

Supplementary Table 1: Descriptive statistics for all data.

Figure Number	Statistical Test	Sample Size	Sample Definition	P Value	Degrees of Freedom and F/T/z/R/ETC value	
					DF	q
2c	one-way ANOVA with Tukey correction for multiple comparisons	4,4,4,4,4,3	mice per age group	adjusted P Value	DF	q
				0.0238	16	5.1
				0.0006	16	7.728
				<0.0001	16	10.88
				<0.0001	16	17.46
				<0.0001	16	9.38
				0.3228	16	3.007
				0.0092	16	5.785
				<0.0001	16	12.36
				0.0436	16	4.659
				0.5737	16	2.349
				0.0002	16	8.439
				0.8774	16	1.545
				0.003	16	6.578
				0.9957	16	0.6974
				0.0022	16	6.787
2d	one-way ANOVA with Tukey correction for multiple comparisons	4,4,4,4,4,3	mice per age group	Adjusted P Value	DF	q
				0.0363	16	4.794
				0.0011	16	7.325
				<0.0001	16	11.1
				<0.0001	16	16.34
				<0.0001	16	9.131
				0.3632	16	2.887
				0.0044	16	6.306
				<0.0001	16	11.54
				0.0416	16	4.693
				0.3411	16	2.951
				0.0006	16	7.8
				0.8331	16	1.69
				0.0197	16	5.237
				0.9615	16	1.145
				0.0068	16	5.994

2e	one-way ANOVA with Tukey correction for multiple comparisons	4,4,3,4,4,3	mice per age group	Adjusted P Value	DF	q
				0.0008	17	7.439
				<0.0001	17	10.54
				<0.0001	17	15.85
				<0.0001	17	12.53
				0.0001	17	8.881
				0.1764	17	3.546
				0.0004	17	7.983
				0.0325	17	4.834
				0.7350	17	1.959
				0.1224	17	3.845
				0.9844	17	0.9297
				0.8942	17	1.485
				0.2762	17	3.149
				0.0139	17	5.432
				0.5029	17	2.517
2h	one-way ANOVA with Tukey correction for multiple comparisons	4,4,4,4,4,4	mice per age group	Adjusted P Value	DF	q
				0.0358	18	4.73
				0.0002	18	8.248
				<0.0001	18	19.77
				<0.0001	18	16.98
				0.0014	18	6.915
				0.1796	18	3.518
				<0.0001	18	15.04
				<0.0001	18	12.25
				0.6416	18	2.185
				<0.0001	18	11.53
				0.0001	18	8.73
				0.9299	18	1.333
				0.3917	18	2.796
				<0.0001	18	12.86
				<0.0001	18	10.06
2i	one-way ANOVA with Tukey correction for multiple comparisons	4,4,4,4,4,4	mice per age group	Adjusted P Value	DF	q
				0.0717	18	4.233
				0.0036	18	6.294
				<0.0001	18	10.91
				<0.0001	18	12.96
				0.1593	18	3.617

				0.6936	18	2.061
				0.0020	18	6.677
				0.0001	18	8.726
				0.9977	18	0.6159
				0.0422	18	4.616
				0.0020	18	6.665
				0.4371	18	2.677
				0.6984	18	2.049
				0.0008	18	7.293
				<0.0001	18	9.342
2j	one-way ANOVA with Tukey correction for multiple comparisons	4,4,4,4,4,4	mice per age group	Adjusted P Value	DF	q
				0.0049	18	6.08
				<0.0001	18	10.08
				<0.0001	18	20.14
				<0.0001	18	20.08
				<0.0001	18	13.75
				0.0980	18	3.999
				<0.0001	18	14.07
				<0.0001	18	14
				0.0005	18	7.671
				<0.0001	18	10.07
				<0.0001	18	10.01
				0.1488	18	3.672
				>0.9999	18	0.06032
				0.0031	18	6.394
				0.0033	18	6.334
5d	one-way ANOVA with Tukey correction for multiple comparisons	23,72,57,62,62	P30=23 axons from 4 mice, P60=72 axons from 4 mice, P220= 57 axons from 3 mice, P370=62 axons from 4 mice, and P640=62 axons from 4 mice	Adjusted P Value	DF	q
				0.7251	271	1.76
				0.0048	271	4.955
				<0.0001	271	6.703
				<0.0001	271	10.61
				0.0132	271	4.525

				<0.0001	271	7.012
				<0.0001	271	12.52
				0.5052	271	2.248
				<0.0001	271	7.45
				0.0019	271	5.314
7d	one-way ANOVA with Tukey correction for multiple comparisons	4,4,4,3	mice per age group	Adjusted P Value		
				Spheroids	DF	q
				0.4072	11	2.291
				<0.0001	11	18.9
				<0.0001	11	25.22
				<0.0001	11	16.61
				<0.0001	11	23.1
				0.001	11	7.72
				Debris	DF	q
				0.7535	11	1.412
				0.0033	11	6.589
				<0.0001	11	11.62
				0.0168	11	5.177
				<0.0001	11	10.31
				0.0113	11	5.519
8c	unpaired two-tailed student's t-test	67,102	myelin debris, oligodendrocyte soma from 3 mice	P Value		
				<0.0001	t=15.91 df=167	
8d	unpaired two-tailed student's t-test	103,136	myelin spheroids, normal appearing internodes from 3 mice	P Value		
				0.2482	t=1.158 df=237	