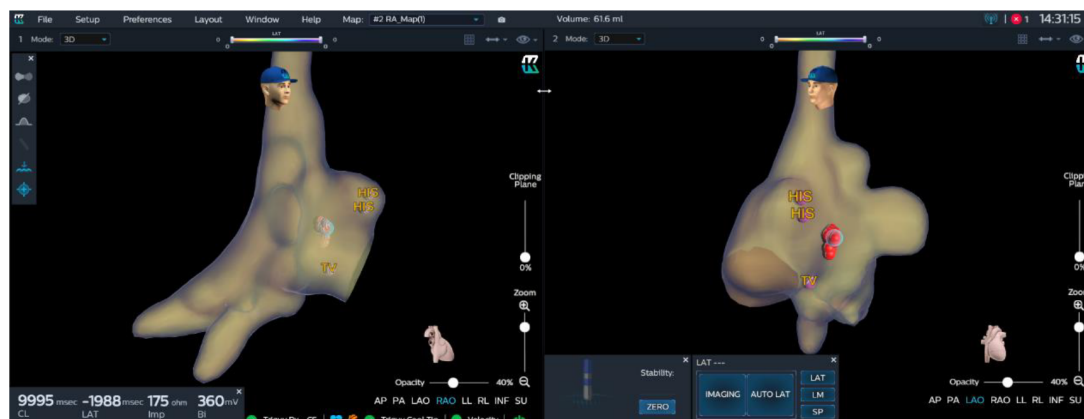
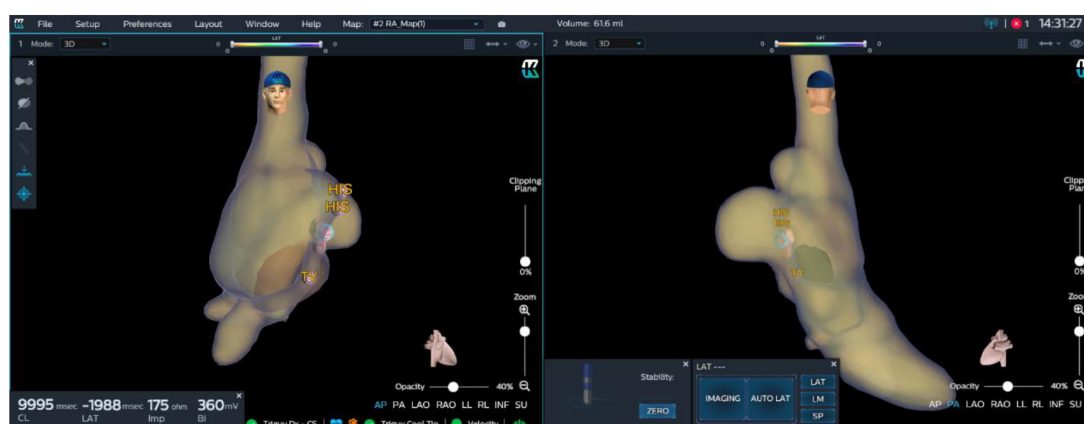


