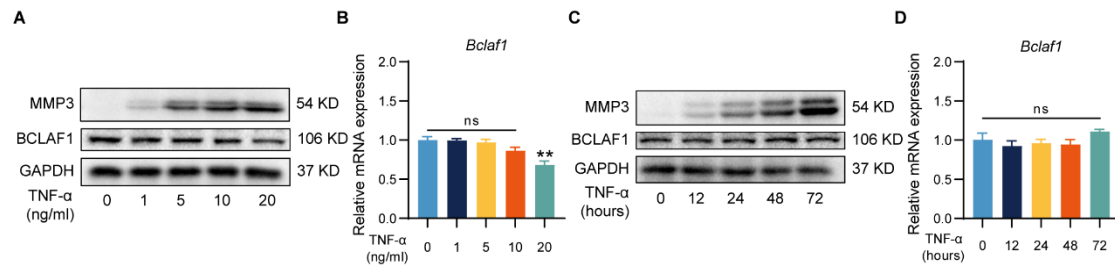
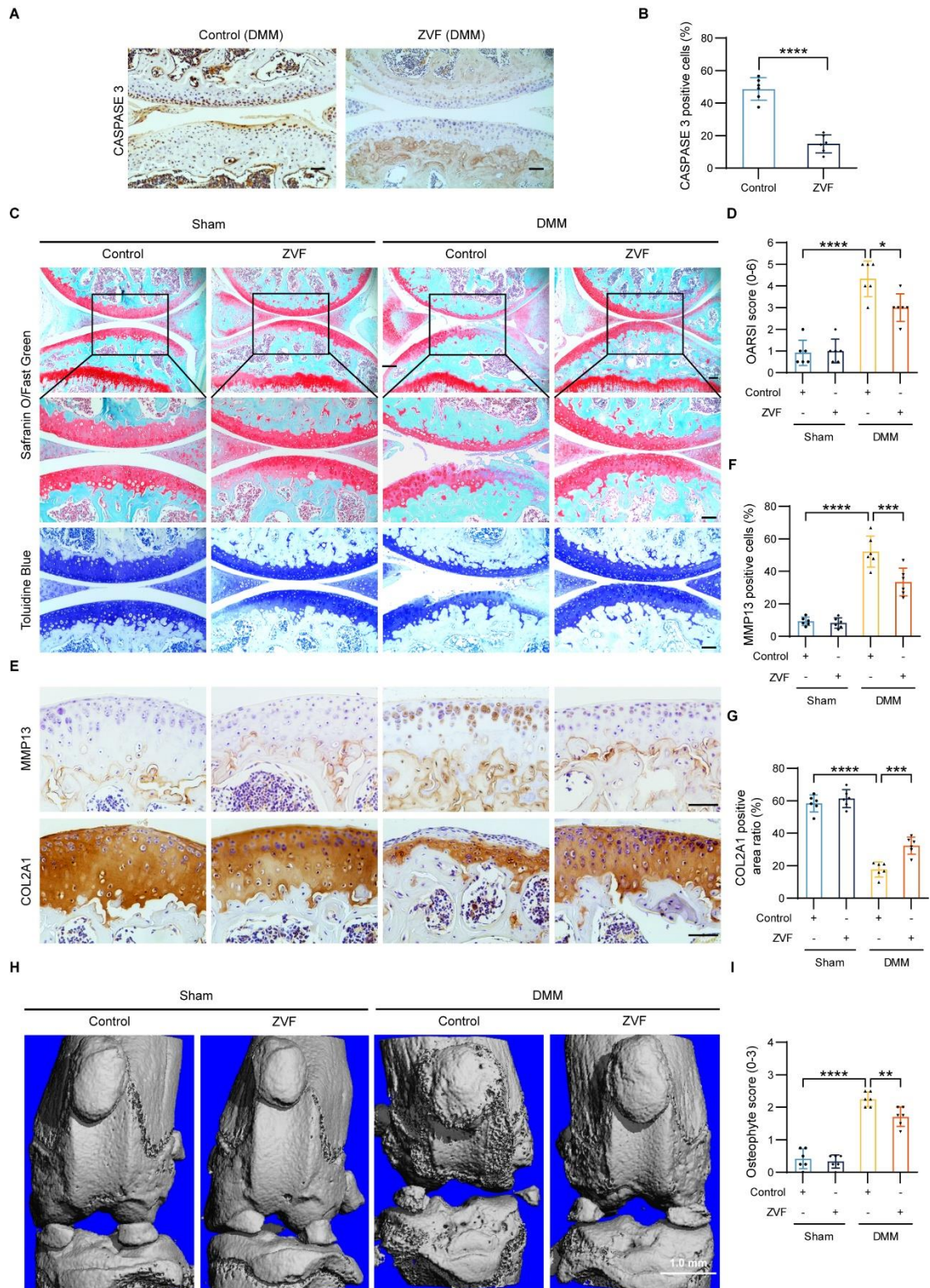


## Supplementary Materials



**Figure S1. BCLAF1 does not respond to TNF- $\alpha$  stimulation in primary chondrocyts.** (A) Immunoblotting analysis of MMP3 and BCLAF1, and (B) mRNA level of *Bclaf1* determined by RT-qPCR in chondrocytes after stimulation with different concentrations of TNF- $\alpha$  (0, 1, 5, 10, and 20 ng/ml) for 48 h. (C) Immunoblotting analysis of MMP3 and BCLAF1, and (D) mRNA level of *Bclaf1* determined by RT-qPCR in chondrocytes after stimulation with 5ng/ml TNF- $\alpha$  for different periods (0, 12, 24, 48, and 72 h). All data are shown as mean  $\pm$  SD, ns: no significant difference, \*\* $p < 0.01$  versus the control group (0 ng/ml or 0 h TNF- $\alpha$  treatment).



**Figure S2. Caspase inhibitor rescues osteoarthritic cartilage degradation *in vivo*.**

(A) Immunohistochemical staining of BCLAF1 of sagittal sections of knee joints and (B) its quantification. (C) Safranin O/Fast Green staining and Toluidine Blue staining and (D) their OARSI scores. (E) Immunohistochemical staining of MMP13 and COL2A1, and (F, G) their quantification of sagittal sections of knee joints in the indicated groups. All data are shown as mean  $\pm$  SD, \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ,

\*\*\* $p < 0.0001$ . Scale bar = 100  $\mu\text{m}$ . **(H)** Representative micro-CT images of knee joints in indicated groups and **(I)** their osteophyte scores. Scale bar = 1.0 mm.