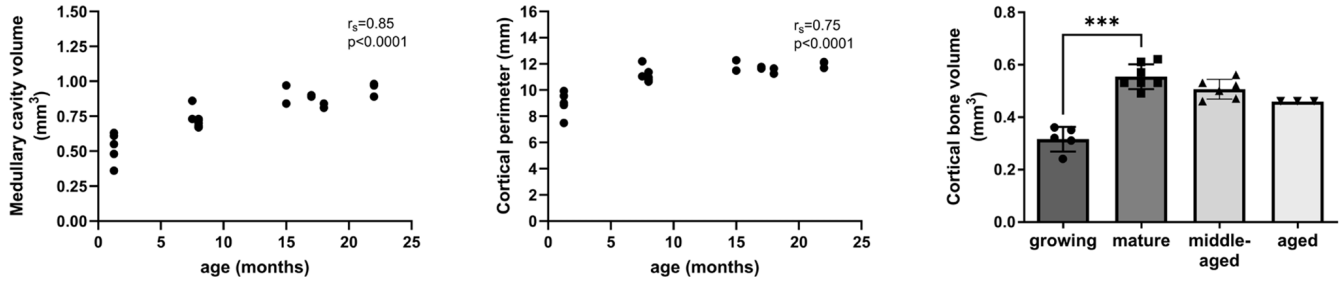
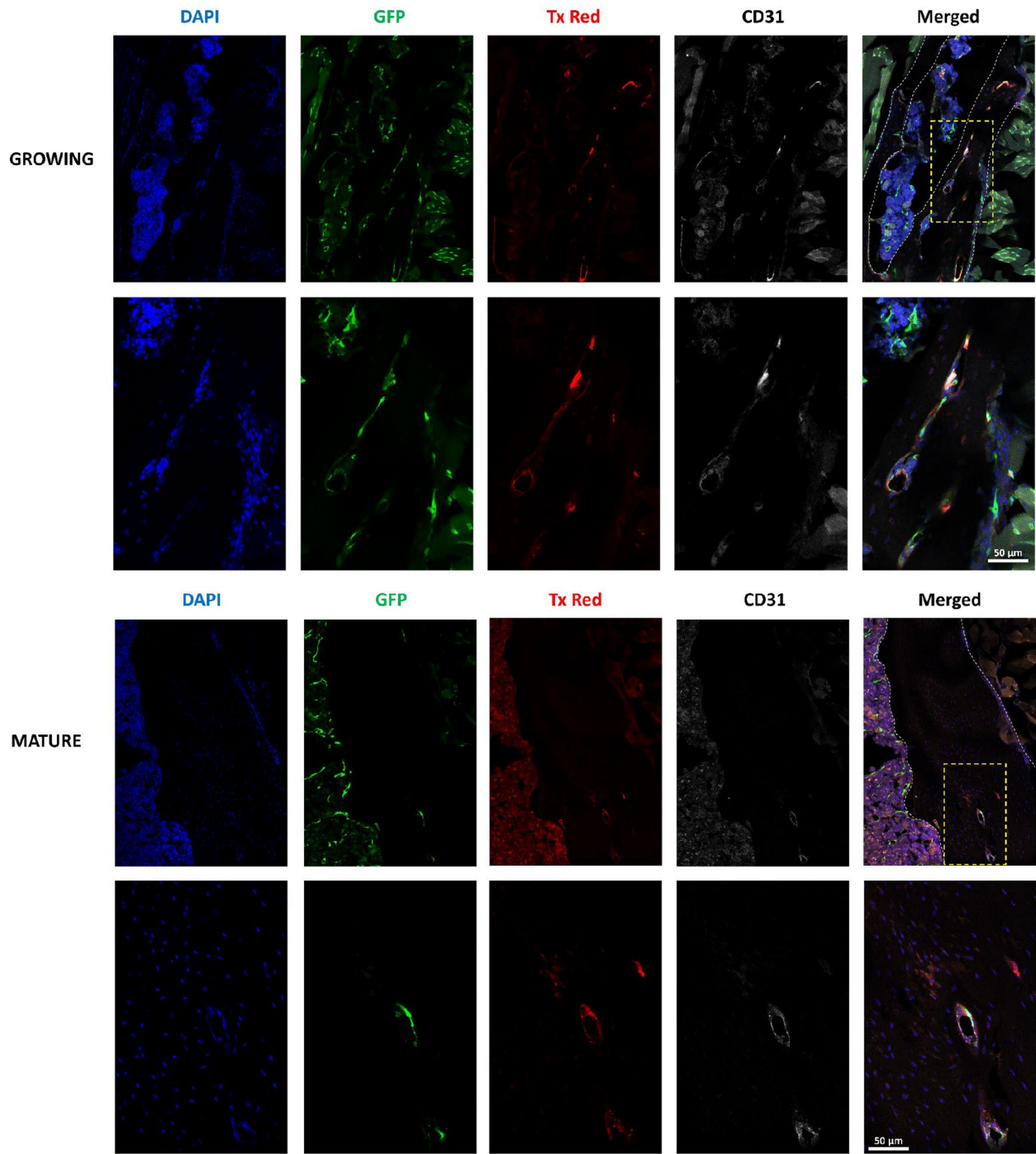
