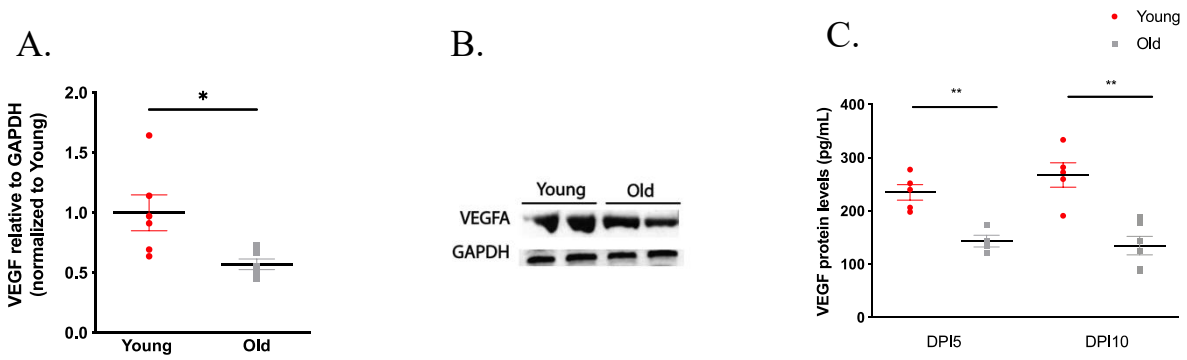
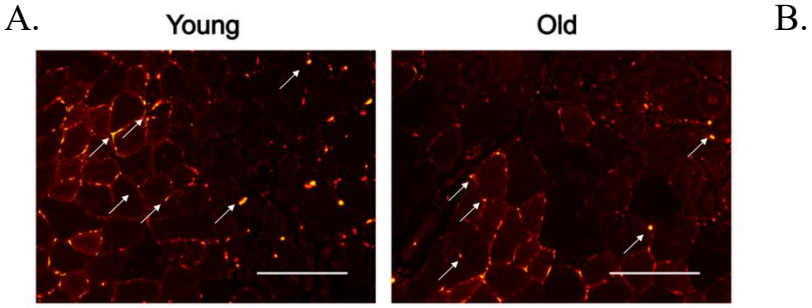
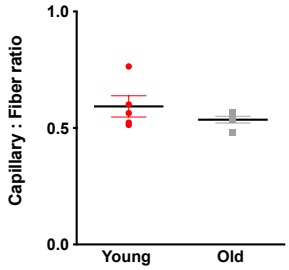
Supplementary Figure

Supplementary Figure 1. Old mice had significantly lower levels of VEGF in injured muscle on 5 DPI (1.00±0.15 vs 0.57±0.04 for young vs old, n=5 each, p=0.02) (**A, B**). Elisa was performed to quantify the protein levels in the skeletal muscle in young and old mice at the baseline and DPI10. There were significantly lower levels of VEGF in the muscle of old mice both at the baseline (235.0±14.7 vs 143.5±11.2 for young vs old, n=5 each, p=0.002) and on DPI10 (267.6±23.0 vs 134.9±17.5 for young vs old, n=5 each, p=0.001) compared to young (**C**). The whole muscle VEGF levels were similar between the baseline and DPI10 timepoints in both young and old mice. (**C**)

