			35	C57BL/6	
			F	3x 60cm 45 min			6	C57BL/6	
	b				see Figure 1 - Statistics for breakdown				
					see Figure 1 - Statistics for breakdown				
					see Figure 1 - Statistics for breakdown				
	c				see Figure 1 - Statistics for breakdown				
					see Figure 1 - Statistics for breakdown				
					see Figure 1 - Statistics for breakdown				
e		1063	M	3x Sham 45min	1 day			Aldh111-eGFP/FVB/N	
		1065	M	3x TBI 50cm 45min	1dpi			Aldh111-eGFP/FVB/N	
		6034	M	3x TBI 60cm 45min	7dpi			Aldh111-eGFP/FVB/N	
		6037	M	3x Sham 45min	7 days			Aldh111-eGFP/FVB/N	

Figure 1 - Statistics

Fig. 1b Kruskal-Wallis test, significant difference for variable injury severity, p<0.0001. N is sample number.

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary
1x Sham vs. 3x Sham 45 min	-4.307	No	ns
1x Sham vs. 3x Sham 24 hours	-33.02	No	ns
1x Sham vs. 1x TBI 50cm	-150	Yes	****
1x Sham vs. 1x TBI 60cm	-214.3	Yes	****
1x Sham vs. 3x TBI 50cm 45min	-273.3	Yes	****
1x Sham vs. 3x TBI 60cm 24 hours	-196.5	Yes	****
3x Sham 45 min vs. 3x Sham 24 hours	-28.71	No	ns
3x Sham 45 min vs. 1x TBI 50cm	-145.7	Yes	****
3x Sham 45 min vs. 1x TBI 60cm	-210	Yes	****
3x Sham 45 min vs. 3x TBI 50cm 45min	-269	Yes	****
3x Sham 45 min vs. 3x TBI 60cm 24 hours	-192.2	Yes	****
3x Sham 24 hours vs. 1x TBI 50cm	-116.9	Yes	****
3x Sham 24 hours vs. 1x TBI 60cm	-181.3	Yes	****
3x Sham 24 hours vs. 3x TBI 50cm 45min	-240.2	Yes	****
3x Sham 24 hours vs. 3x TBI 60cm 24 hours	-163.5	Yes	****
1x TBI 50cm vs. 1x TBI 60cm	-64.37	Yes	*
1x TBI 50cm vs. 3x TBI 50cm 45min	-123.3	Yes	****
1x TBI 50cm vs. 3x TBI 60cm 24 hours	-46.58	No	ns
1x TBI 60cm vs. 3x TBI 50cm 45min	-58.92	No	ns
1x TBI 60cm vs. 3x TBI 60cm 24 hours	17.79	No	ns
3x TBI 50cm 45min vs. 3x TBI 60cm 24 hours	76.71	Yes	*

Test details	Mean 1	SEM 1	Mean 2	SEM 2	N1	N2
1x Sham vs. 3x Sham 45 min	17.74	0.7598	18.76	1.666	78	25
1x Sham vs. 3x Sham 24 hours	17.74	0.7598	26.65	2.474	78	43
1x Sham vs. 1x TBI 50cm	17.74	0.7598	63.44	3.816	78	62
1x Sham vs. 1x TBI 60cm	17.74	0.7598	93.15	4.104	78	103
1x Sham vs. 3x TBI 50cm 45min	17.74	0.7598	146.4	9.876	78	57
1x Sham vs. 3x TBI 60cm 24 hours	17.74	0.7598	84.32	5.42	78	50
3x Sham 45 min vs. 3x Sham 24 hours	18.76	1.666	26.65	2.474	25	43
3x Sham 45 min vs. 1x TBI 50cm	18.76	1.666	63.44	3.816	25	62
3x Sham 45 min vs. 1x TBI 60cm	18.76	1.666	93.15	4.104	25	103
3x Sham 45 min vs. 3x TBI 50cm 45min	18.76	1.666	146.4	9.876	25	57
3x Sham 45 min vs. 3x TBI 60cm 24 hours	18.76	1.666	84.32	5.42	25	50
3x Sham 24 hours vs. 1x TBI 50cm	26.65	2.474	63.44	3.816	43	62
3x Sham 24 hours vs. 1x TBI 60cm	26.65	2.474	93.15	4.104	43	103
3x Sham 24 hours vs. 3x TBI 50cm 45min	26.65	2.474	146.4	9.876	43	57
3x Sham 24 hours vs. 3x TBI 60cm 24 hours	26.65	2.474	84.32	5.42	43	50
1x TBI 50cm vs. 1x TBI 60cm	63.44	3.816	93.15	4.104	62	103
1x TBI 50cm vs. 3x TBI 50cm 45min	63.44	3.816	146.4	9.876	62	57
1x TBI 50cm vs. 3x TBI 60cm 24 hours	63.44	3.816	84.32	5.42	62	50
1x TBI 60cm vs. 3x TBI 50cm 45min	93.15	4.104	146.4	9.876	103	57
1x TBI 60cm vs. 3x TBI 60cm 24 hours	93.15	4.104	84.32	5.42	103	50
3x TBI 50cm 45min vs. 3x TBI 60cm 24 hours	146.4	9.876	84.32	5.42	57	50

Fig. 1c Two-way ANOVA, no significant difference for variable genetic background (p=0.1102). N is sample number.

Sidak's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
C57BL/6 - FVB/N					
1x Sham	-3.624	-34.59 to 27.34	No	ns	0.9972
3x Sham 45 min	-4.99	-44.85 to 34.87	No	ns	0.9964
1x TBI 50cm	19.93	-5.148 to 45	No	ns	0.1767
3x TBI 50cm 45min	28.75	1.476 to 56.03	Yes	*	0.0342

Test details	Mean 1	SEM 1	Mean 2	SEM 2	Mean Diff.	SE of diff.	N1	N2
1x Sham	17.74	0.7598	18.76	1.666	-1.02	1.666	78	25
3x Sham 45 min	17.74	0.7598	26.65	2.474	-8.91	2.474	78	43
1x TBI 50cm	17.74	0.7598	63.44	3.816	45.70	3.816	78	62
1x TBI 60cm	17.74	0.7598	93.15	4.104	75.41	4.104	78	103
3x TBI 50cm 45min	17.74	0.7598	146.4	9.876	128.66	9.876	78	57
3x TBI 60cm 24 hours	17.74	0.7598	84.32	5.42	66.58	5.42	78	50

C57BL/6 (1) - FVB/N (2)									
1x Sham	21.38	1.651	25	2.821	-3.624	12.38		85	32
3x Sham 45 min	18.76	1.666	23.75	2.282	-4.99	15.93		25	32
1x TBI 50cm	69.88	5.177	49.95	3.187	19.93	10.02		65	78
3x TBI 50cm 45min	152.7	11.572	123.9	15.246	28.75	10.9		58	62

Fig. 1d Two-way ANOVA, no significant differences for variable sex (p=0.8702). N is sample number.

Sidak's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
C57BL/6					
Male - C57BL/6					
Female					
1x Sham	4.245	-25.7 to 34.19	No	ns	0.9998
3x Sham 45 min	2.9	-53.44 to 59.24	No	ns	>0.9999
3x Sham 24 hours	8.421	-33.58 to 50.43	No	ns	0.998
1x TBI 50cm	-6.235	-41.42 to 28.95	No	ns	0.9991
1x TBI 60cm	-31.47	-58.45 to -4.485	Yes	*	0.0124
3x TBI 50cm 45min	6.912	-30.13 to 43.96	No	ns	0.9988
3x TBI 60cm 24 hours	21.43	-16.5 to 59.35	No	ns	0.618

Test details	Mean 1	SEM 1	Mean 2	SEM 2	Mean Diff.	SE of diff.	N1	N2
C57BL/6								
Male (1) - C57BL/6								
Female (2)								
1x Sham	23.52	2.908	19.28	1.581	4.245	11.11	42	43
3x Sham 45 min	20.5	1.537	17.6	2.583	2.9	20.9	10	15
3x Sham 24 hours	32	4.437	23.58	3.432	8.421	15.58	25	19
1x TBI 50cm	66.04	6.267	72.28	7.482	-6.235	13.05	25	40
1x TBI 60cm	83.36	5.976	114.8	9.348	-31.47	10.01	47	59
3x TBI 50cm 45min	156.8	14.831	149.9	16.673	6.912	13.74	23	35
3x TBI 60cm 24 hours	103.9	11.12405229	82.46	9.065	21.43	14.07	27	26

