

Supplemental Figure 1. Creation of porcine myocardial infarcts, neural and electrical recordings

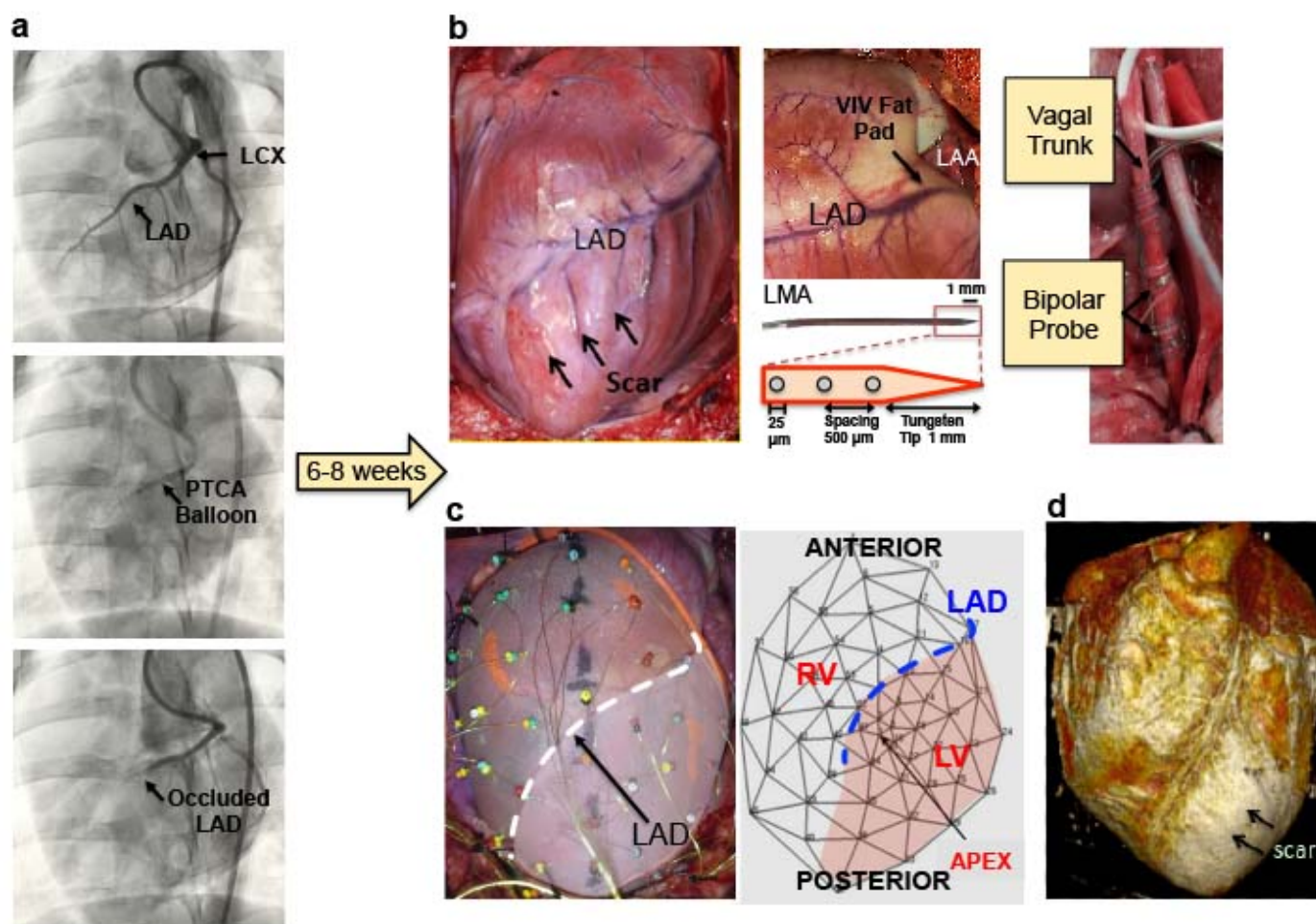


Figure 1. Creation of porcine chronic myocardial infarct, neural and electrical recordings. (a) Myocardial infarction in the porcine heart was created percutaneously under fluoroscopic guidance. A percutaneous angioplasty balloon is used to occlude the left anterior descending coronary artery prior to injection of microspheres through the lumen of the balloon. (b) 6-8 weeks after MI, when the infarct has matured, the chest is opened and the anteroapical infarct identified. The ventral interventricular (VIV) fat pad sits below the left atrial appendage, at the junction of the atrio-ventricular groove and a 16 electrode linear microarray is inserted in this fat pad for neural recordings. The vagal trunk is dissected from

the sympathetic chain via a lateral cutdown and bipolar electrodes are used for stimulation of the trunk. **(c)** A 56 electrode sock is placed around the ventricles for unipolar electrical recordings and location of electrodes are noted. A template of the polar map of the sock with the location of the electrodes relative to the LAD, used to qualitatively assess regional electrical signals, is shown. **(d)** At the end of the procedure, the location and extent of scar is confirmed with cardiac magnetic resonance imaging *ex vivo*. LAD = left anterior descending coronary artery, LCX = left circumflex coronary artery, PTCA = percutaneous transluminal coronary angioplasty, VIV = ventral interventricular fat pad, LMA = linear microelectrode array, RV = right ventricle, LV = left ventricle.