SUPPLEMENTAL MATERIAL

## Figure S1:



## 3D LGE-defined scar correlation with invasive bipolar voltage mapping

3D LGE scar (**A**, **C**) and superimposed low-voltage signal from bipolar voltage maps at PES (**B**, **D**), following the registration of the 3D segmented heart model with EAM data. The segmented aorta (red) is used for landmark registration of the 3D CMR model with EAM. LGE-defined scar in the RVOT (**A-dotted yellow arrow**) and RV side of the septum (**C yellow arrow**) is reconstructed (grey) with healthy RV myocardium shown (blue). The bipolar voltage map overlying the segmented 3D LGE regions demonstrated a good geographical match between low-voltage areas seen on EAM (red) and high signal LGE (grey) in both the RVOT (**B-dotted yellow arrow**) and RV septum (**D-yellow arrow**).







A 3D RV LGE independently predicts inducible VT. Binary logistic regression curve illustrates higher predicted probability of inducible VT is related to higher RV LGE extent. B Receiver-operating characteristic curve show that RV LGE of 25cm<sup>3</sup> (grey dot) had the most optimal sensitivity (72%) and specificity (81%) for predicting inducible VT. A RV LGE of 10cm3 were 100% sensitive and 17% specific for inducible VT (green dot) whereas a RV LGE of 36cm<sup>3</sup> (red dot) was 25% sensitive and 100% specific for inducible VT.