Figure 2-1

Figure 2	panel	animal #	sex	experimental group	time point	total n number	n male/ female	mouse strain	
a,b		1063	M	3xTBI 50cm 45min	1dpi	3 (rdTBI)	3M	Aldh111-eGFP/FVB/N	
		1065	M	3xTBI 50cm 45min	1dpi			Aldh111-eGFP/FVB/N	
		1069	M	3xTBI 50cm 45min	1dpi			Aldh111-eGFP/FVB/N	
		1064	M	3xSham 1day	1 day	6 (Sham)	3M/3F	Aldh111-eGFP/FVB/N	
		6298	F	3x Sham 24hours	7 days			Aldh111-eGFP/FVB/N	
		6038	F	3xSham 45 min	7 days			Aldh111-eGFP/FVB/N	
		6032	M	3xSham 45 min	7 days	Aldh111-eGFP/FVB/N			
		6037	M	3xSham 45 min	7 days	Aldh111-eGFP/FVB/N			
		6076	F	3xSham 45 min	7 days	Aldh111-eGFP/FVB/N			
		6034	M	3x TBI 60cm 45min	7dpi	6 (TBI)	2M/4F	Aldh111-eGFP/FVB/N	
		6033	F	3x TBI 60cm 45min	7dpi			Aldh111-eGFP/FVB/N	
		6039	F	3x TBI 60cm 45min	7dpi			Aldh111-eGFP/FVB/N	
		6036	M	3x TBI 60cm 45min	7dpi	Aldh111-eGFP/FVB/N			
		6078	F	3x TBI 60cm 45min	7dpi	Aldh111-eGFP/FVB/N			
		6084	F	3x TBI 60cm 45min	7dpi	Aldh111-eGFP/FVB/N			
		5226	F	3xSham 24hours	14 days	5 (Sham)	5F	C57BL/6	
		5227	F	3xSham 24hours	14 days			C57BL/6	
		5228	F	3xSham 24hours	14 days			C57BL/6	
		5229	F	3xSham 24hours	14 days	C57BL/6			
		5250	F	3xSham 24hours	14 days	C57BL/6			
		5230	F	3xTBI 60cm 24hours	14dpi	4 (TBI)	4F	C57BL/6	
		5232	F	3xTBI 60cm 24hours	14dpi			C57BL/6	
		5236	F	3xTBI 60cm 24hours	14dpi			C57BL/6	
		5239	F	3xTBI 60cm 24hours	14dpi	C57BL/6			
	c,d		202	F	3x Sham 45 min	4 hours	5 (Sham)	5F	C57BL/6
			203	F	3x Sham 45 min	4 hours			C57BL/6
			204	F	3x Sham 45 min	4 hours			C57BL/6
			205	F	3x Sham 45 min	4 hours	C57BL/6		
			206	F	3x Sham 45 min	4 hours	C57BL/6		
			66	F	3x TBI 50cm 4hpi	4hpi	7 (4hpi)	7F	C57BL/6
		62	F	3x TBI 50cm 4hpi	4hpi	C57BL/6			
		72	F	3x TBI 50cm 4hpi	4hpi	C57BL/6			
		68	F	3x TBI 50cm 4hpi	4hpi	C57BL/6			
		70	F	3x TBI 50cm 4hpi	4hpi	C57BL/6			
		763	F	3x TBI 50cm 4hpi	4hpi	C57BL/6			
		765	F	3x TBI 50cm 4hpi	4hpi	C57BL/6			
		234	F	3x TBI 50cm 7dpi	7dpi	8 (7dpi)	8F	C57BL/6	
		235	F	3x TBI 50cm 7dpi	7dpi			C57BL/6	
		236	F	3x TBI 50cm 7dpi	7dpi			C57BL/6	
		330	F	3x TBI 50cm 7dpi	7dpi	C57BL/6			
		331	F	3x TBI 50cm 7dpi	7dpi	C57BL/6			
		1194	F	3x TBI 50cm 7dpi	7dpi	C57BL/6			
		1192	F	3x TBI 50cm 7dpi	7dpi	C57BL/6			
		180	F	3x TBI 50cm 7dpi	7dpi	C57BL/6			
	152	F	3x TBI 50cm 14dpi	14dpi	5 (14 dpi)	5F	C57BL/6		
	153	F	3x TBI 50cm 14dpi	14dpi			C57BL/6		
	155	F	3x TBI 50cm 14dpi	14dpi			C57BL/6		
	156	F	3x TBI 50cm 14dpi	14dpi	C57BL/6				
	157	F	3x TBI 50cm 14dpi	14dpi	C57BL/6				
e		1202	M	3x Sham 45 min	4 hours	5 (Sham)	5M	C57BL/6	
		1198	M	3x Sham 45 min	4 hours			C57BL/6	
		1030	M	3x Sham 45 min	4 hours			C57BL/6	
		1165	M	3x Sham 45 min	4 hours	C57BL/6			
		1166	M	3x Sham 45 min	4 hours	C57BL/6			
		289	M	3x TBI 50cm 45 min	4hpi	4 (4hpi)	4M	C57BL/6	
		290	M	3x TBI 50cm 45 min	4hpi			C57BL/6	
		291	M	3x TBI 50cm 45 min	4hpi			C57BL/6	
		292	M	3x TBI 50cm 45 min	4hpi	C57BL/6			
		293	M	3x TBI 50cm 45 min	3dpi	3 (3dpi)	3M	C57BL/6	
	295	M	3x TBI 50cm 45 min	3dpi	C57BL/6				
	297	M	3x TBI 50cm 45 min	3dpi	C57BL/6				

	1204	M	3x TBI 50cm 45 min	7dpi	16 (7dpi)	16M	C57BL/6
	1179	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1190	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1205	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1191	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1284	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1285	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1287	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1279	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1275	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1288	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1286	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	325	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	326	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	327	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	329	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	146	M	3x TBI 50cm 45 min	14dpi	5 (14dpi)	5M	C57BL/6
	147	M	3x TBI 50cm 45 min	14dpi			C57BL/6
	148	M	3x TBI 50cm 45 min	14dpi			C57BL/6
	149	M	3x TBI 50cm 45 min	14dpi			C57BL/6
	150	M	3x TBI 50cm 45 min	14dpi			C57BL/6
f	202	F	3x Sham 45 min	4 hours	5 (Sham)	5F	C57BL/6
	203	F	3x Sham 45 min	4 hours			C57BL/6
	204	F	3x Sham 45 min	4 hours			C57BL/6
	205	F	3x Sham 45 min	4 hours			C57BL/6
	206	F	3x Sham 45 min	4 hours			C57BL/6
	234	F	3x TBI 50cm 7dpi	7dpi	8 (7dpi)	8F	C57BL/6
	235	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	236	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	330	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	331	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	1194	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	1192	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	180	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	1202	M	3x Sham 45 min	4 hours	5 (Sham)	5M	C57BL/6
	1198	M	3x Sham 45 min	4 hours			C57BL/6
	1030	M	3x Sham 45 min	4 hours			C57BL/6
	1165	M	3x Sham 45 min	4 hours			C57BL/6
	1166	M	3x Sham 45 min	4 hours			C57BL/6
	1179	M	3x TBI 50cm 7dpi	7dpi	7 (7dpi)	7F	C57BL/6
	1285	M	3x TBI 50cm 7dpi	7dpi			C57BL/6
	1287	M	3x TBI 50cm 7dpi	7dpi			C57BL/6
	1279	M	3x TBI 50cm 7dpi	7dpi			C57BL/6
	326	M	3x TBI 50cm 7dpi	7dpi			C57BL/6
	327	M	3x TBI 50cm 7dpi	7dpi			C57BL/6
	329	M	3x TBI 50cm 7dpi	7dpi			C57BL/6
g	1202	M	3x Sham 45 min	4 hours	5 Sham	5M	C57BL/6
	1198	M	3x Sham 45 min	4 hours			C57BL/6
	1030	M	3x Sham 45 min	4 hours			C57BL/6
	1165	M	3x Sham 45 min	4 hours			C57BL/6
	1166	M	3x Sham 45 min	4 hours			C57BL/6
	1204	M	3x TBI 50cm 45 min	7dpi	16 (7dpi)	16M	C57BL/6
	1179	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1190	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1205	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1191	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1284	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1285	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1287	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1279	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1275	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1288	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1286	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	325	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	326	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	327	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	329	M	3x TBI 50cm 45 min	7dpi			C57BL/6
h,i	207	M	3x Sham 45 min	4 hours	6 (Sham)	6M	C57BL/6
	208	M	3x Sham 45 min	4 hours			C57BL/6
	209	M	3x Sham 45 min	4 hours			C57BL/6
	210	M	3x Sham 45 min	4 hours			C57BL/6
	211	M	3x Sham 45 min	4 hours			C57BL/6
	212	M	3x Sham 45 min	4 hours			C57BL/6
	289	M	3x TBI 50cm 45 min	4hpi	4 (4hpi)	4M	C57BL/6
	290	M	3x TBI 50cm 45 min	4hpi			C57BL/6
	291	M	3x TBI 50cm 45 min	4hpi			C57BL/6
	292	M	3x TBI 50cm 45 min	4hpi			C57BL/6
	293	M	3x TBI 50cm 45 min	3dpi	3 (3dpi)	3M	C57BL/6
	295	M	3x TBI 50cm 45 min	3dpi			C57BL/6
	296	M	3x TBI 50cm 45 min	3dpi			C57BL/6
	297	M	3x TBI 50cm 45 min	3dpi			C57BL/6
	1204	M	3x TBI 50cm 45 min	7dpi	12 (7dpi)	12M	C57BL/6
	1179	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1190	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1205	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1191	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1284	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1285	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1287	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1279	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1275	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	325	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	326	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	146	M	3x TBI 50cm 45 min	14dpi	6 (14dpi)	6M	C57BL/6
	147	M	3x TBI 50cm 45 min	14dpi			C57BL/6
	148	M	3x TBI 50cm 45 min	14dpi			C57BL/6

