

Supplementary Table 1. Summary of statistical analysis for relevant figures.

Figure	Panel	Statistical Tests	Statistical Results
1	e left	One-way ANOVA with post hoc tests	$F(4,46)=16.69$ , $p<0.0001$ Tukey's multiple comparison tests: DCC8 vs. 22: $\text{adj.}p<0.0001$ DCC15 vs. 29: $\text{adj.}p=0.0019$
1	e right	One-way ANOVA with post hoc tests	$F(4,46)=10.95$ , $p<0.0001$ Tukey's multiple comparison tests: DCC8 vs. 22: $\text{adj.}p=0.0082$ DCC15 vs. 22: $\text{adj.}p=0.0486$
1	g	Mixed-effects model (REML)	$F(0.9122, 10.72) = 63.30$ , $p<0.0001$ Tukey's multiple comparison tests: DCC4 vs. 7: $\text{adj.}p=0.0017$ DCC7 vs. 14: $\text{adj.}p=0.0008$ DCC14 vs. 21: $\text{adj.}p=0.0144$
2	c	Chi-squared test	$X\text{-squared} = 1697.1$ , $df = 3$ , $p< 2.2e-16$
2	f	One-way ANOVA with post hoc tests	$F(2,6)=14.94$ , $p<0.0047$ Tukey's multiple comparison tests: DCC7 vs. 21: $\text{adj.}p=0.0042$ DCC14 vs. 21: $\text{adj.}p=0.0244$
2	g	Kruskal-Wallis rank sum test, two-sided and pairwise Wilcoxon tests, two-sided	Kruskal-Wallis: $p= 2.708e-10$ Pairwise Wilcoxon with Benjamini-Hochberg multiple testing correction: DCC7 vs. 15: $\text{adj.}p= 9.7e-08$ DCC15 vs. 21: $\text{adj.}p= 1.9e-09$
3	b	One-way ANOVA with post hoc tests	$F(2,6)=30.78$ $p=0.0007$ Tukey's multiple comparison tests: bin1 vs. bin2: $\text{adj.}p=0.003$
3	c	One-way ANOVA with post hoc tests	$F(2,6)=10.84$ $p=0.01$ Tukey's multiple comparison tests: bin1 vs. bin2: $\text{adj.}p=0.04$
3	e	Simple Linear Regression	$R\text{-squared}=0.37$ $F(1,18)=10.42$ , $p=0.0047$
3	f	Fisher's exact test two sided for DCC7 and 15, Chi-squared test for CCD21	DCC7 Fisher's exact test: $p=7.214e-09$ DCC15: Fisher's exact test: $p<2.2e-16$ DCC21: $X\text{-squared}=674.03$ , $df=3$ , $p<2.2e-16$
4	c	Chi-squared test	$X\text{-squared}=0.2981$ , $df=3$ , $p=0.9604$
4	d	Unpaired t-test, two-sided	$t=2.749$ , $df=17$ , $p=0.0137$
4	e	Wilcoxon rank sum test, two-sided	$p=0.0141$
4	f	Unpaired t-test, two-sided	$t=3.983$ , $df=4$ , $p=0.0164$
4	g	Chi-squared test	$X\text{-squared} = 1.361$ , $df=3$ , $p=0.7147$
4	i	Paired t-test, two-sided	$t=4.641$ , $df=2$ , $p=0.0434$

4	j	Wilcoxon rank sum test, two-sided	p=0.0008
6	a Area	One-way ANOVA with post hoc tests	F(2, 32)=11.82, p=0.0001 Dunnett's multiple comparison tests: Neu Ctr-Myo Ctr vs. Neu Ctr-Myo Q72: adj.p=0.0174 Neu Ctr-Myo Ctr vs. Neu Q72-Myo Ctr: adj.p<0.0001
6	a Length	One-way ANOVA with post hoc tests	F(2, 34)=10.08, p=0.0004 Dunnett's multiple comparison tests: Neu Ctr-Myo Ctr vs. Neu Ctr-Myo Q72: adj.p=0.0042 Neu Ctr-Myo Ctr vs. Neu Q72-Myo Ctr: adj.p=0.0004
6	a Form factor	One-way ANOVA with post hoc tests	F(2, 34)=5.01, p=0.0124 Dunnett's multiple comparison tests: Neu Ctr-Myo Ctr vs. Neu Ctr-Myo Q72: adj.p=0.0424 Neu Ctr-Myo Ctr vs. Neu Q72-Myo Ctr: adj.p=0.0127
6	b left panel	two-way ANOVA for each time point	DCC2: DCC2 Fmyo()=, p= DCC2 Fneu()= DCC2 Fmyo:neu()=
6	b right panel	two-way ANOVA for each time point	
6	c	One-way ANOVA with post hoc tests	F (2, 25) = 25.22, p<0.0001 Tukey's multiple comparison tests: Neu Ctr-Myo Q72 vs. Neu Q72-Myo Q72: adj.p=0.0003 Neu Q72-Myo Ctr vs. Neu Q72-Myo Q72: adj.p<0.0001
7	d	Unpaired t-test, two-sided	t=9.361, df=4, p=0.0007