

Table S9

Fig ref	Strain / condition	no. of animals	mean lifespan	median lifespan	maximum lifespan	Log Rank Test <i>p</i> value relative to control
S6A	N2 EV control	54	16.3	16	29	
	N2 + <i>daf-16</i> RNAi	56	13.3	14	17	<0.0001 (****) compared with <i>N2 control</i>
	<i>vha-6p::utx-1::GFP</i> (intestine) + EV control	51	22.4	23	40	<0.0001 (****) compared with <i>N2 control</i>
	<i>vha-6p::utx-1::GFP</i> (intestine) + <i>daf-16</i> RNAi	58	14.47	16	20	0.0001 (***) compared with <i>daf-16 RNAi</i> <0.0001 (****) compared with <i>vha-6p::utx-1::GFP</i>
S6A rep	N2 EV control	57	16.3	18	22	
	N2 + <i>daf-16</i> RNAi	59	14.9	13	18	0.002 (**) compared with <i>N2 control</i>
	<i>vha-6p::utx-1::GFP</i> (intestine) + EV control	54	17.9	15	36	0.03 (*) compared with <i>N2 control</i>
	<i>vha-6p::utx-1::GFP</i> (intestine) + <i>daf-16</i> RNAi	57	15.51	13	26	0.03 (*) compared with <i>daf-16 RNAi</i> 0.008 (**) compared with <i>vha-6p::utx-1::GFP</i>
S6B	N2 EV control	54	16.3	16	29	
	N2 + <i>daf-16</i> RNAi	56	13.3	14	17	<0.0001 (****) compared with <i>N2 control</i>
	<i>rab-3p::utx-1::GFP</i> (neuron) + EV control	54	20.7	30	46	0.0002 (***) compared with <i>N2 control</i>
	<i>rab-3p::utx-1::GFP</i> (neuron) + <i>daf-16</i> RNAi	56	14.52	16	24	0.0002 (***) compared with <i>daf-16 RNAi</i> <0.0001 (****) compared with <i>utx-1(tm3118)+ utx-1::GFP</i>
S6B rep	N2 EV control	57	16.3	18	22	
	N2 + <i>daf-16</i> RNAi	59	14.9	13	18	0.002 (**) compared with <i>N2 control</i>
	<i>rab-3p::utx-1::GFP</i> (neuron) + EV control	53	18.7	19	37	0.001 (**) compared with <i>N2 control</i>
	<i>rab-3p::utx-1::GFP</i> (neuron) + <i>daf-16</i> RNAi	57	15.49	15	22	0.002 (**) compared with <i>daf-16 RNAi</i> 0.001 (**) compared with <i>utx-1(tm3118) + utx-1::GFP</i>

S6C	N2 + EV control	49	17.8	18	28	
	N2 + <i>utx-1</i> RNAi	55	20.8	20	32	0.003 (**) (vs N2 + EV)
	<i>daf-16(mu86)</i> + EV control	56	14.5	14	18	<0.0001 (****) (vs N2 + EV)
	<i>daf-16(mu86)</i> + <i>utx-1</i> RNAi	54	14.7	14	18	0.38 (ns) (vs <i>daf-16(mu86)</i> +EV)
S6C rep	N2 + EV control	54	14.4	14	20	
	N2 + <i>utx-1</i> RNAi	54	16.3	16	22	0.005 (**) (vs N2 + EV)
	<i>daf-16(mu86)</i> + EV control	56	14.3	14	17	0.002 (**) (vs N2 + EV)
	<i>daf-16(mu86)</i> + <i>utx-1</i> RNAi	57	14.7	14	17	0.27 (ns) (vs <i>daf-16(mu86)</i> +EV)
S6D	epidermis-specific EV control (strain NR222)	55	15.8	16	25	
	epidermis-specific <i>utx-1</i> RNAi	59	20.2	21	27	<0.0001 (****) (vs epidermis-specific EV)
	<i>daf-16(mu86)</i> + epidermis-specific EV control (strain AW1708)	59	14.3	16	22	0.0001 (***) (vs epidermis-specific EV)
	<i>daf-16(mu86)</i> + epidermis-specific <i>utx-1</i> RNAi	60	14.8	18	23	0.02 (*) (vs <i>daf-16(mu86)</i> +epidermis-specific EV)
S6D rep	epidermis-specific EV control (strain NR222)	44	14.4	14	24	
	epidermis-specific <i>utx-1</i> RNAi	43	19.4	20	28	<0.0001 (****) (vs epidermis-specific EV)
	<i>daf-16(mu86)</i> + epidermis-specific EV control (strain AW1708)	58	16.3	16	22	0.0001 (***) (vs epidermis-specific EV)
	<i>daf-16(mu86)</i> + epidermis-specific <i>utx-1</i> RNAi	58	18.3	18	23	0.0001 (***) (vs <i>daf-16(mu86)</i> +epidermis-specific EV)
S6E	neuron-specific EV control (strain TU3401)	56	16.1	16	21	
	neuron-specific <i>utx-1</i> RNAi	58	22.8	24	30	<0.0001 (****) (vs neuron-specific EV)
	<i>daf-16(mu86)</i> + neuron-specific EV control (strain AW1709)	60	13.3	13.5	19	<0.0001 (****) (vs neuron-specific EV)
	<i>daf-16(mu86)</i> + neuron-specific <i>utx-1</i> RNAi	57	13.0	13	19	0.57 (ns) (vs <i>daf-16(mu86)</i> +neuron-specific EV)
S6E rep	neuron-specific EV control (strain TU3401)	48	15.1	14	20	
	neuron-specific <i>utx-1</i> RNAi	48	21.8	22	29	<0.0001 (****) (vs neuron-specific EV)
	<i>daf-16(mu86)</i> + neuron-specific EV	57	12.8	14	17	<0.0001 (****) (vs neuron-specific EV)

	control (strain AW1709)					
	<i>daf-16(mu86)</i> + neuron-specific <i>utx-1</i> RNAi	58	13.0	14	16	0.79 (ns) (vs <i>daf-16(mu86)</i> +neuron-specific EV)
S6F	intestine-specific EV control (strain VP303)	42	13.7	14	20	
	intestine-specific <i>utx-1</i> RNAi	42	16.2	16	22	0.008 (**) (vs intestine-specific EV)
	<i>daf-16(mu86)</i> + intestine-specific EV control (strain AW1774)	59	11.6	11	14	<0.0001 (****) (vs intestine-specific EV)
	<i>daf-16(mu86)</i> + intestine-specific <i>utx-1</i> RNAi	54	11.9	11	14	0.07 (ns) (vs <i>daf-16(mu86)</i> +intestine-specific EV)
S6F rep	intestine-specific EV control (strain VP303)	51	14.7	14	24	
	intestine-specific <i>utx-1</i> RNAi	56	16.6	16	24	0.009 (**) (vs intestine-specific EV)
	<i>daf-16(mu86)</i> + intestine-specific EV control (strain AW1774)	56	12.5	12	16	0.0003 (***) (vs intestine-specific EV)
	<i>daf-16(mu86)</i> + intestine-specific <i>utx-1</i> RNAi	55	12.4	11	16	0.76 (ns) (vs <i>daf-16(mu86)</i> +intestine-specific EV)

Table S9. Statistical analysis of lifespan data relating to Figure S6

Full statistical analysis of lifespan data from Fig. S6 (**** $p < 0.0001$, *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ns=not significant). EV = empty vector control. Rep = repeat. Note some of the data corresponds to data in Figure 6 (Table S8) as these values were part of the same experiment, split off for clarity.