	149	M	3x TBI 50cm 45 min	14dpi			C57BL/6
	150	M	3x TBI 50cm 45 min	14dpi			C57BL/6
j	202	F	3x Sham 45 min	4 hours	5 (Sham)	5F	C57BL/6
	203	F	3x Sham 45 min	4 hours			C57BL/6
	204	F	3x Sham 45 min	4 hours			C57BL/6
	205	F	3x Sham 45 min	4 hours			C57BL/6
	206	F	3x Sham 45 min	4 hours			C57BL/6
	636	F	3x TBI 50cm 4hpi	4hpi	7 (4hpi)	7F	C57BL/6
	637	F	3x TBI 50cm 4hpi	4hpi			C57BL/6
	638	F	3x TBI 50cm 4hpi	4hpi			C57BL/6
	639	F	3x TBI 50cm 4hpi	4hpi			C57BL/6
	66	F	3x TBI 50cm 4hpi	4hpi			C57BL/6
	62	F	3x TBI 50cm 4hpi	4hpi			C57BL/6
	72	F	3x TBI 50cm 4hpi	4hpi			C57BL/6
	179	F	3x TBI 50cm 7dpi	7dpi	7 (7dpi)	7F	C57BL/6
	180	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	1194	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	1192	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	235	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	236	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	330	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	152	F	3x TBI 50cm 14dpi	14dpi	5 (14dpi)	5F	C57BL/6
	153	F	3x TBI 50cm 14dpi	14dpi			C57BL/6
	155	F	3x TBI 50cm 14dpi	14dpi			C57BL/6
	156	F	3x TBI 50cm 14dpi	14dpi			C57BL/6
	157	F	3x TBI 50cm 14dpi	14dpi			C57BL/6
k	202	F	3x Sham 45 min	4 hours	5 (Sham)	5F	C57BL/6
	203	F	3x Sham 45 min	4 hours			C57BL/6
	204	F	3x Sham 45 min	4 hours			C57BL/6
	205	F	3x Sham 45 min	4 hours			C57BL/6
	206	F	3x Sham 45 min	4 hours			C57BL/6
	179	F	3x TBI 50cm 7dpi	7dpi	7 (7dpi)	7F	C57BL/6
	180	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	1194	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	1192	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	235	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	236	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	330	F	3x TBI 50cm 7dpi	7dpi			C57BL/6
	207	M	3x Sham 45 min	4 hours	4 (Sham)	4M	C57BL/6
	209	M	3x Sham 45 min	4 hours			C57BL/6
	210	M	3x Sham 45 min	4 hours			C57BL/6
	211	M	3x Sham 45 min	4 hours			C57BL/6
	1179	M	3x TBI 50cm 45min	7dpi	8 (7dpi)	8M	C57BL/6
	1190	M	3x TBI 50cm 45min	7dpi			C57BL/6
	1205	M	3x TBI 50cm 45min	7dpi			C57BL/6
	1191	M	3x TBI 50cm 45min	7dpi			C57BL/6
	326	M	3x TBI 50cm 45min	7dpi			C57BL/6
	327	M	3x TBI 50cm 45min	7dpi			C57BL/6
	1287	M	3x TBI 50cm 45min	7dpi			C57BL/6
	1285	M	3x TBI 50cm 45min	7dpi			C57BL/6
l	207	M	3x Sham 45 min	4 hours	6 (Sham)	6M	C57BL/6
	208	M	3x Sham 45 min	4 hours			C57BL/6
	209	M	3x Sham 45 min	4 hours			C57BL/6
	210	M	3x Sham 45 min	4 hours			C57BL/6
	211	M	3x Sham 45 min	4 hours			C57BL/6
	212	M	3x Sham 45 min	4 hours			C57BL/6
	1204	M	3x TBI 50cm 45 min	7dpi	12 (7dpi)	12M	C57BL/6
	1179	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1190	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1205	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1191	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1284	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1285	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1287	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1279	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	1275	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	325	M	3x TBI 50cm 45 min	7dpi			C57BL/6
	326	M	3x TBI 50cm 45 min	7dpi			C57BL/6

Figure 2 - Statistics

Fig. 2d Kruskal-Wallis test, significant difference for presence of injury and post-injury timepoint (p=0.0023) N is sample number.

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value
Sham vs. 4hpi	-11.29	Yes	*	0.0192
Sham vs. 7dpi	-9.429	No	ns	0.0683
Sham vs. 14dpi	-16.6	Yes	***	0.0006

Test details	Mean 1	SEM 1	Mean 2	SEM 2	N1	N2
Sham vs. 4hpi	1.02	0.2212	3.175	0.2858	5	7
Sham vs. 7dpi	1.02	0.2212	3.009	0.2913	5	7
Sham vs. 14dpi	1.02	0.2212	4.834	0.8111	5	5

Fig. 2e One-Way ANOVA, significant difference for presence and post-injury timepoint (p=0.0473). N is sample number.

Dunnnett's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value	A-?
Sham vs. 4hpi	-0.2614	-2.576 to 2.053	No	ns	0.994	B
Sham vs. 3dpi	-0.6572	-3.193 to 1.879	No	ns	0.8913	C
Sham vs. 7dpi	-0.4207	-2.736 to 1.894	No	ns	0.9655	D
Sham vs. 14dpi	-2.578	-4.75 to -0.4067	Yes	*	0.0179	E

Test details	Mean 1	SEM 1	Mean 2	SEM 2	Mean Diff.	SE of diff.	N1	N2
Sham vs. 4hpi	1.236	0.1796	1.497	0.2652	-0.2614	0.8601	6	4
Sham vs. 3dpi	1.236	0.1796	1.893	0.6934	-0.6572	0.9422	6	3
Sham vs. 7dpi	1.236	0.1796	1.657	0.432	-0.4207	0.8601	6	4
Sham vs. 14dpi	1.236	0.1796	3.814	1.078	-2.578	0.8069	6	5

Fig. 2f

Kruskal-Wallis test, significant difference for sex and presence of injury (p=0.0056). N is sample number

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value
F/Sham vs. F/7dpi	-13.38	Yes	**	0.0057
F/Sham vs. M/Sham'	-9.6	No	ns	0.1567
M/Sham' vs. M/7dpi	-3.971	No	ns	>0.9999
F/7dpi vs. M/7dpi	-0.1964	No	ns	>0.9999

Test details	Mean 1	SEM 1	Mean 2	SEM 2	N1	N2
F/Sham vs. F/7dpi	0.963	0.1566	2.333	0.2919	5	8
F/Sham vs. M/Sham'	0.963	0.1566	1.908	0.2308	5	5
M/Sham' vs. M/7dpi	1.908	0.2308	2.703	0.5626	5	7
F/7dpi vs. M/7dpi	2.333	0.2919	2.703	0.5626	8	7

Fig. 2g

Unpaired, two-tailed t-test, significant difference for presence of injury (p=0.0345). N is sample number.

