

**Supplementary Table 1. Detailed information for statistical analysis**

Figure #	Compare (group size)	Statistical method	P-value	Notes
Fig. 1C	VEH + Saline (n = 12) vs. CIS + Saline (n = 12)	One-way ANOVA with Tukey's multiple comparisons test	P = 0.0001	500 $\mu$ M NMN, 0.1 $\mu$ M CIS
	VEH + Saline (n = 12) vs. VEH + NMN (n = 12)		P = 0.9999	
	VEH + Saline (n = 12) vs. CIS + NMN (n = 10)		P = 0.7793	
	NMN (n = 10)		P = 0.0001	
Fig. 1E	Saline (n = 17)	One-way ANOVA with Tukey's multiple comparisons test	P = 0.0001	500 $\mu$ M NMN,
	NMN (n = 18)		P = 0.9869	
	NMN (n = 24)		P = 0.0246	
	NMN (n = 24)		P = 0.0001	
Fig. 2A	VEH + Saline (n = 3) vs. CIS + Saline (n = 3)	One-way ANOVA with Tukey's multiple comparisons test	P = 0.0034	500 $\mu$ M NMN, 0.1 $\mu$ M CIS
	VEH + Saline (n = 3) vs. VEH + NMN (n = 3)		P = 0.4833	
	VEH + Saline (n = 3) vs. CIS + NMN (n = 3)		P = 0.3798	
	CIS + Saline (n = 3) vs. CIS + NMN (n = 3)		P = 0.031	
Fig. 2B	VEH + Saline (n = 6) vs. CIS + Saline (n = 6)	One-way ANOVA with Tukey's multiple comparisons test	P = 0.0001	500 $\mu$ M NMN, 0.1 $\mu$ M CIS
	VEH + Saline (n = 6) vs. VEH + NMN (n = 6)		P = 0.8981	
	VEH + Saline (n = 6) vs. CIS + NMN (n = 6)		P = 0.8326	
	CIS + Saline (n = 6) vs. CIS + NMN (n = 6)		P = 0.0031	
Fig. 3B	VEH + Saline (n = 12) vs. CIS + Saline (n = 11)	One-way ANOVA with Tukey's multiple comparisons test	P = 0.0001	500 $\mu$ M NMN, 0.1 $\mu$ M CIS
	VEH + Saline (n = 12) vs. VEH + NMN (n = 13)		P = 0.9993	
	VEH + Saline (n = 12) vs. CIS + NMN (n = 10)		P = 0.8048	
	CIS + Saline (n = 11) vs. CIS + NMN (n = 10)		P = 0.0001	