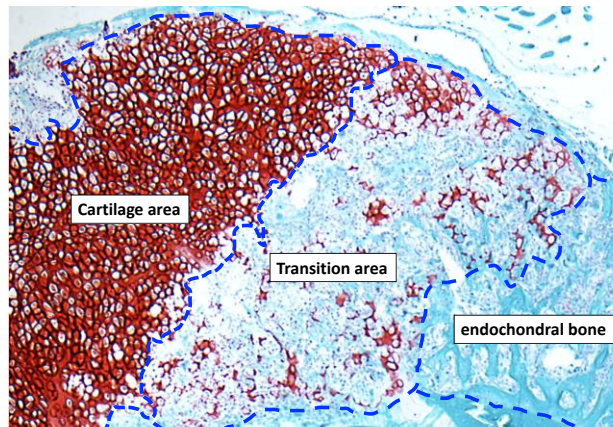
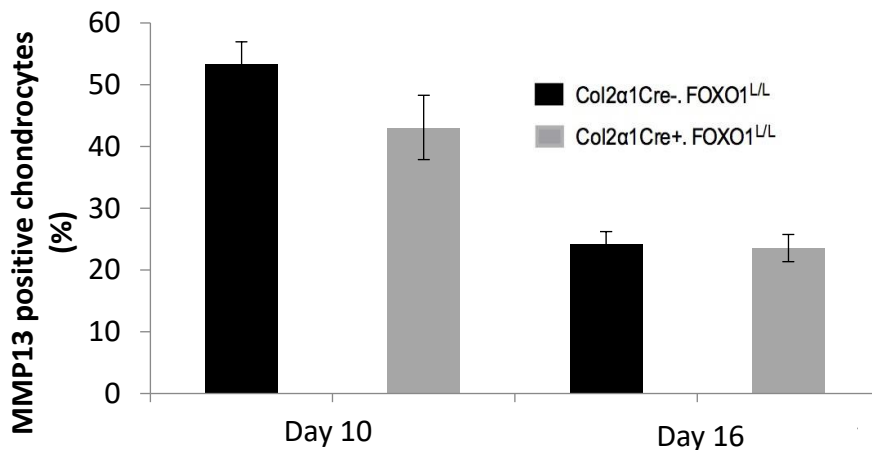


Supplemental Fig 1. Cartilage and transitional zone areas



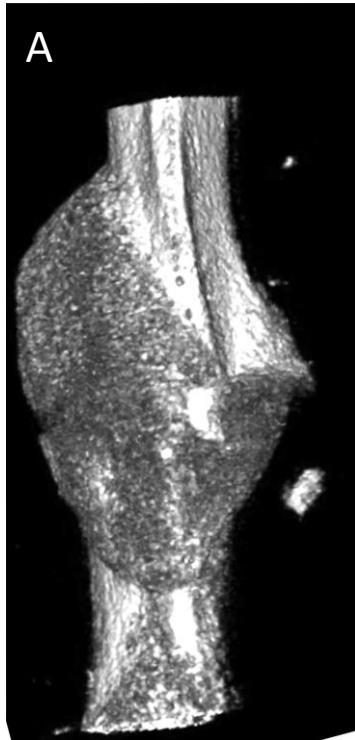
Supplemental Fig 1. Cartilage, transitional zone (the chondro-osseous junction) and the bone areas. A histologic image is shown of the fracture callus stained with Safranin-O/fast green, illustrating areas of cartilage, the transition zone containing a mix of cartilage and bone and the endochondral bone.

Supplemental Fig 2. MMP 13 expression in chondrocytes



Supplemental Fig 2. MMP13 expression in chondrocytes. Fractures were obtained from experimental and matched control mice as indicated. Histologic sections were examined by immunofluorescence with antibody specific for MMP13 and compared to a reference section stained with Safranin-O/fast green to identify cartilage and expression in chondrocytes. No signal was detected in matched negative control antibody. The percentage of MMP13 immunopositive chondrocytes are expressed as mean \pm SEM; $P > 0.05$ for Cre⁺ vs. Cre⁻ groups at each time point.

Supplemental Fig 3. Micro-CT:



Micro-CT (Day 16)
Col2 α 1Cre-FOXO1^{L/L}



Micro-CT (Day 16)
Col2 α 1Cre⁺FOXO1^{L/L}

Supplemental Fig 3. Micro-CT was performed on fracture calluses during healing 16 days after fracture in (A) Col2 α 1Cre-FOXO1L/L control mice, and (B) mice with FOXO1 deletion. Col2 α 1Cre+FOXO1L/L The total callus volume (TV), amount of bone volume (BV), and the BV/TV were quantified. The results are summarized in supplemental table 3.