Column A	Sham	N=5
vs.	vs.	
Column B	7dpi	N=16

Mean ± SEM of column A	1.068	± 0.08346
Mean ± SEM of column B	2.178	± 0.2667
Difference between means	1.11	± 0.4876

Fig. 2i

One-way ANOVA, no significant difference for presence of injury and post-injury timepoint (p=0.4620).

Dunn's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
Sham vs. 4hpi	0.3108	-0.3052 to 0.9269	No	ns	0.4457
Sham vs. 7dpi	-0.03215	-0.6025 to 0.5382	No	ns	0.9978
Sham vs. 14dpi	0.06529	-0.5607 to 0.6713	No	ns	0.9913

Test details	Mean 1	SEM 1	Mean 2	SEM 2	SE of diff.	N1	N2
Sham vs. 4hpi	1.17	0.1742	0.8588	0.1353	0.2403	5	5
Sham vs. 7dpi	1.17	0.1742	1.202	0.1448	0.2225	5	7
Sham vs. 14dpi	1.17	0.1742	1.114	0.193	0.2403	5	5

Fig. 2j

Kruskal-Wallis Test, no significance for presence of injury or post-injury timepoint (p=0.5993). N is Sample Number.

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value
Sham vs. 4hpi	3.417	No	ns	>0.9999
Sham vs. 3dpi	2.167	No	ns	>0.9999
Sham vs. 7dpi	-3.633	No	ns	>0.9999
Sham vs. 14dpi	0.3667	No	ns	>0.9999

Test details	Mean 1	SEM 1	Mean 2	SEM 2	N1	N2
Sham vs. 4hpi	0.9036	0.9353	0.8295	0.1942	6	4
Sham vs. 3dpi	0.9036	0.9353	0.7323	0.02093	6	3
Sham vs. 7dpi	0.9036	0.9353	1.59	0.6477	6	5
Sham vs. 14dpi	0.9036	0.9353	0.9077	0.1051	6	5

Fig. 2k

Kruskal-Wallis test, significant difference for sex and presence of injury (p=0.0438). N is sample number.

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value
F/Sham vs. M/Sham'	4.25	No	ns	>0.9999
F/Sham vs. F/7dpi	-7.125	No	ns	0.2996
M/Sham' vs. M/7dpi	-9	No	ns	0.113

Test details	Mean 1	SEM 1	Mean 2	SEM 2	N1	N2
F/Sham vs. M/Sham'	0.8856	0.08251	0.6988	0.1191	4	4
F/Sham vs. F/7dpi	0.8856	0.08251	1.392	0.1874	4	8
M/Sham' vs. M/7dpi	0.6988	0.1191	1.187	0.1323	4	8

Fig. 2l

Kolmogorov-Smirnov Test, significant difference for presence of injury, (p=0.0005). N is sample number.

Column A	Sham	N=6
vs.	vs.	
Column B	7dpi	N=13

Mean ± SEM of column A	0.9908	± 0.08951
Mean ± SEM of column B	3.121	± 0.7228
Difference between means	2.13	± 1.082

Figure 3-1

Figure 3	panel	animal #	sex	experimental group	time point	total n number	n male/ female	mouse strain	
a		5250	F	3xSham 45 min	14 days	1 (Sham)	1F	C57/B6	
		5232	F	3xTBI 60cm 24 hours	14dpi	1 (14dpi)	1F	C57/B6	
		1747	F	3xSham 45 min	7 days	1 (Sham)	1F	Aldh111-eGFP/FVB/N	
		1748	F	3xTBI 50cm 45 min	7dpi	1 (7dpi)	1F	Aldh111-eGFP/FVB/N	
		1713	F	3xSham 45 min	7 days	2 (Sham)	1M/1F	mGFAP-Cre Tg/GCamp5 fl/fl	
		2513	M	3xSham 45 min	7 days			Aldh111-tdTomato	
		1151	M	3xTBI 45 min	7dpi	4 (7dpi)	3M/1F	mGFAP-Cre Tg/GCamp5 fl/fl	
		1712	M	3xTBI 45 min	7dpi			mGFAP-Cre Tg/GCamp5 fl/fl	
		1364	F	3xTBI 45 min	7dpi			mGFAP-Cre Tg/GCamp5 fl/fl	
		2515	M	3xTBI 45 min	7dpi			Aldh111-tdTomato	
	b		5561	M	3xTBI 50cm 14dpi	14dpi	2 (14dpi)	2M	C57/B6
			5562	M	3xTBI 50cm 14dpi	14dpi			C57/B6
	c,d		1063	M	3x 45 min Sham	1 day	3 (Sham)	2M/1F	Aldh111-eGFP/FVB/N
			1649	M	3x TBI 50cm 45min	1dpi	10 (1dpi)	5M/5F	Aldh111-eGFP/FVB/N
		1648	F	3x TBI 50cm 45min	1dpi			Aldh111-eGFP/FVB/N	
		1651	F	3x TBI 50cm 45min	1dpi			Aldh111-eGFP/FVB/N	
	1065	M	3x TBI 50cm 45min	1dpi			Aldh111-eGFP/FVB/N		

	1069	M	3x TBI 50cm 45min	1dpi				Aldh111-eGFP//FVB/N
	1077	F	3x TBI 50cm 45min	1dpi				Aldh111-eGFP//FVB/N
	2493	M	3x TBI 50cm 45min	1dpi				Aldh111-eGFP//FVB/N
	2499	M	3x TBI 50cm 45min	1dpi				Aldh111-eGFP//FVB/N
	2468	F	3x TBI 50cm 45min	1dpi				Aldh111-eGFP//FVB/N
	2318	F	3x TBI 50cm 45min	1dpi				Aldh111-eGFP//FVB/N
	1607	M	3x 45 min Sham	14 days	4 (Sham)	2M/2F		Aldh111-eGFP//FVB/N
	2321	F	3x 45 min Sham	14 days				Aldh111-eGFP//FVB/N
	2359	M	3x 45 min Sham	14 days				Aldh111-eGFP//FVB/N
	1460	F	3x 45 min Sham	14 days				Aldh111-eGFP//FVB/N
	1454	F	3x TBI 50cm 45min	14dpi	6 (14dpi)	3M/3F		Aldh111-eGFP//FVB/N
	1606	F	3x TBI 50cm 45min	14dpi				Aldh111-eGFP//FVB/N
	1608	M	3x TBI 50cm 45min	14dpi				Aldh111-eGFP//FVB/N
	2320	F	3x TBI 50cm 45min	14dpi				Aldh111-eGFP//FVB/N
	2361	M	3x TBI 50cm 45min	14dpi				Aldh111-eGFP//FVB/N
	2364	M	3x TBI 50cm 45min	14dpi				Aldh111-eGFP//FVB/N

Figure 3 - Statistics

Fig. 3c One-way ANOVA, significant difference for post-injury timepoint (p=0.0007), N is sample number

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
1dpi Sham vs. 1dpi TBI	-5.094	-9.121 to -1.066	Yes	*	0.0104
1dpi Sham vs. 14dpi Sham	-0.9345	-5.607 to 3.738	No	ns	0.942
1dpi Sham vs. 14dpi TBI	-6.217	-10.54 to -1.891	Yes	**	0.0036
1dpi TBI vs. 14dpi Sham	4.159	0.5397 to 7.779	Yes	*	0.0209
1dpi TBI vs. 14dpi TBI	-1.124	-4.283 to 2.036	No	ns	0.7512
14dpi Sham vs. 14dpi TBI	-5.283	-9.232 to -1.334	Yes	**	0.0066

Test details	Mean 1	SEM 1	Mean 2	SEM 2	Mean Diff.	SE of diff.	N1	N2
1dpi Sham vs. 1dpi TBI	0.7295	0.1766	5.823	0.8374	-5.094	1.432	3	10
1dpi Sham vs. 14dpi Sham	0.7295	0.1766	1.664	0.2063	-0.9345	1.662	3	4
1dpi Sham vs. 14dpi TBI	0.7295	0.1766	6.947	0.9336	-6.217	1.539	3	6
1dpi TBI vs. 14dpi Sham	5.823	0.8374	1.664	0.2063	4.159	1.287	10	4
1dpi TBI vs. 14dpi TBI	5.823	0.8374	6.947	0.9336	-1.124	1.124	10	6
14dpi Sham vs. 14dpi TBI	1.664	0.2063	6.947	0.9336	-5.283	1.405	4	6

Fig. 3d One-way ANOVA, no significant difference for sex and post-injury timepoint (p=0.8494), N is sample number.