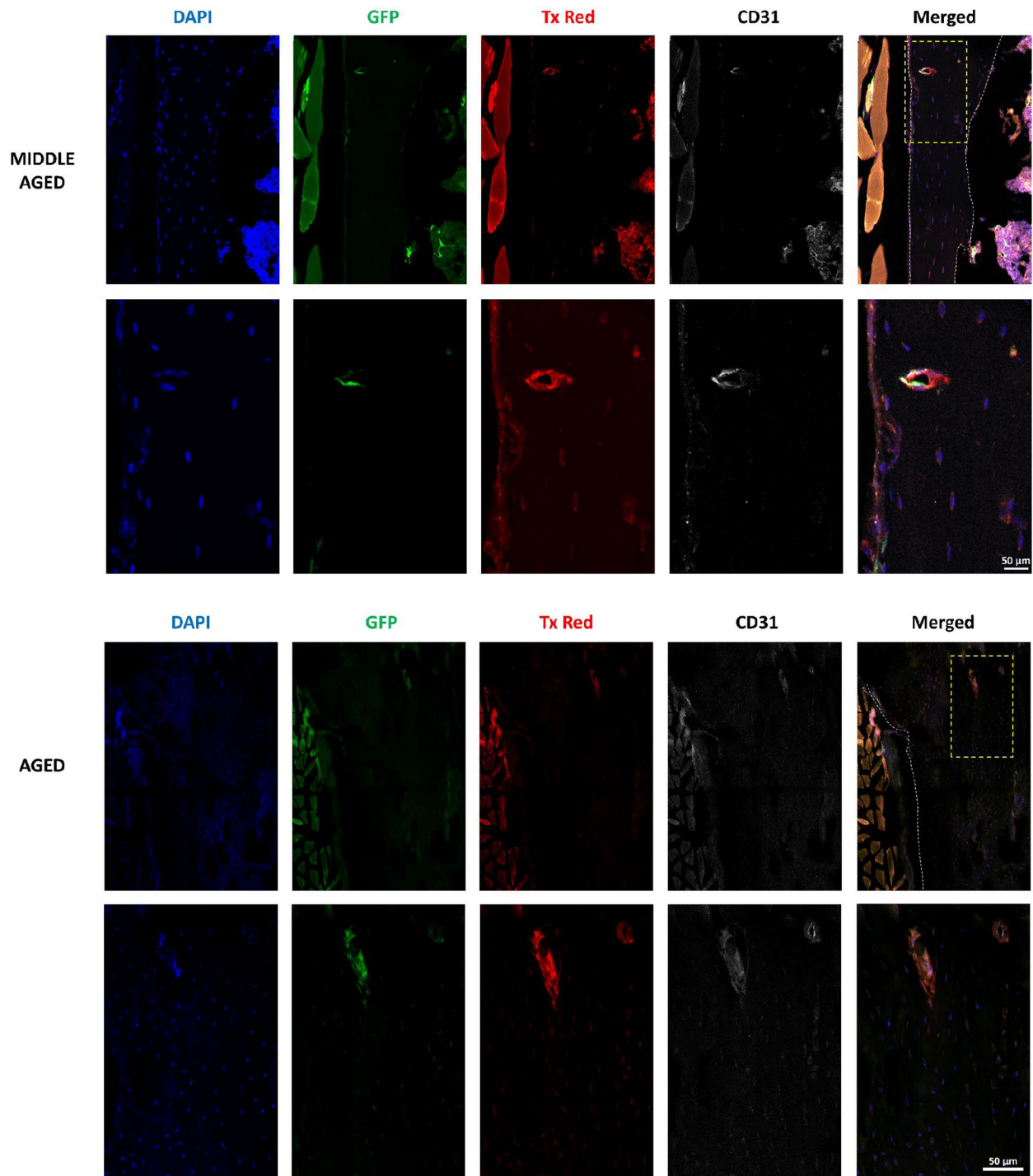


