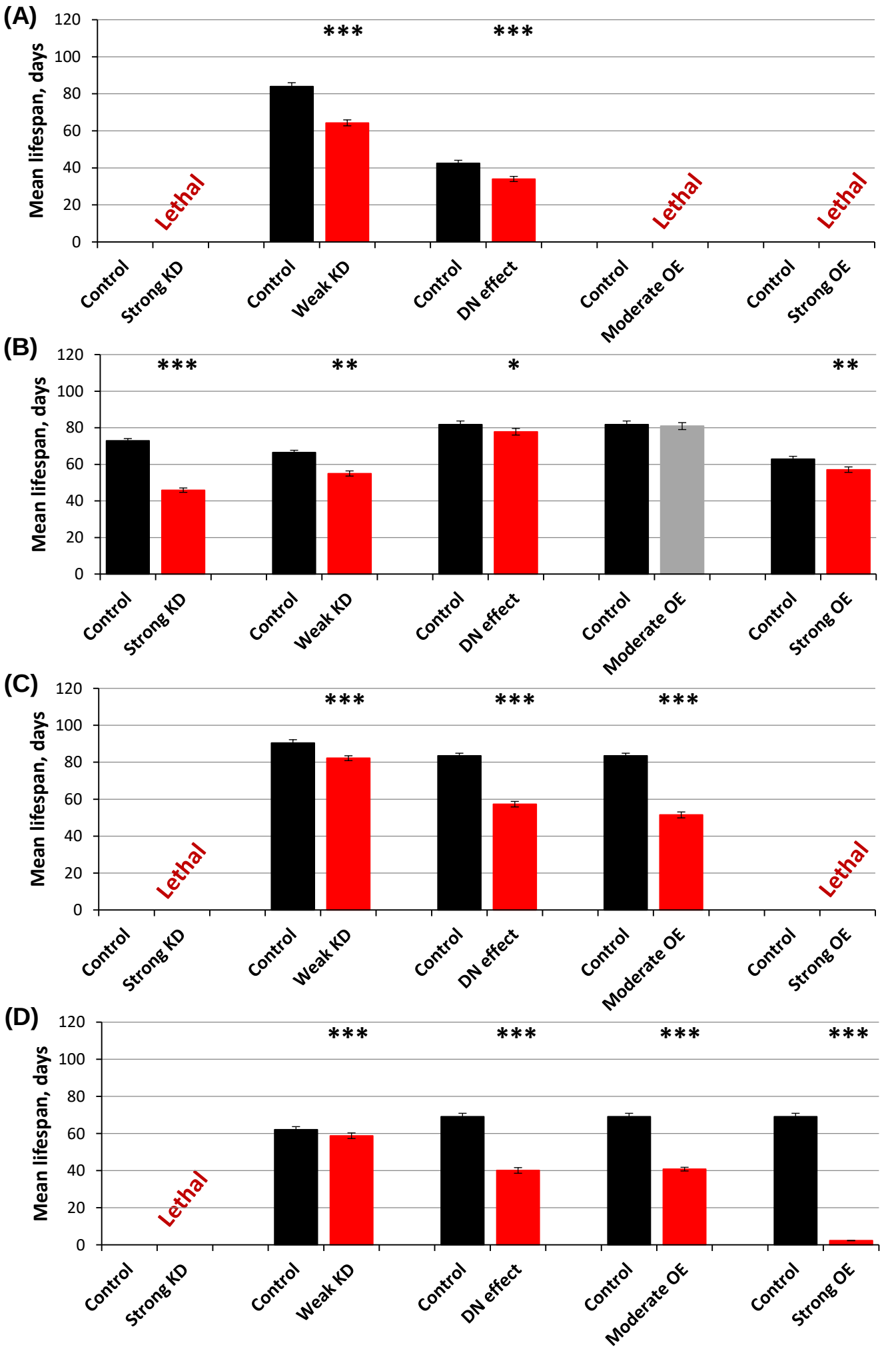
(A)
Mean lifespan, days
120
100
80
60
40
20
0
***
***
Lethal
Lethal
Lethal
Control
Strong KD
Control
Weak KD
Control
DN effect
Control
Moderate OE
Control
Strong OE
(B)
Mean lifespan, days
120
100
80
60
40
20
0
***
**
*
**
Control
Strong KD
Control
Weak KD
Control
DN effect
Control
Moderate OE
Control
Strong OE
(C)
Mean lifespan, days
120
100
80
60
40
20
0
***
***
***
Lethal
Lethal
Control
Strong KD
Control
Weak KD
Control
DN effect
Control
Moderate OE
Control
Strong OE
(D)
Mean lifespan, days
120
100
80
60
40
20
0
***
***
***
***
Lethal
Control
Strong KD
Control
Weak KD
Control
DN effect
Control
Moderate OE
Control
Strong OE

Fig. S1 Effects of multidirectional changes in *sgg* expression in embryos **(A)**, muscle **(B)**, the fat body **(C)** and the nervous systemc **(D)** on the mean lifespan of males. Control and Strong knockdown (KD); Control and Weak KD; Control and Dominant negative (DN) effect; Control and Moderate overexpression (OE); Control and Strong OE denote hybrid genotypes obtained as a result of crossing 1) y^1 v^1*; P{*y$^{+t7.7}$*=CaryP}attP40* and y^1 *sc** v^1*; P{*$y^{+t7.7}$ $v^{+t1.8}$*=TriP. HMS01751}attP40*; 2) y^1 v^1*; P{*$y^{+t7.7}$*=CaryP}attP2* and y^1 v^1*; P{*$y^{+t7.7}$ $v^{+t1.8}$*=TriP. JF01255}attP2*; 3) *w[1118]* and *w[1118]; P{w[+mC]=UAS-sgg.A81T}MB2*; 4) *w[1118]* and *w[1118]; P{w+mC=UAS-sgg.Y214F}2*; 5) *w[1118]* and *w[1118]; P{w+mC=UAS-sgg.B}*MB5 females, respectively, with *y[1] w*; P{w+mW.hs=en2.4-GAL4}e22c; P{w+mC=tGPH}4/TM3, Ser[1]*, *P{w+mC=UAS-Dcr-2.D}1*, *w[1118]; P{w+mC=GAL4-Mef2.R}R1*, *w*; P{w+mC=ppl-GAL4.P}2* and *P{w+mW.hs=GawB}elavC155 w[1118]; P{w+mC=UAS-Dcr-2.D}2* males to induce the expression of transgenic constructs in embryos, muscle, the fat body and the nervous system, respectively. * denotes P < 0.05, ** denotes P < 0.01, and *** denotes P < 0.001, as determined by the Kruskal-Wallis test. Black asterisks denote differences between knockdowns and corresponding controls or overexpressions and corresponding controls; red asterisks denote differences between *sgg-RB* overexpression and *sgg-RB Y214F* or *sgg-RB A81T* overexpression. * P < 0.05, ** P < 0.01, and *** P < 0.001, as determined by the Kruskal-Wallis test.