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
Male 1dpi vs. Female 1dpi	-0.6467	-5.736 to 4.443	No	ns	0.9808
Male 1dpi vs. Male 14dpi	-1.544	-7.42 to 4.333	No	ns	0.862
Male 1dpi vs. Female 14dpi	-1.35	-7.227 to 4.527	No	ns	0.9019
Female 1dpi vs. Male 14dpi	-0.8973	-6.774 to 4.979	No	ns	0.9677
Female 1dpi vs. Female 14dpi	-0.7034	-6.58 to 5.173	No	ns	0.9839
Male 14dpi vs. Female 14dpi	0.1938	-6.376 to 6.764	No	ns	0.9997

Test details	Mean 1	SEM 1	Mean 2	SEM 2	Mean Diff.	SE of diff.	N1	N2
Male 1dpi vs. Female 1dpi	5.5	1.225	6.147	1.266	-0.6467	1.714	5	5
Male 1dpi vs. Male 14dpi	5.5	1.225	7.044	0.08006	-1.544	1.979	5	3
Male 1dpi vs. Female 14dpi	5.5	1.225	6.85	2.084	-1.35	1.979	5	3
Female 1dpi vs. Male 14dpi	6.147	1.266	7.044	0.08006	-0.8973	1.979	5	3
Female 1dpi vs. Female 14dpi	6.147	1.266	6.85	2.084	-0.7034	1.979	5	3
Male 14dpi vs. Female 14dpi	7.044	0.08006	6.85	2.084	0.1938	2.213	3	3

Figure 4-1

Figure 4	panel	animal #	sex	experimental group	time point	total n number	n male/ female	mouse strain
	a	6037	M	3x 45 min Sham	7 days	1 (Sham)	1M	Aldh111-eGFP//FVB/N
		1087	F	3x TBI 50cm 45min	4hpi	1 (4hpi)	1F	Aldh111-eGFP//FVB/N
		1077	F	3x TBI 50cm 45min	1dpi	1 (1dpi)	1F	Aldh111-eGFP//FVB/N
		747	F	3x TBI 50cm 45min	3dpi	1 (3dpi)	1F	Aldh111-eGFP//FVB/N
		6033	F	3x TBI 50cm 45min	7dpi	1 (7dpi)	1F	Aldh111-eGFP//FVB/N
		30	M	3x TBI 50cm 45min	28dpi	1 (28dpi)	1M	Aldh111-eGFP//FVB/N
		794	M	3x TBI 50cm 45min	56dpi	1 (56dpi)	1M	Aldh111-eGFP//FVB/N
	b	1093	M	3x TBI 50cm 45min	4hpi	3 (4hpi)	1M/2F	Aldh111-eGFP//FVB/N
		1087	F	3x TBI 50cm 45min	4hpi			Aldh111-eGFP//FVB/N
		1086	F	3x TBI 50cm 45min	4hpi			Aldh111-eGFP//FVB/N
		743	F	3x TBI 50cm 45min	3dpi	3 (3dpi)	3F	Aldh111-eGFP//FVB/N
		747	F	3x TBI 50cm 45min	3dpi			Aldh111-eGFP//FVB/N
		749	F	3x TBI 50cm 45min	3dpi			Aldh111-eGFP//FVB/N
		35	M	3x TBI 50cm 45min	28dpi	3 (28dpi)	3M	Aldh111-eGFP//FVB/N
		30	M	3x TBI 50cm 45min	28dpi			Aldh111-eGFP//FVB/N
		29	M	3x TBI 50cm 45min	28dpi			Aldh111-eGFP//FVB/N
	c	1411	M	3x 45 min Sham	0-50 days	2 (Sham)	2M	Aldh111-eGFP//FVB/N
		1973	M	3x 45 min Sham	0-3 days			Aldh111-eGFP//FVB/N
		1453	F	3x TBI 50 cm 45 min	0-27dpi	4 (rdTBI)	3M/1F	Aldh111-eGFP//FVB/N
		1414	M	3x TBI 50 cm 45 min	0-8dpi			Aldh111-eGFP//FVB/N
		1971	M	3x TBI 50 cm 45 min	0-3dpi			Aldh111-eGFP//FVB/N
		1974	M	3x TBI 50 cm 45 min	0-3dpi			Aldh111-eGFP//FVB/N
	d	1713	F	3x 45 min Sham	7 days	2 (Sham)	2F	GCaMP5G//mGFAP Cre
		1572	F	3x 45 min Sham	7 days			GCaMP5G//mGFAP Cre
		1714	M	3x TBI 50cm 45min	7dpi	4 (7dpi)	2M	GCaMP5G//mGFAP Cre
		1151	M	3x TBI 50cm 45min	7dpi			GCaMP5G//mGFAP Cre
		1565	F	3x TBI 50cm 45min	7dpi			GCaMP5G//mGFAP Cre
		1712	F	3x TBI 50cm 45min	7dpi			GCaMP5G//mGFAP Cre
		1713	F	3x 45 min Sham	7 days	2 (Sham)	2F	GCaMP5G//mGFAP Cre
		1572	F	3x 45 min Sham	7 days			GCaMP5G//mGFAP Cre
		1714	M	3x TBI 50cm 45min	7dpi	4 (7dpi)	2M/2F	GCaMP5G//mGFAP Cre
		1151	M	3x TBI 50cm 45min	7dpi			GCaMP5G//mGFAP Cre
		1565	F	3x TBI 50cm 45min	7dpi			GCaMP5G//mGFAP Cre
		1712	F	3x TBI 50cm 45min	7dpi			GCaMP5G//mGFAP Cre
		2506	F	3x TBI 50cm 45min	7dpi	3 (7dpi)	1M/2F	Aldh111-tdTomato
		2515	M	3x TBI 50cm 45min	7dpi			Aldh111-tdTomato
		2512	F	3x TBI 50cm 45min	7dpi			Aldh111-tdTomato
		2514	M	3x 45 min Sham	7 days	2 (Sham)	2M	Aldh111-tdTomato
		2516	M	3x 45 min Sham	7 days			Aldh111-tdTomato

Figure 4 - Statistics

Fig. 4b Two-Way ANOVA, significant difference in location examined (p<0.0001). N is sample number.

Sidak's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P Value
periphery:4hpi vs. periphery:3dpi	-5.836	-51.71 to 40.04	No	ns	>0.9999
periphery:4hpi vs. periphery:28dpi	-19.94	-65.82 to 25.94	No	ns	0.9551
periphery:4hpi vs. atypical astrocytes:4hpi	57.68	11.8 to 103.6	Yes	**	0.0049
periphery:4hpi vs. atypical astrocytes:3dpi	70.59	24.72 to 116.5	Yes	***	0.0003
periphery:4hpi vs. atypical astrocytes:28dpi	79.07	33.19 to 124.9	Yes	****	<0.0001
periphery:3dpi vs. periphery:28dpi	-14.1	-59.98 to 31.77	No	ns	0.9984
periphery:3dpi vs. atypical astrocytes:4hpi	63.52	17.64 to 109.4	Yes	**	0.0014
periphery:3dpi vs. atypical astrocytes:3dpi	76.43	30.55 to 122.3	Yes	****	<0.0001
periphery:3dpi vs. atypical astrocytes:28dpi	84.9	39.03 to 130.8	Yes	****	<0.0001
periphery:28dpi vs. atypical astrocytes:4hpi	77.62	31.74 to 123.5	Yes	****	<0.0001
periphery:28dpi vs. atypical astrocytes:3dpi	90.53	44.66 to 136.4	Yes	****	<0.0001
periphery:28dpi vs. atypical astrocytes:28dpi	99.01	53.13 to 144.9	Yes	****	<0.0001
atypical astrocytes:4hpi vs. atypical astrocytes:3dpi	12.91	-32.96 to 58.79	No	ns	0.9994
atypical astrocytes:4hpi vs. atypical astrocytes:28dpi	21.39	-24.49 to 67.26	No	ns	0.9235
atypical astrocytes:3dpi vs. atypical astrocytes:28dpi	8.472	-37.4 to 54.35	No	ns	>0.9999