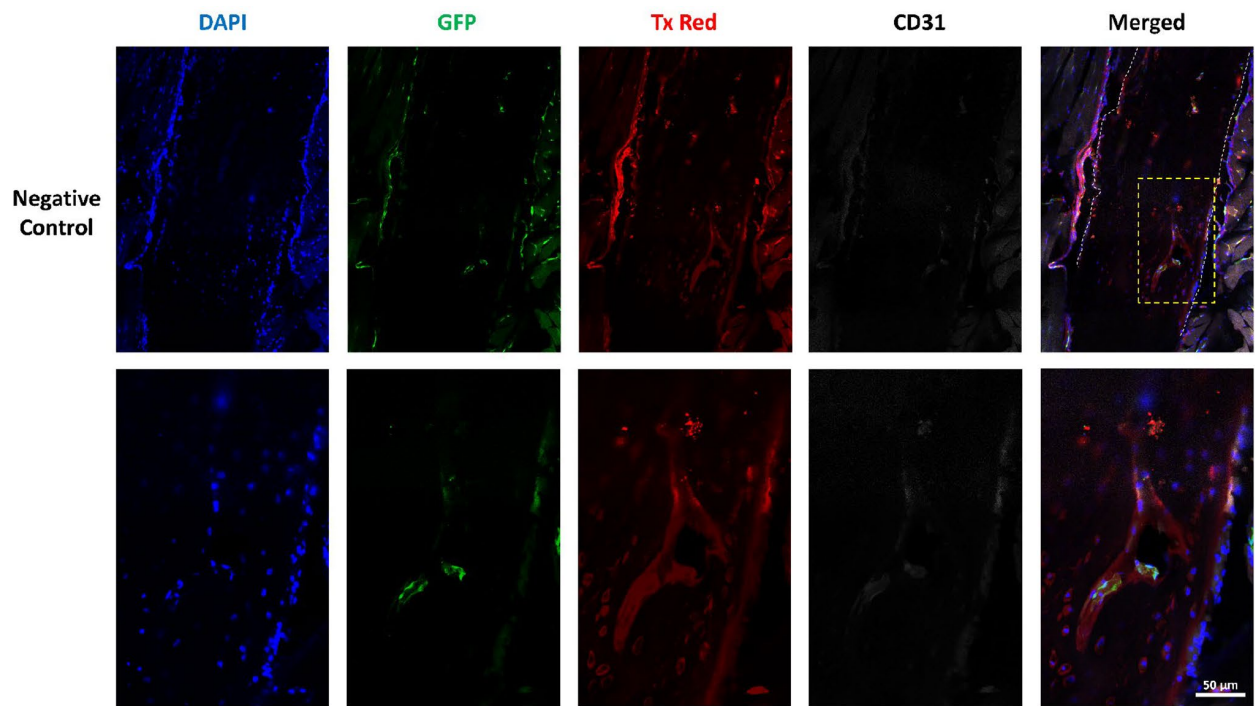
SUPPLEMENTARY FIGURES



Supplementary Figure 1. MicroCT analysis of femur for the 4 age groups. Correlation between the medullary cavity volume and age, between the cortical perimeter and age, and comparison of the cortical bone volume between the 4 age groups. The data are presented as mean \pm s.d. Statistical analyses: Spearman's correlation, KW, Dunn's multiple comparison test with the mature group as reference, *** $p < 0.001$.

