

Ratnappan et al., REVISED Table S4: Effect of *nhr-49* mutation on the longevity mediated by reduced IIS pathway activity and impaired mitochondrial electron transport

**S4A: Genetic Mutants**

#	Strain	Trial 1					Trial 2					Trial 3				
		n = Obs/Total <sup>a</sup>	Mean ± SEM	P (vs. N2)	P (vs...)	% Lifespan Extension	n = Obs/Total <sup>a</sup>	Mean ± SEM	P (vs. N2)	P (vs...)	% Lifespan Extension	n = Obs/Total <sup>a</sup>	Mean ± SEM	P (vs. N2)	P (vs...)	% Lifespan Extension
1	N2	48/80	16.9 ± 0.1				22/55	22.5 ± 0.3				59/70	17.9 ± 0.5			
2	<i>nhr-49(nr2041)</i>	80/91	10.7 ± 0.1	<0.0001		- 37	43/57	12.2 ± 0.07	<0.0001		- 46	74/86	9.5 ± 0.2	<0.0001		- 47
4	<i>daf-2(e1370)</i>	42/67	43.0 ± 0.6	<0.0001		+ 154	51/89	43.8 ± 0.5	<0.0001		+ 97	80/92	40.6 ± 1.1	<0.0001		+ 126
5	<i>nhr-49(nr2041);daf-2(e1370)</i>	46/74	42.4 ± 0.6	<0.0001	0.004 (vs. <i>daf-2 (e1370)</i> )	+ 150	21/82	49.2 ± 1.4		0.0004 (vs. <i>daf-2 (e1370)</i> )	+ 118	70/90	34.3 ± 1.1	<0.0001	0.0001 (vs. <i>daf-2 (e1370)</i> )	+ 92
6	<i>daf-2(e1368)</i>	31/75	30.6 ± 0.4	<0.0001		+ 81	50/80	28.8 ± 0.6	<0.0001		+ 28	56/75	24.4 ± 1.1	<0.0001		+ 36
7	<i>nhr-49(nr2041);daf-2(e1368)</i>	45/86	29.5 ± 0.7	<0.0001	0.73 (vs. <i>daf-2 (e1368)</i> )	+ 74	63/94	26.8 ± 0.9	<0.0001	0.88 (vs. <i>daf-2 (e1368)</i> )	+ 19	46/64	21.2 ± 0.8	<0.0001	0.001 (vs. <i>daf-2 (e1368)</i> )	+ 18

**S4B: RNAi inactivation**

#	Strain (RNAi Treatment)	Trial 1					Trial 2				
		n = Obs/Total <sup>a</sup>	Mean ± SEM	P (vs. Control <sup>b</sup> )	P (vs. )	% Lifespan Extension	n = Obs/Total <sup>a</sup>	Mean ± SEM	P (vs. Control <sup>b</sup> )	P (vs. )	% Lifespan Extension
1	N2 (Control)	72/86	17.0 ± 0.2				81/90	16.9 ± 0.3			
2	N2 ( <i>daf-2</i> )	58/84	34.6 ± 0.6	<0.0001		+ 50	70/90	27.9 ± 0.6	<0.0001		+ 40
3	N2 ( <i>cyc-1</i> )	64/83	30.7 ± 1.1	0.0002		+ 45	85/90	19.6 ± 0.3	0.0002		+ 14
4	N2 ( <i>cco-1</i> )	33/80	28.3 ± 0.3	<0.0001	P vs {N2 ( <i>cyc-1</i> ) 0.4	+ 40	81/90	21.0 ± 0.2	<0.0001	P vs {N2 ( <i>cyc-1</i> ) 0.17	+ 19
5	<i>nhr-49</i> (Control)	86/89	12.9 ± 0.2	<0.0001	P vs N2 (Control) <0.0001		86/89	11.6 ± 0.1	<0.0001	P vs N2 (Control) <0.0001	
6	<i>nhr-49</i> ( <i>daf-2</i> )	61/86	25.0 ± 0.4	<0.0001	P vs N2 (Control) <0.0001	+ 49	72/90	28.0 ± 0.3	<0.0001	P vs N2 (Control) <0.0001; P vs N2( <i>daf-2</i> ) 0.33	+ 58
7	<i>nhr-49</i> ( <i>cyc-1</i> )	85/95	14.8 ± 0.2	0.0004		+ 13	85/95	14.8 ± 0.2	<0.0001		+ 22
8	<i>nhr-49</i> ( <i>cco-1</i> )	57/70	19.4 ± 0.2	<0.0001	P vs <i>nhr-49</i> ( <i>cyc-1</i> ) <0.0001	+ 33	88/90	14.1 ± 0.2	<0.0001	P vs <i>nhr-49</i> ( <i>cyc-1</i> ) 0.05	+ 18