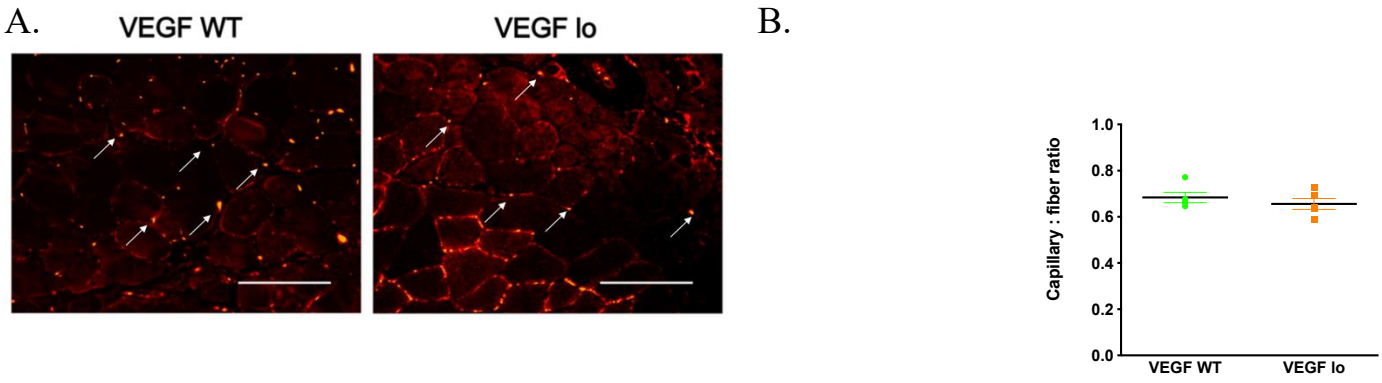


Supplementary Figure 2. Muscle cross-sections of TA muscles 10 days following cryoinjury from young and old mice were stained for CD31 (green) and laminin (red). White arrows indicate capillaries. Scale Bar = 100 μm (**A**). There was no significant difference in the capillary density between young and old mice on 10 DPI (0.59±0.05 vs 0.54±0.01 for young vs old, n=5 each, p=0.27) (**B**)**.**

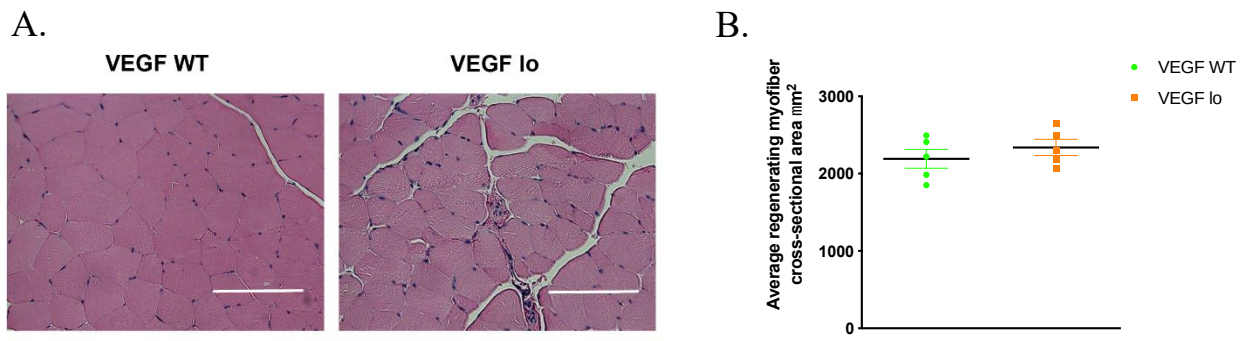




Supplementary Figure 3. Muscle cross-sections of TA muscles 10 days following cryoinjury from VEGF^{lo} and their littermate control mice were stained for CD31 (green) and laminin (red). White arrows indicate capillaries. Scale Bar = 100 μm (**A**). There was no significant difference in the capillary density between young and old mice on 10 DPI (0.68±0.02 vs 0.66±0.02 for young vs old, n=5 each, p=0.42) (**B**)**.**



Supplementary Figure 4. Uninjured TA muscles of VEGF^{lo} mouse and its littermate mouse. Scale Bar = 100 μm (**A**). There was no significant difference the average cross-sectional area of uninjured myofibers (2192±121.7 vs 2338±104.2 μm^2 for VEGF WT vs VEGF^{lo}, n=5 each, p=0.43) (**B**).



Supplementary Figure 5. Muscle cross-sections of uninjured TA muscles from VEGFlo mice and their littermate controls treated with either ML228 or DMSO were stained for CD31 (green) and laminin (red). White arrows indicate capillaries. Scale Bar = 100 μm (**A**). Capillary-to-fiber ratios of those 4 groups exhibited no significant difference (2.13±0.05 vs 2.02±0.05 vs 2.00±0.10 vs 2.13±0.07 for VEGF WT DMSO vs VEGF WT Ml228 vs $VEGF^{lo}$ DMSO vs $VEGF^{lo}$ ML228, n=5 each, p=0.002) (**B**).