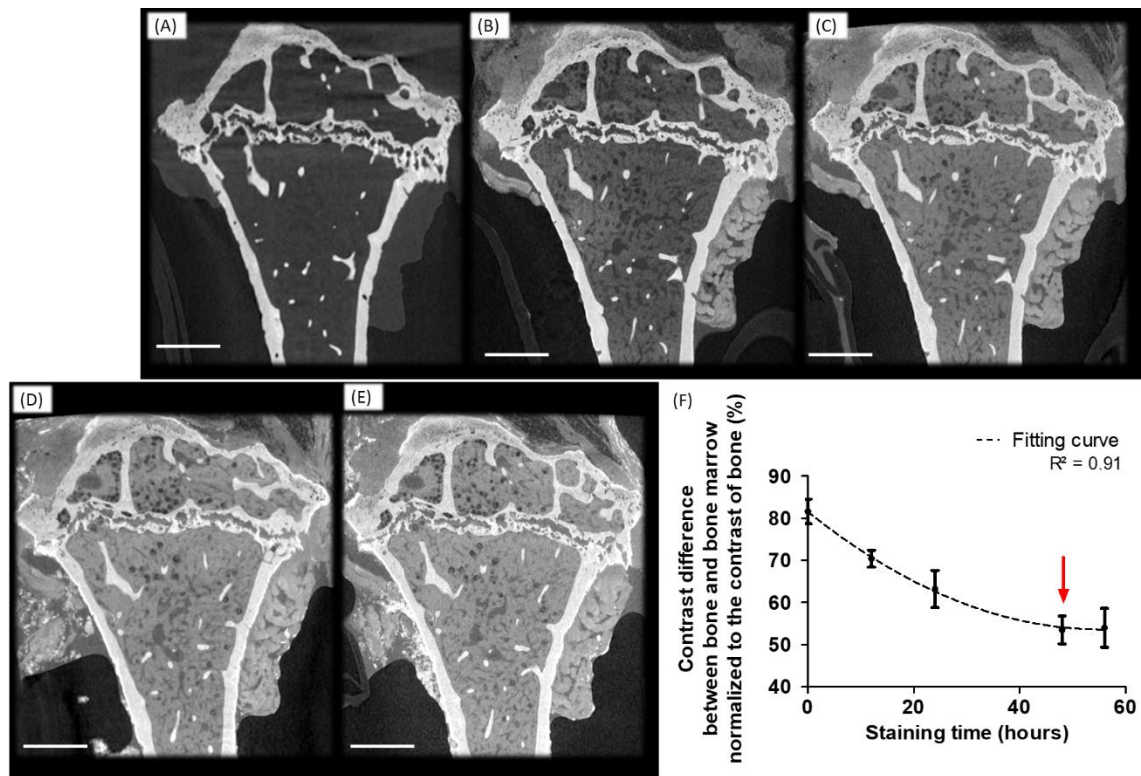
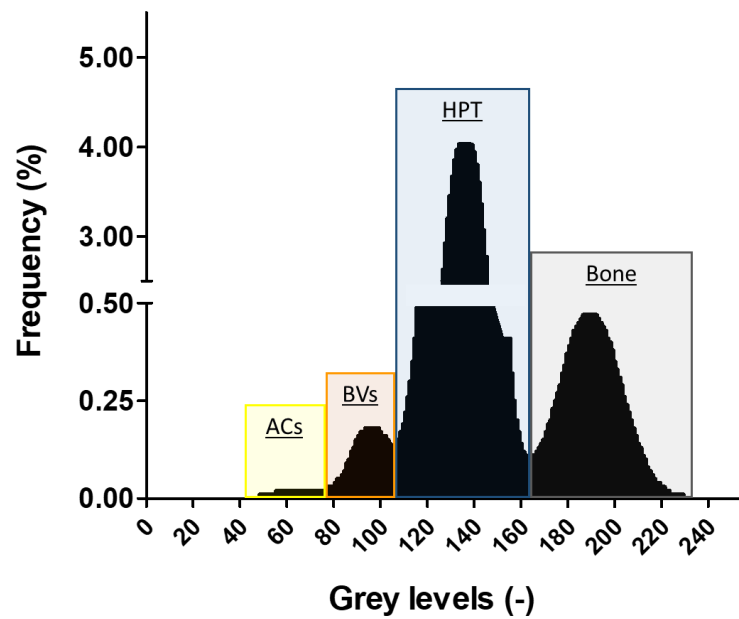




Supplementary Figure S1: Determination of the staining time. Typical Hf-POM-based CE-CT cross-sections through the center of a mouse tibia, stained for (A) 0 hours, (B) 12 hours, (C) 24 hours, (D) 48 hours and (E) 56 hours. Scale bar = 500 μm . (F) The contrast difference between bone and bone marrow normalized to the contrast of bone in function of the staining time, showing a clear plateau starting from 48 hours of staining ($n = 5$).



Supplementary Figure S2: Grey-scale histogram of an Hf-POM-based CE-CT dataset, indicating the manually selected threshold ranges for the different skeletal tissues. Typical averaged grey-scale histogram of an Hf-POM-based CE-CT dataset within the VOI, with an indication how the manually selected threshold ranges were chosen for the different skeletal tissues. ACs = adipocytes; BVs = blood vessels; HPT = hematopoietic tissue.