Tissue-engineered human myobundle system as a platform for evaluation of skeletal muscle injury biomarkers.

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Supplementary Figure 1. Human myobundle system. (A) Human muscle progenitor cells (MPCs) are isolated from muscle biopsies and expanded in culture for 5 passages. Expanded MPCs are embedded at high density in a fibrin/matrigel hydrogel and cast in molds to form pairs of cylindrically shaped tissues (myobundles) anchored to a supporting Cerex® frame. (B) Representative myobundle cross-sectional image stained for filamentous-actin (F-actin) and nuclei (DAPI). (C) Representative myobundle cross-sectional image at higher magnification showing myofibers stained for dystrophin (Dys). (D) Representative whole-myobundle image showing aligned myofibers stained for sarcomeric alpha-actinin (SAA) and nuclei (DAPI).