

SUPPLEMENTARY DATA

Supplementary Figure 1. Loss of injured skeletal muscle remains significant when expressed relative to uninjured skeletal muscle mass, myofiber area, or body mass in type 1 diabetes. Expressing injured tibialis anterior (TA) mass and fiber area relative to the corresponding value of the uninjured contralateral muscle from the same animal essentially factors out the effect of type 1 diabetes on uninjured muscle/myofiber growth, allowing the true effect of CTX-injury to be observed. (a) Relative mass of injured TA demonstrates a deficit in the *Ins2*^{WT/C96Y} mice compared to WT (main effect: $P=0.011$; $N=16$). (b) Relative myofiber area of injured TA also demonstrates impaired regeneration in the *Ins2*^{WT/C96Y} mice compared to WT (main effect: $P<0.001$, interaction $P=0.018$; $N=16$). Notably, it appears that the WT myofibers exhibit hypertrophy (exceeding uninjured TA myofiber size), while the *Ins2*^{WT/C96Y} myofibers do not fully return to 100% by 35 days post-injury. (c) Mass of injured TA relative to body mass indicates deficient recovery of skeletal muscle mass following injury, and eliminates the possibility that overall growth following injury might be impaired (main effect: $P<0.001$, $N=16$).

(* indicates differences between groups at specific time-points identified by Bonferonni post-hoc analysis following 2 way ANOVA). In all panels, white bars represent WT and black represent *Ins2*^{WT/C96Y}.