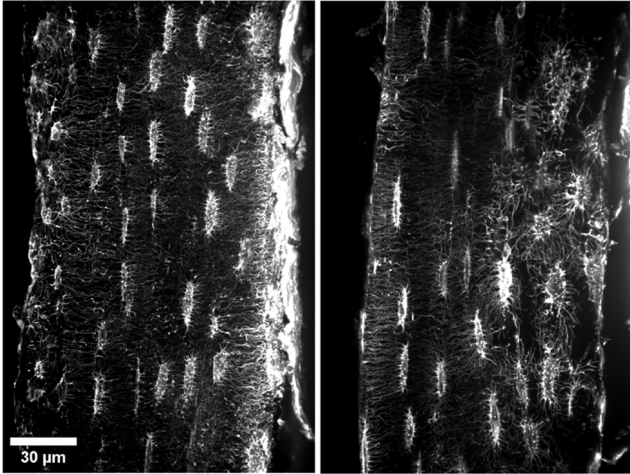




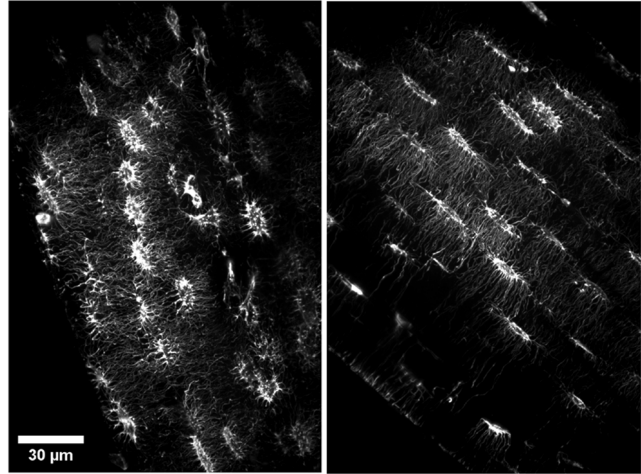


Supplementary Figure 2. Characterization of the blood vessels in the cortical bone. Images showing the co-localization of endogenous GFP, immunolabeling of CD31 in the blood vessels with diffused Texas Red-Dextran in the channels the cortical bone. DAPI in blue, GFP in green, Texas Red-Dextran in red, CD31 in white.

