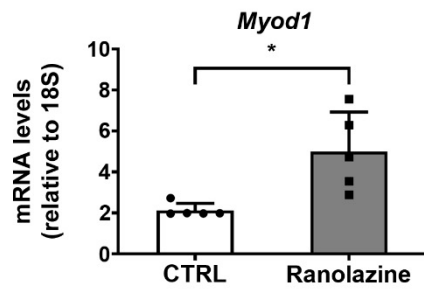
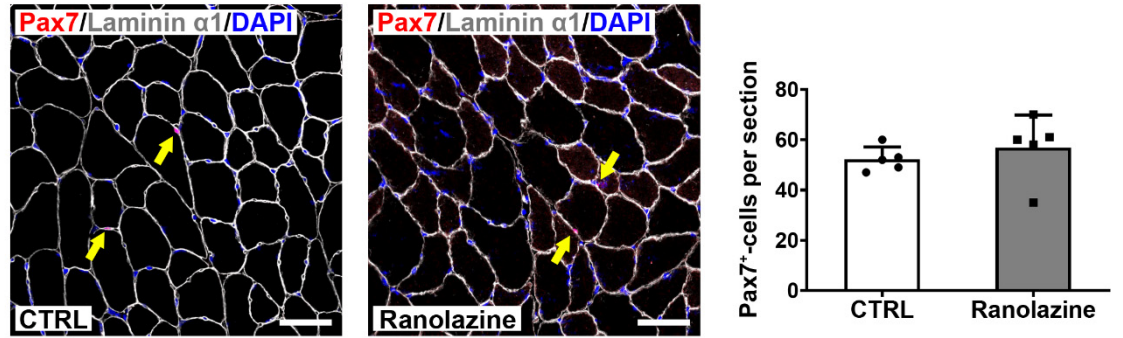
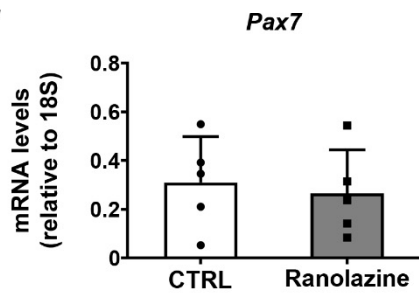
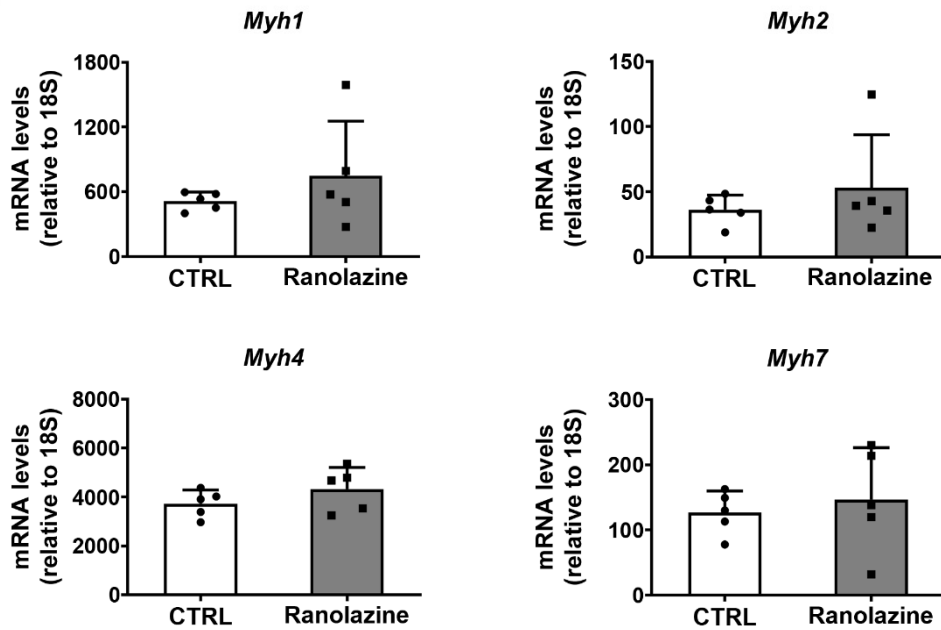


**A****B****C****D**

**FIGURE S1. Ranolazine up-regulates *Myod1* expression in aged mice, but do not affect the expression of *Pax7* and *Myosins*.** **A)** qPCR expression analysis of *Myod1* on whole TA muscles excised from 24 month-old mice treated or not treated with Ranolazine. Data are reported as relative to the housekeeping gene 18S. Values are means  $\pm$  SD. N = 5 for both experimental conditions. Unpaired t-test was used for comparison. \* =  $p < 0.05$ . **B)** Representative images of 8- $\mu$ m-thick TA cryosections of old mice treated or not treated (CTRL) with Ranolazine stained with anti-Pax7 (red) and anti-Laminin  $\alpha$ 1 antibodies (grey). Nuclei were counterstained with DAPI (blue). Yellow arrows point at Pax7-positive cells (i.e. satellite cells). Scale bar = 50  $\mu$ m. The histogram displayed the average of Pax7<sup>+</sup> cells per muscle section. **C)** qPCR expression analysis of *Pax7* on whole TA muscles excised from 24 month-old mice treated or not treated with Ranolazine. **D)** qPCR expression analysis of adult Myosins (*Myh1*, *Myh2*, *Myh4* and *Myh7*) on whole TA muscles excised from 24 month-old mice treated or not treated with Ranolazine. Data are reported as relative to the housekeeping gene 18S. Values are means  $\pm$  SD. N = 5 for both experimental conditions. Unpaired t-test was used for comparison.