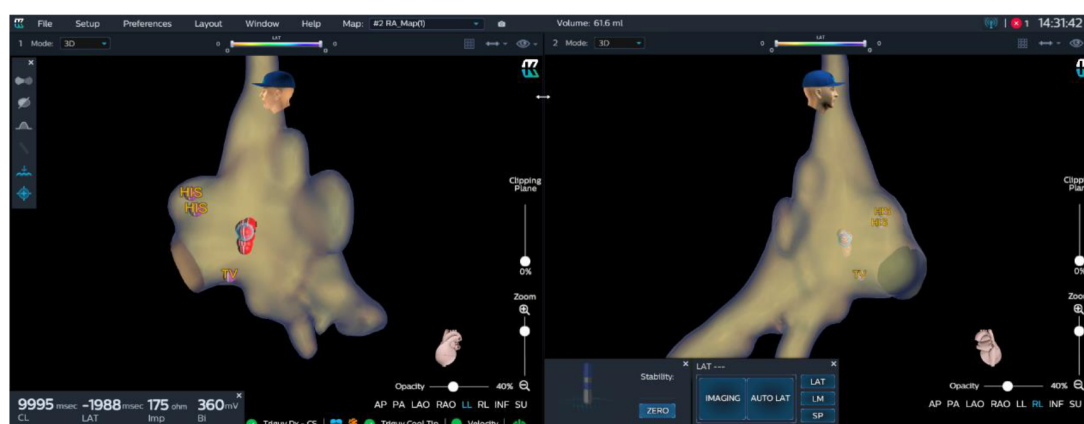
A



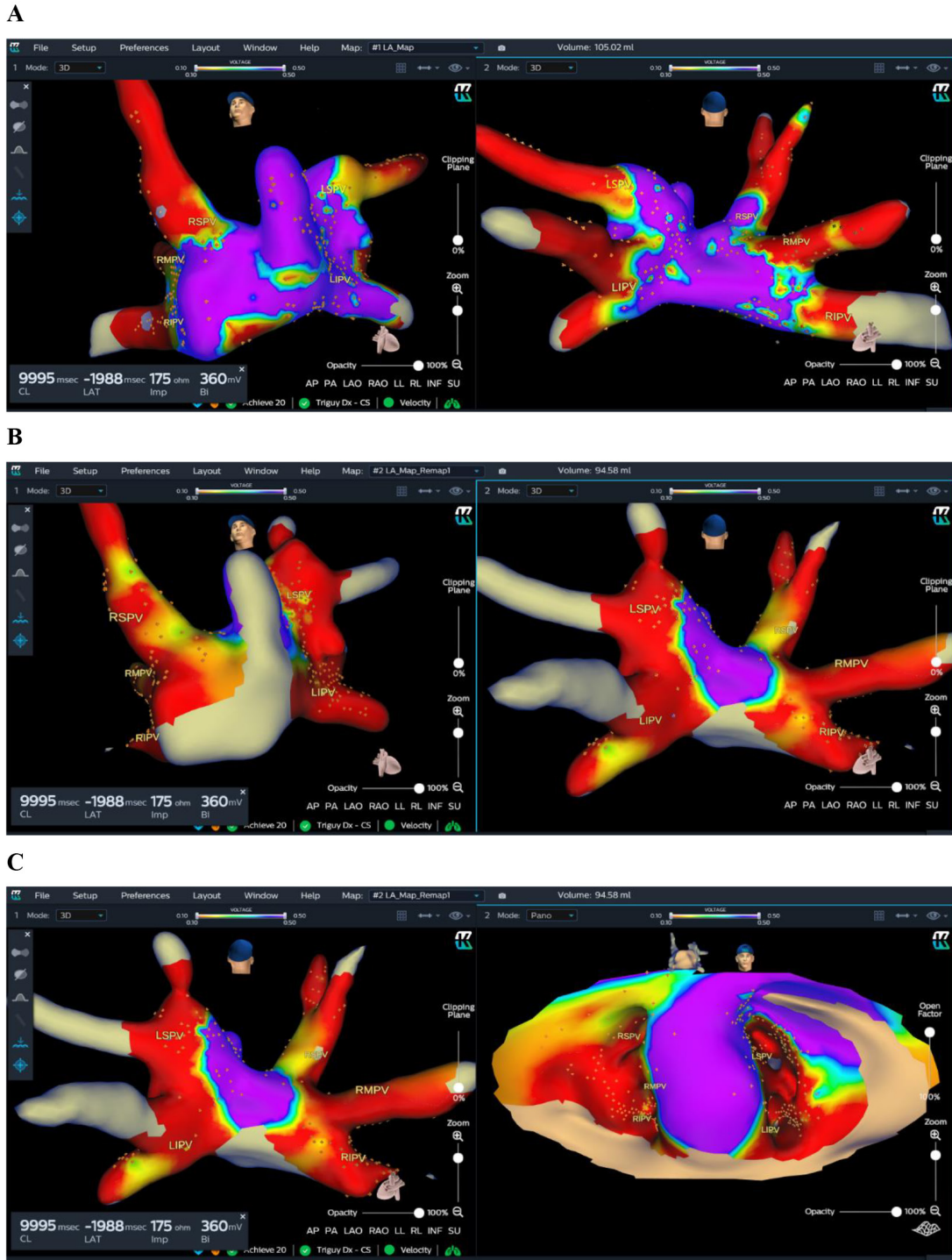
B



C



Supplement Figure 1: KODEX map of atrioventricular junctional region and right atrium (multiple position views). (A) Right front oblique position (RAO) and left front oblique position (LAO). (B) Anterior posterior position (AP) and posterior anterior position (PA). (C) Left lateral position (LL) and right lateral position (RL). Three-dimensional maps of right atrium and atrioventricular junctional region in different position were presented. The position of His bundle, coronary sinus orifice and the ablation mark were clearly marked to indicate the ablation target. After 1.5 minutes of ablation (35W, 55°C), the arrhythmia was successfully ablated. HIS: His bundle; TV: tricuspid valve.



