

SUPPLEMENTAL INFORMATION

Table S1: Baseline values for experimental mouse groups

Weight partial SSP Injury	
Overall	23.80±4.00g
Female	21.12±2.48g
Male	26.77±3.18g

Weight SSP Repair	
Overall	25.14±3.64g
Female	23.52±2.41
Male	28.09±3.44g

Figure S1: Region of interest enclosing the humeral head for bone mineral density calculations.

Figure S2: Lineage tracing using Sox9CreERT2 at d14 after partial tear injury. Yellow arrow indicate scar region. Scalebars: 100um.

Figure S3: Immunostaining for α SMA only labeled blood vessels with no labeling in epitenon or bursa and discrete staining in muscle and bone marrow. Yellow arrow highlights enthesis scar. Region of interest defined by dashed outline. Scalebars: 100um.

Figure S4: Bone mineral density was not significantly different between sham control and partial tear injury; there was also no significant difference between sex.