Test details	Mean 1	SEM 1	Mean 2	SEM 2	Mean Diff.	SE of diff.	N1	N2
periphery:4hpi vs. periphery:3dpi	139.4	13.618	145.2	11.385	-5.836	14.89	9	9
periphery:4hpi vs. periphery:28dpi	139.4	13.618	159.3	12.258	-19.94	14.89	9	9
periphery:4hpi vs. atypical astrocytes:4hpi	139.4	13.618	81.69	9.281	57.68	14.89	9	9
periphery:4hpi vs. atypical astrocytes:3dpi	139.4	13.618	68.77	9.542	70.59	14.89	9	9
periphery:4hpi vs. atypical astrocytes:28dpi	139.4	13.618	60.3	4.77	79.07	14.89	9	9
periphery:3dpi vs. periphery:28dpi	145.2	11.385	159.3	12.258	-14.1	14.89	9	9
periphery:3dpi vs. atypical astrocytes:4hpi	145.2	11.385	81.69	9.281	63.52	14.89	9	9
periphery:3dpi vs. atypical astrocytes:3dpi	145.2	11.385	68.77	9.542	76.43	14.89	9	9
periphery:3dpi vs. atypical astrocytes:28dpi	145.2	11.385	60.3	4.77	84.9	14.89	9	9
periphery:28dpi vs. atypical astrocytes:4hpi	159.3	12.258	81.69	9.281	77.62	14.89	9	9
periphery:28dpi vs. atypical astrocytes:3dpi	159.3	12.258	68.77	9.542	90.53	14.89	9	9
periphery:28dpi vs. atypical astrocytes:28dpi	159.3	12.258	60.3	4.77	99.01	14.89	9	9
atypical astrocytes:4hpi vs. atypical astrocytes:3dpi	81.69	9.281	68.77	9.542	12.91	14.89	9	9
atypical astrocytes:4hpi vs. atypical astrocytes:28dpi	81.69	9.281	60.3	4.77	21.39	14.89	9	9
atypical astrocytes:3dpi vs. atypical astrocytes:28dpi	68.77	9.542	60.3	4.77	8.472	14.89	9	9

Figure 5-1

Figure 5	panel	animal #	sex	experimental group	time point	total n number	n male/ female	mouse strain
		3410 cell 4	M	3x TBI 45 min	15dpi	18(TBI)	18M	Aldh111-tdTomato
		3421 cell 1	M	3x TBI 45 min	13dpi			Aldh111-tdTomato
		3928 cell 5	M	3x TBI 45 min	7dpi			Aldh111-tdTomato
		3932 cell 2	M	3x TBI 45 min	11dpi			Aldh111-tdTomato
		3934 cell 1	M	3x TBI 45 min	13dpi			Aldh111-tdTomato
		4281 cell 2	M	3x TBI 45 min	14dpi			Aldh111-tdTomato
		3619 cell 1	M	3x TBI 45 min	12dpi			Aldh111-tdTomato
		3619 cell 5	M	3x TBI 45 min	12dpi			Aldh111-tdTomato
		3928 cell 4	M	3x TBI 45 min	7dpi			Aldh111-tdTomato
		3932 cell 5	M	3x TBI 45 min	11dpi			Aldh111-tdTomato
		3932 cell 1	M	3x TBI 45 min	11dpi			Aldh111-tdTomato
		3932 cell 6	M	3x TBI 45 min	11dpi			Aldh111-tdTomato
		3934 cell 3	M	3x TBI 45 min	13dpi			Aldh111-tdTomato
		3934 cell 4	M	3x TBI 45 min	13dpi			Aldh111-tdTomato
		4199 cell 1	M	3x TBI 45 min	7dpi			Aldh111-tdTomato
		4199 cell 5	M	3x TBI 45 min	7dpi			Aldh111-tdTomato
		4199 cell 6	M	3x TBI 45 min	7dpi			Aldh111-tdTomato
		4281 cell 1	M	3x TBI 45 min	14dpi			Aldh111-tdTomato

Figure 5 - Statistics

Fig. 5 Paired Sample T-Test, significant difference between healthy and dysfunctional areas (p<0.0001). N is sample number.

	N	Mean	Std. Deviation	Std. Error of Mean	t	df	Significant?	Summary	P Value
bioc+ tdTom+ Glf1+ area	18	61.65	17.46	4.114	5.207	5	Yes	****	<0.0001
atypical area	18	23.86	18.34	4.324					

Figure 6-1

Figure 6	panel	animal #	sex	experimental group	time point	total n number	n male/ female	mouse strain
a		1088	F	3x Sham 45 min	4 hours	4 (Sham)	2M/2F	Aldh111-eGFP/FVB/N
		1089	F	3x Sham 45 min	4 hours			Aldh111-eGFP/FVB/N
		1743	M	3x Sham 45 min	4 hours			Aldh111-eGFP/FVB/N
		1094	M	3x Sham 45 min	4 hours			Aldh111-eGFP/FVB/N
		1740	M	3x TBI 50cm 45 min	4hpi	9 (4hpi)	4M/5F	Aldh111-eGFP/FVB/N
		1092	M	3x TBI 50cm 45 min	4hpi			Aldh111-eGFP/FVB/N
		1093	M	3x TBI 50cm 45 min	4hpi			Aldh111-eGFP/FVB/N
		1094	M	3x TBI 50cm 45 min	4hpi			Aldh111-eGFP/FVB/N
		1085	F	3x TBI 50cm 45 min	4hpi			Aldh111-eGFP/FVB/N
		1086	F	3x TBI 50cm 45 min	4hpi			Aldh111-eGFP/FVB/N
		1742	F	3x TBI 50cm 45 min	4hpi			Aldh111-eGFP/FVB/N
		1739	F	3x TBI 50cm 45 min	4hpi			Aldh111-eGFP/FVB/N
		1741	F	3x TBI 50cm 45 min	4hpi			Aldh111-eGFP/FVB/N
		1647	F	3x Sham 45 min	1 day	3 (Sham)	2M/1F	Aldh111-eGFP/FVB/N
		1064	M	3x Sham 45 min	1 day			Aldh111-eGFP/FVB/N
		1063	M	3x Sham 45 min	1 day			Aldh111-eGFP/FVB/N
		1649	M	3x TBI 50cm 45 min	1dpi	6 (1dpi)	3M/3F	Aldh111-eGFP/FVB/N
		1076	F	3x TBI 50cm 45 min	1dpi			Aldh111-eGFP/FVB/N
		1082	F	3x TBI 50cm 45 min	1dpi			Aldh111-eGFP/FVB/N
		1077	F	3x TBI 50cm 45 min	1dpi			Aldh111-eGFP/FVB/N
		1069	M	3x TBI 50cm 45 min	1dpi			Aldh111-eGFP/FVB/N
		1070	M	3x TBI 50cm 45 min	1dpi			Aldh111-eGFP/FVB/N
		1682	F	3x Sham 45 min	3 days	1 (Sham)	1F	Aldh111-eGFP/FVB/N
		1653	M	3x TBI 50cm 45 min	3dpi	2 (3dpi)	2M	Aldh111-eGFP/FVB/N
		1655	M	3x TBI 50cm 45 min	3dpi			Aldh111-eGFP/FVB/N
		6038	F	3x Sham 45 min	7 days	5 (Sham)	2M/3F	Aldh111-eGFP/FVB/N

