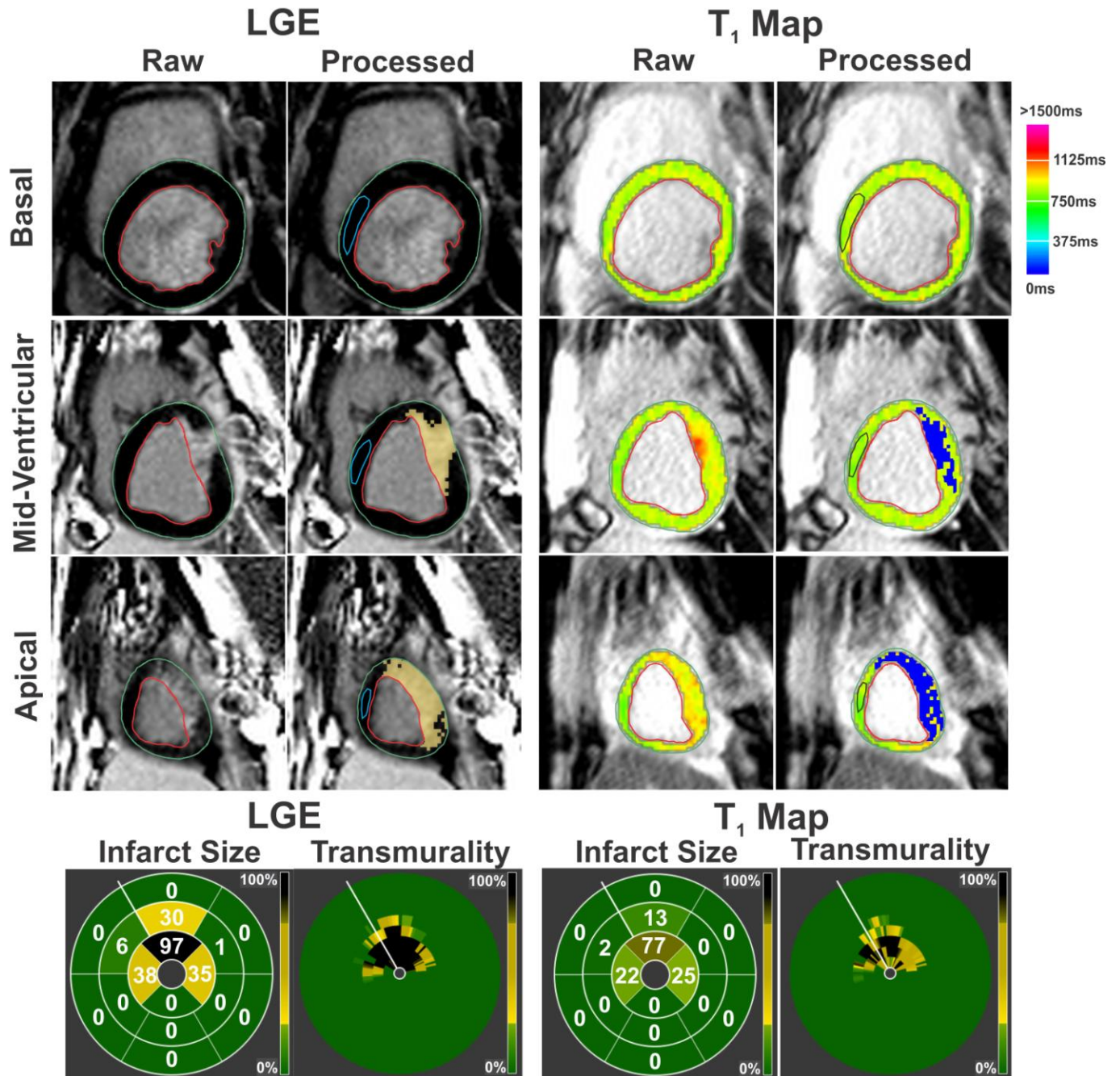
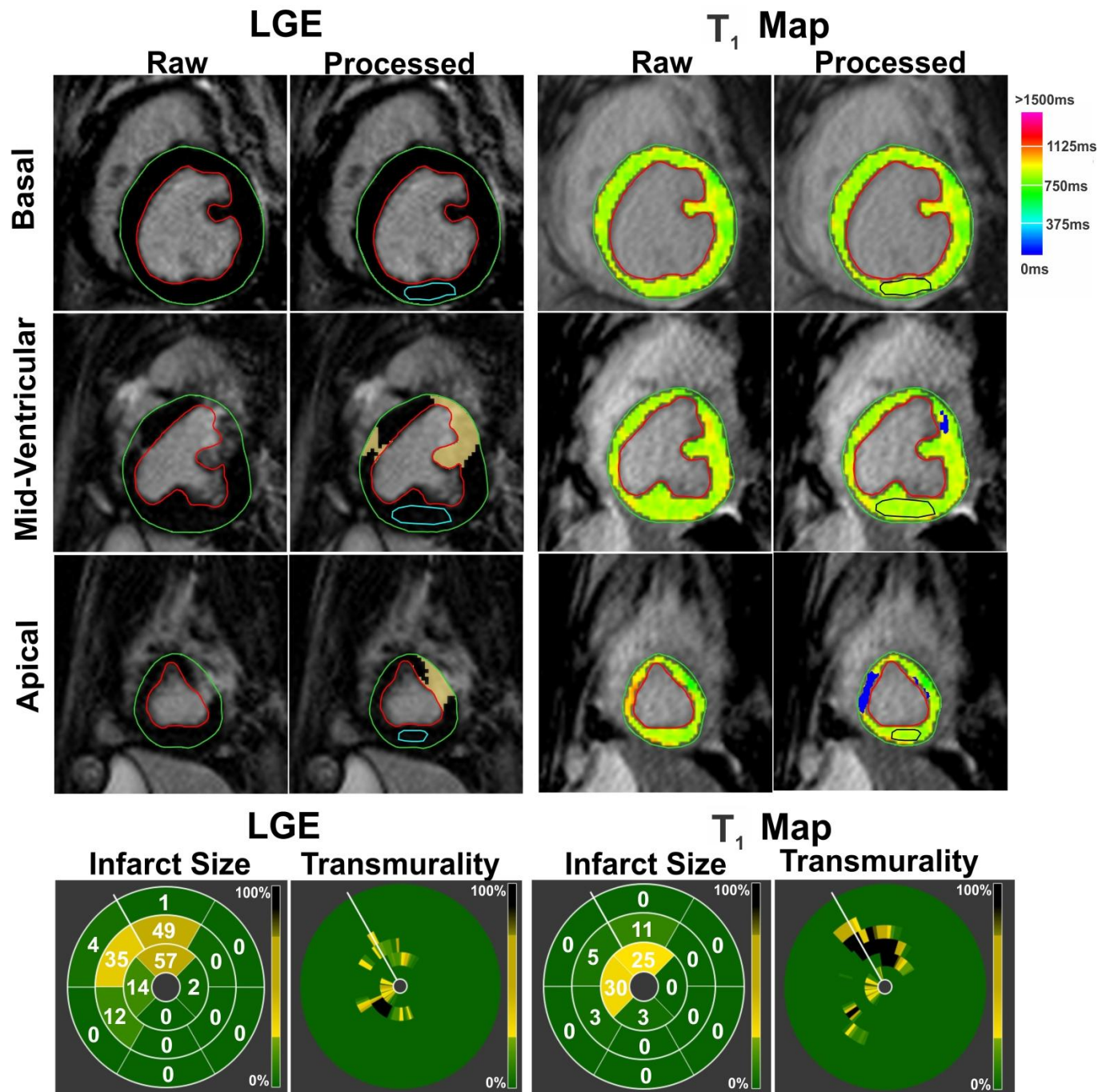


**SUPPLEMENTAL MATERIAL**



**Supplementary Figure 1:** *Detecting acute myocardial infarction at 1.5T.* Representative LGE images and T<sub>1</sub> maps of basal, mid-ventricular and apical slices acquired at 7 days post reperfusion from a canine scanned at 1.5T are shown. Infarcted myocardium was identified as in Figure 1. Good correlation was observed between LGE images and the T<sub>1</sub> maps in terms of location of the infarcted myocardium.



**Supplementary Figure 2:** *Detecting chronic myocardial infarction at 1.5T.* Representative LGE images and T<sub>1</sub> maps of basal, mid-ventricular and apical slices acquired at 4 months post reperfusion from a canine scanned at 1.5T are shown. The LGE image and T<sub>1</sub> map were poorly correlated with respect to the spatial extent and location of the infarcted myocardium. Note that in the apical slice, there is a complete mismatch in the infarcted myocardium detected by the LGE image and the T<sub>1</sub> map. T<sub>1</sub> hyperintensity

observed in the apical slice was possibly due to partial volume effects. Bulls-eye plots showed significant underestimation of infarct size and transmuralty on T<sub>1</sub> maps relative to LGE images (p<0.001 for both cases).