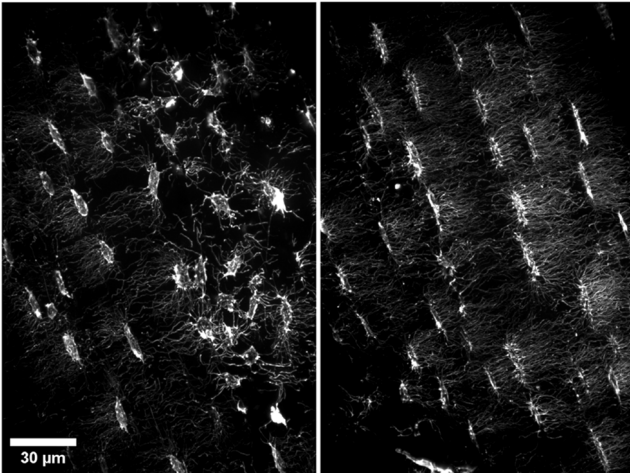
growing



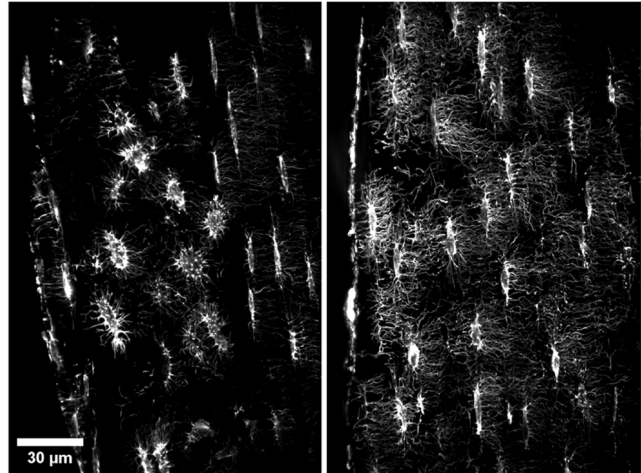
mature



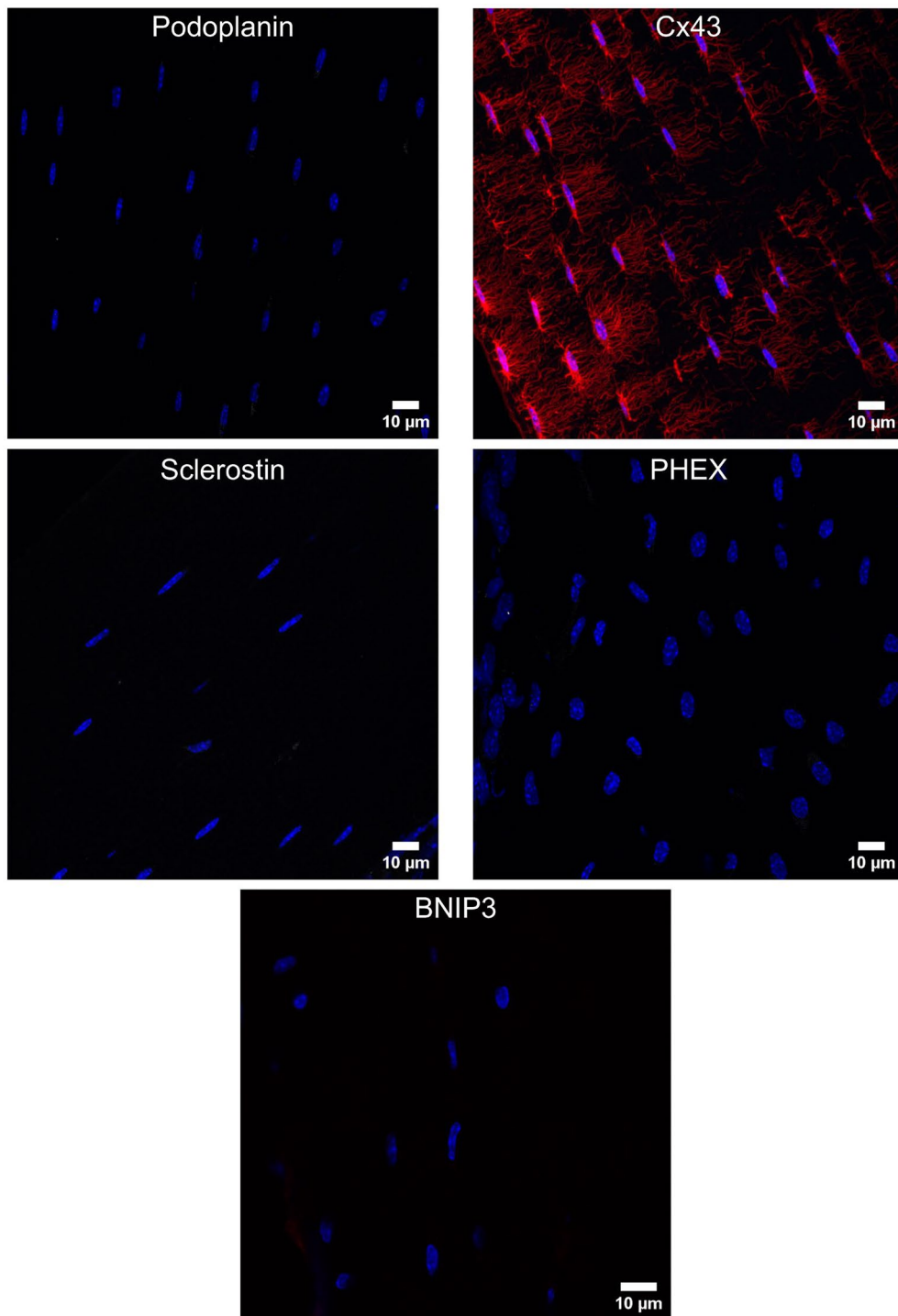
middle-aged



aged



Supplementary Figure 3. Heterogeneity in the organization of the osteocyte network in the 4 groups studied. Phalloidin labeling in white.



Supplementary Figure 4. Images of the negative controls for the Podoplanin, Cx43, Sclerostin, PHEX and BNIP3 immunofluorescences.