	6037	M	3x Sham 45 min	7 days			Aldh11-eGFP/FVB/N
	6076	F	3x Sham 45 min	7 days			Aldh11-eGFP/FVB/N
	1747	F	3x Sham 45 min	7 days			Aldh11-eGFP/FVB/N
	6032	M	3x Sham 45 min	7 days			Aldh11-eGFP/FVB/N
	1746	M	3x TBI 50cm 45 min	7dpi	6 (7dpi)	4M/2F	Aldh11-eGFP/FVB/N
	1749	M	3x TBI 50cm 45 min	7dpi			Aldh11-eGFP/FVB/N
	1748	F	3x TBI 50cm 45 min	7dpi			Aldh11-eGFP/FVB/N
	6034	M	3x TBI 50cm 45 min	7dpi			Aldh11-eGFP/FVB/N
	1745	F	3x TBI 50cm 45 min	7dpi			Aldh11-eGFP/FVB/N
	1744	M	3x TBI 50cm 45 min	7dpi			Aldh11-eGFP/FVB/N
	1738	F	3x Sham 45 min	28 days	2 (Sham)	2F	Aldh11-eGFP/FVB/N
	1754	F	3x Sham 45 min	28 days			Aldh11-eGFP/FVB/N
	1750	F	3x TBI 50cm 45 min	28dpi	7 (28dpi)	4M/3F	Aldh11-eGFP/FVB/N
	1752	M	3x TBI 50cm 45 min	28dpi			Aldh11-eGFP/FVB/N
	1753	F	3x TBI 50cm 45 min	28dpi			Aldh11-eGFP/FVB/N
	1755	F	3x TBI 50cm 45 min	28dpi			Aldh11-eGFP/FVB/N
	30	M	3x TBI 50cm 45 min	28dpi			Aldh11-eGFP/FVB/N
	35	M	3x TBI 50cm 45 min	28dpi			Aldh11-eGFP/FVB/N
	33	M	3x TBI 50cm 45 min	28dpi			Aldh11-eGFP/FVB/N
	1412	M	3x Sham 45 min	56 days	1 (Sham)	1M	Aldh11-eGFP/FVB/N
	1416	M	3x TBI 50cm 45 min	56dpi	3 (56dpi)	1M/2F	Aldh11-eGFP/FVB/N
	1443	F	3x TBI 50cm 45 min	56dpi			Aldh11-eGFP/FVB/N
	1442	F	3x TBI 50cm 45 min	56dpi			Aldh11-eGFP/FVB/N
c	204	F	3x Sham 45 min	4 hours	3 (Sham)	3F	C57/B6
	205	F	3x Sham 45 min	4 hours			C57/B6
	206	F	3x Sham 45 min	4 hours			C57/B6
	66	F	3x TBI 50cm 45 min	4hpi	7 (4hpi)	7F	C57/B6
	83	F	3x TBI 50cm 45 min	4hpi			C57/B6
	72	F	3x TBI 50cm 45 min	4hpi			C57/B6
	68	F	3x TBI 50cm 45 min	4hpi			C57/B6
	70	F	3x TBI 50cm 45 min	4hpi			C57/B6
	763	F	3x TBI 50cm 45 min	4hpi			C57/B6
	765	F	3x TBI 50cm 45 min	4hpi			C57/B6
	235	F	3x TBI 50cm 45 min	7dpi	6 (7dpi)	6F	C57/B6
	236	F	3x TBI 50cm 45 min	7dpi			C57/B6
	330	F	3x TBI 50cm 45 min	7dpi			C57/B6
	331	F	3x TBI 50cm 45 min	7dpi			C57/B6
	1194	F	3x TBI 50cm 45 min	7dpi			C57/B6
	1192	F	3x TBI 50cm 45 min	7dpi			C57/B6
d	203	F	3x Sham 45 min	4 hours	8(Sham)	4M/4F	C57/B6
	204	F	3x Sham 45 min	4 hours			C57/B6
	205	F	3x Sham 45 min	4 hours			C57/B6
	206	F	3x Sham 45 min	4 hours			C57/B6
	1189	M	3x Sham 45 min	4 hours			C57/B6
	1030	M	3x Sham 45 min	4 hours			C57/B6
	1166	M	3x Sham 45 min	4 hours			C57/B6
	1288	M	3x Sham 45 min	4 hours			C57/B6
	66	F	3x TBI 50cm 45 min	4hpi	11 (4hpi)	4M/7F	C57/B6
	83	F	3x TBI 50cm 45 min	4hpi			C57/B6
	72	F	3x TBI 50cm 45 min	4hpi			C57/B6
	68	F	3x TBI 50cm 45 min	4hpi			C57/B6
	70	F	3x TBI 50cm 45 min	4hpi			C57/B6
	763	F	3x TBI 50cm 45 min	4hpi			C57/B6
	765	F	3x TBI 50cm 45 min	4hpi			C57/B6
	98	M	3x TBI 50cm 45 min	4hpi			C57/B6
	290	M	3x TBI 50cm 45 min	4hpi			C57/B6
	291	M	3x TBI 50cm 45 min	4hpi			C57/B6
	292	M	3x TBI 50cm 45 min	4hpi			C57/B6
	235	F	3x TBI 50cm 45 min	7dpi	15 (7dpi)	9M/6F	C57/B6
	236	F	3x TBI 50cm 45 min	7dpi			C57/B6
	330	F	3x TBI 50cm 45 min	7dpi			C57/B6
	331	F	3x TBI 50cm 45 min	7dpi			C57/B6
	1194	F	3x TBI 50cm 45 min	7dpi			C57/B6
	1192	F	3x TBI 50cm 45 min	7dpi			C57/B6
	1275	M	3x TBI 50cm 45 min	7dpi			C57/B6
	1279	M	3x TBI 50cm 45 min	7dpi			C57/B6
	329	M	3x TBI 50cm 45 min	7dpi			C57/B6
	1191	M	3x TBI 50cm 45 min	7dpi			C57/B6
	1205	M	3x TBI 50cm 45 min	7dpi			C57/B6
	1284	M	3x TBI 50cm 45 min	7dpi			C57/B6
	1285	M	3x TBI 50cm 45 min	7dpi			C57/B6
	1287	M	3x TBI 50cm 45 min	7dpi			C57/B6
	1190	M	3x TBI 50cm 45 min	7dpi			C57/B6

Figure 6 - Statistics
Fig 6d.

Kruskal-Wallis Test, significant difference for post-injury timepoint ($p=0.0391$). N is sample number.

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value
Sham vs. 4hpi	-3.5	No	ns	0.9085
Sham vs. 7dpi	-10.62	Yes	*	0.0359

Test details	Mean 1	SEM 1	Mean 2	SEM 2
Sham vs. 4hpi	1	0.169	1.416	0.2958
Sham vs. 7dpi	1	0.169	2.272	0.4318

Figure 7-1

Figure 7	panel	animal #	sex	experimental group	time point	total n number	n male/ female	mouse strain
	a	33	M	3x TBI 50cm 45min	28dpi	1 (28dpi)	1M	Aldh11-eGFP/FVB/N
	b	1739	F	3x TBI 50cm 45min	4hpi	1 (4hpi)	1F	Aldh11-eGFP/FVB/N
		1648	F	3x TBI 50cm 45min	1dpi	1 (1dpi)	1F	Aldh11-eGFP/FVB/N
		749	F	3x TBI 50cm 45min	3dpi	1 (3dpi)	1F	Aldh11-eGFP/FVB/N
		1745	F	3x TBI 50cm 45min	7dpi	1 (7dpi)	1F	Aldh11-eGFP/FVB/N
		1606	F	3x TBI 50cm 45min	14dpi	1 (14dpi)	1F	Aldh11-eGFP/FVB/N
		792	M	3x TBI 50cm 45min	56dpi	1 (56dpi)	1M	Aldh11-eGFP/FVB/N
	c	792	M	3x TBI 50cm 45min	56dpi	1 (56dpi)	1M	Aldh11-eGFP/FVB/N

d	1647	F	3x Sham 45min	1 day	1 (Sham)	1F	Aldh111-eGFP/FVB/N
	1648	F	3x TBI 50cm 45min	1dpi	3 (1dpi)	1M/2F	Aldh111-eGFP/FVB/N
	1649	M	3x TBI 50cm 45min	1dpi			Aldh111-eGFP/FVB/N
	1651	F	3x TBI 50cm 45min	1dpi			Aldh111-eGFP/FVB/N
	1682	F	3x Sham 45min	3 days	1 (Sham)	1F	Aldh111-eGFP/FVB/N
	1653	M	3x TBI 50cm 45min	3dpi	4 (3dpi)	2M/2F	Aldh111-eGFP/FVB/N
	1655	M	3x TBI 50cm 45min	3dpi			Aldh111-eGFP/FVB/N
	1686	F	3x TBI 50cm 45min	3dpi			Aldh111-eGFP/FVB/N
	1689	F	3x TBI 50cm 45min	3dpi			Aldh111-eGFP/FVB/N
	1747	F	3x Sham 45min	7 days	1 (Sham)	1F	Aldh111-eGFP/FVB/N
	1744	M	3x TBI 50cm 45min	7dpi	5 (7dpi)	3M/2F	Aldh111-eGFP/FVB/N
	1745	F	3x TBI 50cm 45min	7dpi			Aldh111-eGFP/FVB/N
	1746	M	3x TBI 50cm 45min	7dpi			Aldh111-eGFP/FVB/N
	1748	F	3x TBI 50cm 45min	7dpi			Aldh111-eGFP/FVB/N
	1749	M	3x TBI 50cm 45min	7dpi			Aldh111-eGFP/FVB/N
	1460	F	3x Sham 45min	14 days	2 (Sham)	1M/1F	Aldh111-eGFP/FVB/N
	1607	M	3x Sham 45min	14 days			Aldh111-eGFP/FVB/N
	1454	F	3x TBI 50cm 45min	14dpi	4 (14dpi)	1M/3F	Aldh111-eGFP/FVB/N
	1463	F	3x TBI 50cm 45min	14dpi			Aldh111-eGFP/FVB/N
	1606	F	3x TBI 50cm 45min	14dpi			Aldh111-eGFP/FVB/N
	1608	M	3x TBI 50cm 45min	14dpi			Aldh111-eGFP/FVB/N
	1754	F	3x Sham 45min	28 days	2 (Sham)	2F	Aldh111-eGFP/FVB/N
	1738	F	3x Sham 45min	28 days			Aldh111-eGFP/FVB/N
	1750	F	3x TBI 50cm 45min	28dpi	4 (28dpi)	1M/3F	Aldh111-eGFP/FVB/N
	1752	M	3x TBI 50cm 45min	28dpi			Aldh111-eGFP/FVB/N
	1753	F	3x TBI 50cm 45min	28dpi			Aldh111-eGFP/FVB/N
	1755	F	3x TBI 50cm 45min	28dpi			Aldh111-eGFP/FVB/N