Supplement Figure 2: High-quality voltage images of left atrium before and after ablation. Preoperational (A) and post-operational (B and C) high-quality voltage mapping were constructed with KODEX-EPD system. The mean time for establishing this high-quality voltage mapping was 4.3 (range, 3.4-5.2) min. Preoperational anatomic image was used for guiding cryoablation. Pulmonary potentials in pulmonary branches and antrum disappeared after cryoablation (B). Anatomic structure and PANO view (C) were complementary to locate catheter and find leak points for ablation. LIPV: left inferior pulmonary vein; LSPV: left superior pulmonary vein; RIPV: right inferior pulmonary vein; RMPV: right medium pulmonary vein; RSPV: right superior pulmonary vein.

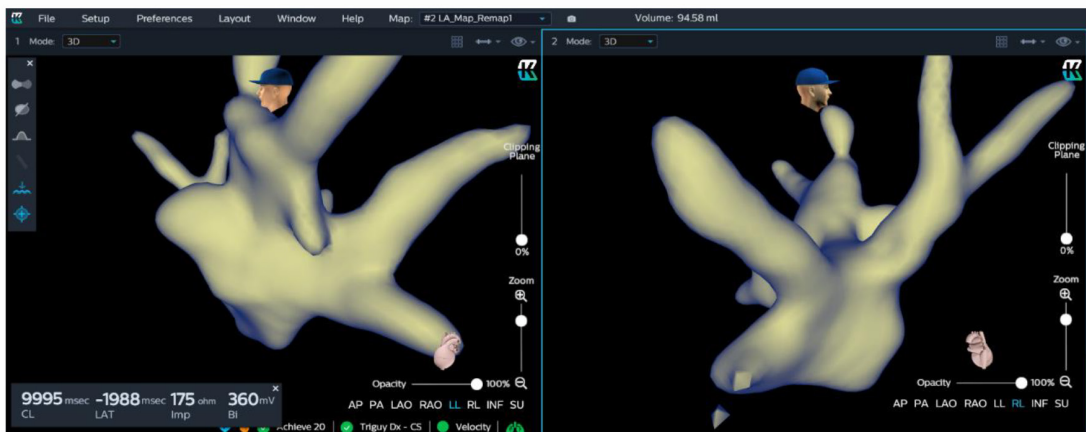
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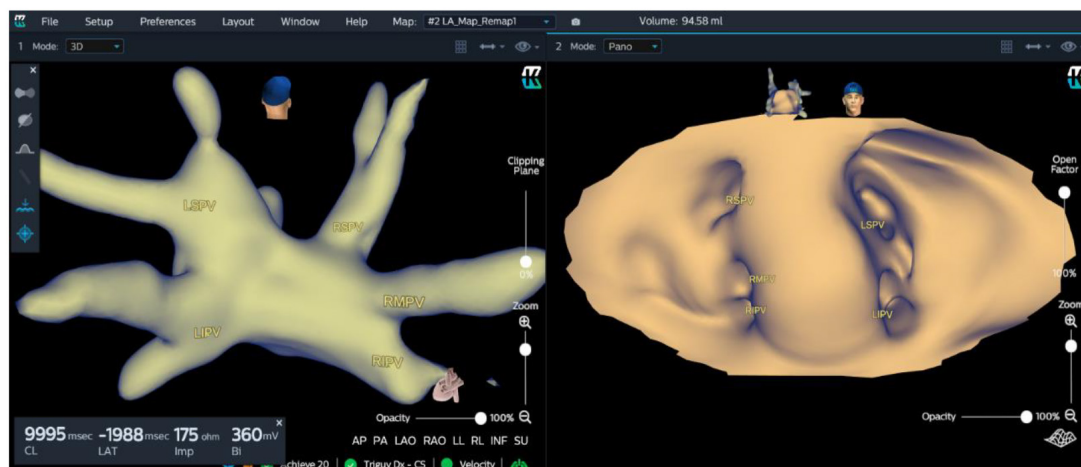


B



C



D

Supplement Figure 3: All standard positions of left atrium anatomical images. (A) Anterior position (AP) and posterior anterior position (PA) views of left atrium. (B) Left front oblique position (LAO) and right front oblique position (RPAO) view. (C) Left lateral position (LL) and right lateral position (RL) view. (D) Posterior anterior position (PA) and PANO view of PA position view. Three-dimensional maps of left atrium in different position were presented (A, B and C). Posterior anterior position view and PANO view of left atrium can be seen in part D.