Figure 7 - Statistics

Fig. 7c Kruskal-Wallis Test, no significant difference for post-injury timepoint ($p=0.6998$), N is sample number

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value
1dpi vs. 3dpi	0.8712	No	ns	>0.9999
1dpi vs. 7dpi	6.417	No	ns	>0.9999
1dpi vs. 14dpi	-4.383	No	ns	>0.9999
1dpi vs. 28dpi	0.8611	No	ns	>0.9999
3dpi vs. 7dpi	5.545	No	ns	>0.9999
3dpi vs. 14dpi	-5.255	No	ns	>0.9999
3dpi vs. 28dpi	-0.0101	No	ns	>0.9999
7dpi vs. 14dpi	-10.8	No	ns	>0.9999
7dpi vs. 28dpi	-5.556	No	ns	>0.9999
14dpi vs. 28dpi	5.244	No	ns	>0.9999

Test details	Mean 1	SEM 1	Mean 2	SEM 2	N1	N2
1dpi vs. 3dpi	1.29	0.1317	1.334	0.1523	12	11
1dpi vs. 7dpi	1.29	0.1317	1.366	0.4111	12	7
1dpi vs. 14dpi	1.29	0.1317	1.521	0.1972	12	5
1dpi vs. 28dpi	1.29	0.1317	1.255	0.193	12	9
3dpi vs. 7dpi	1.334	0.1523	1.366	0.4111	11	7
3dpi vs. 14dpi	1.334	0.1523	1.521	0.1972	11	5
3dpi vs. 28dpi	1.334	0.1523	1.255	0.193	11	9
7dpi vs. 14dpi	1.366	0.4111	1.521	0.1972	7	5
7dpi vs. 28dpi	1.366	0.4111	1.255	0.193	7	9
14dpi vs. 28dpi	1.521	0.1972	1.255	0.193	5	9

Figure 8-1

Figure 8	panel	animal #	sex	experimental group	time point	total n number	n male/female	mouse strain
	a	123	M	3x TBI 50cm 45min + EEG	50dpi	9 (rdTBI)	9M	C57BL/6
		127	M	3x TBI 50cm 45min + EEG	50dpi			C57BL/6
		129	M	3x TBI 50cm 45min + EEG	50dpi			C57BL/6
		1106	M	3x TBI 50cm 45min + EEG	78dpi			C57BL/6
		1105	M	3x TBI 50cm 45min + EEG	78dpi			C57BL/6
		1107	M	3x TBI 50cm 45min + EEG	78dpi			C57BL/6
		1108	M	3x TBI 50cm 45min + EEG	78dpi			C57BL/6
		1336	M	3x TBI 50cm 45min + EEG	110dpi			C57BL/6
		1822	M	3x TBI 50cm 45min + EEG	110dpi			C57BL/6
	b,c	7779	M	3xSham+EEG	50 days	1 (Sham)	1M	C57BL/6
		129	M	3x TBI 50cm 45min + EEG	35dpi	1 (rdTBI)	1M	C57BL/6
	d	1106	M	3x TBI 50cm 45min + EEG	78dpi	1 (rdTBI)	1M	C57BL/6
	e	7779	M	3xSham+EEG	50 days	1 (Sham)	1M	C57BL/6
		129	M	3x TBI 50cm 45min + EEG	35dpi	2 (rdTBI)	2M	C57BL/6
		1106	M	3x TBI 50cm 45min + EEG	78dpi			C57BL/6
	f	7776	M	3xSham+EEG	50 days	6 (Sham)	6M	C57BL/6
		7779	M	3xSham+EEG	50 days			C57BL/6
		6213	M	3xSham+EEG	76 days			C57BL/6
		6221	M	3xSham+EEG	75 days			C57BL/6
		6232	M	3xSham+EEG	74 days			C57BL/6
		6234	M	3xSham+EEG	45 days			C57BL/6
		123	M	3x TBI 50cm 45min + EEG	50dpi	9 (rdTBI)	9M	C57BL/6

	127	M	3x TBI 50cm 45min + EEG	50dpi			C57BL/6
	129	M	3x TBI 50cm 45min + EEG	50dpi			C57BL/6
	1106	M	3x TBI 50cm 45min + EEG	78dpi			C57BL/6
	1105	M	3x TBI 50cm 45min + EEG	78dpi			C57BL/6
	1107	M	3x TBI 50cm 45min + EEG	78dpi			C57BL/6
	1108	M	3x TBI 50cm 45min + EEG	78dpi			C57BL/6
	1336	M	3x TBI 50cm 45min + EEG	110dpi			C57BL/6
	1822	M	3x TBI 50cm 45min + EEG	110dpi			C57BL/6
g	7779	M	3xSham+EEG	50 days	1 (Sham)	1M	C57BL/6
	129	M	3x TBI 50cm 45min + EEG	50dpi	1 (rdTBI)	1M	C57BL/6
h	127	M	3x TBI 50cm 45min + EEG	50dpi	1 (rdTBI)	1M	C57BL/6

	animal #	sex	experimental group	time point	total n number	n male/ female	mouse strain
	123	M	3x TBI, PTE	50 dpi	4 (3x TBI, Seizures+)	4M	C57BL/6
	127	M	3x TBI, PTE	50 dpi			C57BL/6
	129	M	3x TBI, PTE	50 dpi			C57BL/6
	1106	M	3x TBI, PTE	78 dpi			C57BL/6
	1105	M	3x TBI, no PTE	78 dpi	5 (3x TBI, Sseizures-)	5M	C57BL/6
	1107	M	3x TBI, no PTE	78 dpi			C57BL/6
	1108	M	3x TBI, no PTE	78 dpi			C57BL/6
	1822	M	3x TBI, no PTE	107 dpi			C57BL/6
	1336	M	3x TBI, no PTE	63 dpi			C57BL/6

Figure 8 Statistics

Fig.8f One-way ANOVA, significant difference (p=0.0042) N is sample number.

Holm-Sidak's multiple comparisons test	Mean Diff.	Significant?	Summary	Adjusted P Value
3xSham vs. 3xTBI, Seizure-	0	No	ns	>0.9999
3xSham vs. 3xTBI, Seizure+	-0.3005	Yes	**	0.0073
3xTBI, Seizure- vs. 3xTBI, Seizure+	-0.3005	Yes	**	0.0073

Test details	Mean 1	Mean 2	Mean Diff.	SE of diff.	N1	N2
3xSham vs. 3xTBI, Seizure-	0	0	0	0.07371	6	5
3xSham vs. 3xTBI, Seizure+	0	0.3005	-0.3005	0.07858	6	4
3xTBI, Seizure- vs. 3xTBI, Seizure+	0	0.3005	-0.3005	0.08166	5	4

Fig.8i Unpaired t-test, significant difference between rdTBI, no seizures and rdTBI seizures (p=0.0432). N is sample number.

	N	Mean	Std. Deviation	Std. Error of Mean	t	df	Significant?	Summary	P Value
rdTBI, no seizures	4	3.21	0.9208	0.4604	2.556	6	Yes	*	0.0432
rdTBI, seizures	4	5.871	1.867	0.9337					