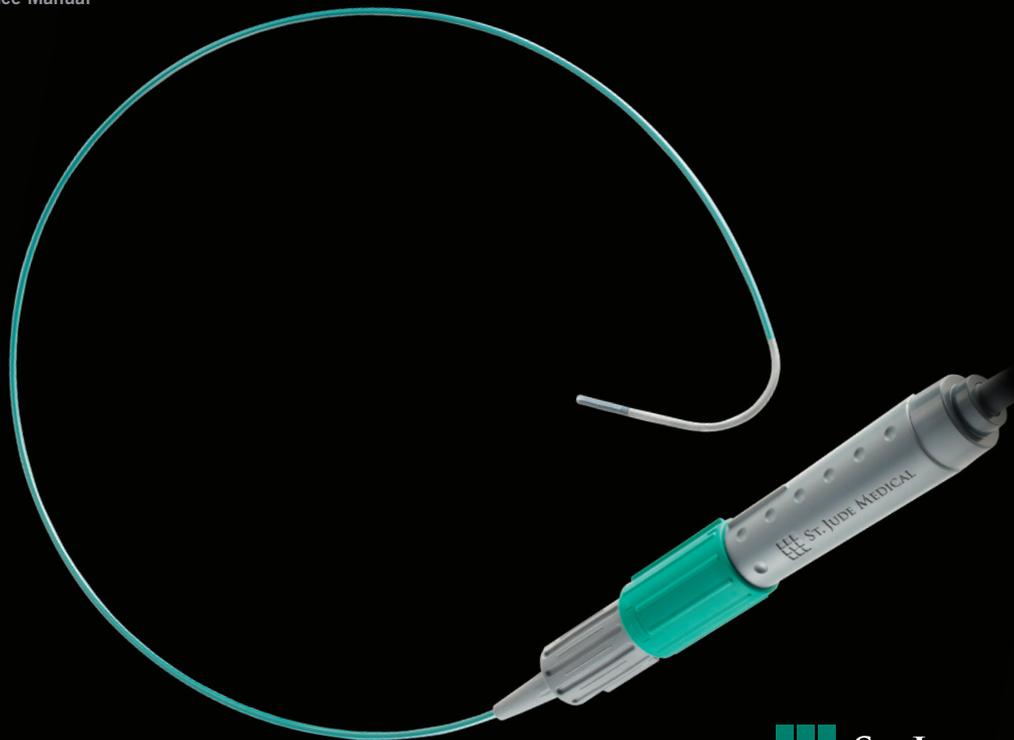


# ViewFlex™ Xtra ICE Catheter

Positioning Reference Manual



**ST. JUDE MEDICAL™**

MORE CONTROL. LESS RISK.

# ViewFlex™ Xtra ICE Catheter

The ViewFlex Xtra ICE Catheter, which is compatible with the ViewMate™ Z and ViewMate™ II ultrasound consoles, provides visualization of cardiac structures and blood flow within the heart during electrophysiology and interventional cardiology procedures. This “Positioning Reference Manual” can be used as a guide to understanding the technique of ICE imaging.

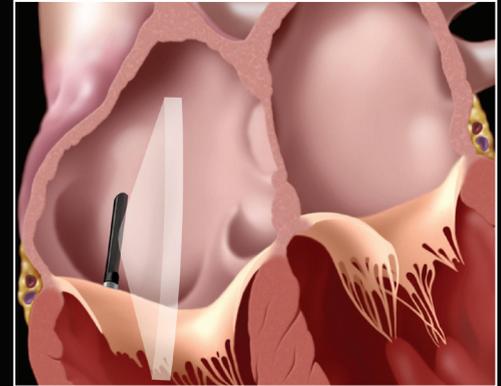
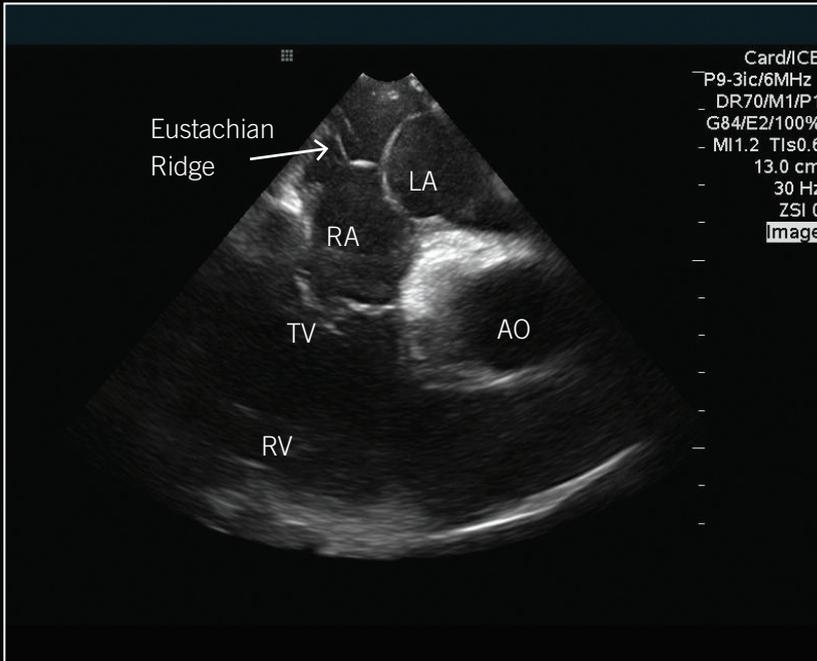
The diagrams and ultrasound images represented in the following text display the approximate cardiac anatomy seen during a typical ICE overview of the heart. Precise movements in catheter angulations and rotations, for a specific view, may differ with individual cardiac anatomy.

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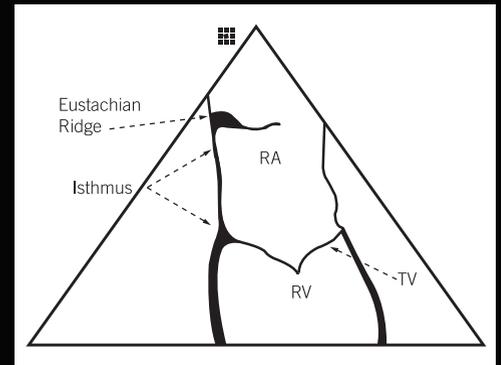
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# Eustachian Ridge

- As the ICE catheter enters the right atrium, the eustachian ridge is the first anatomical structure that can be visualized.

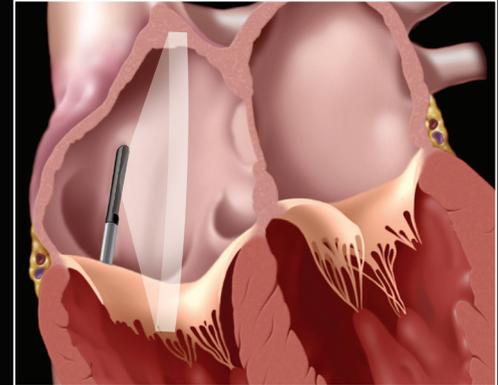
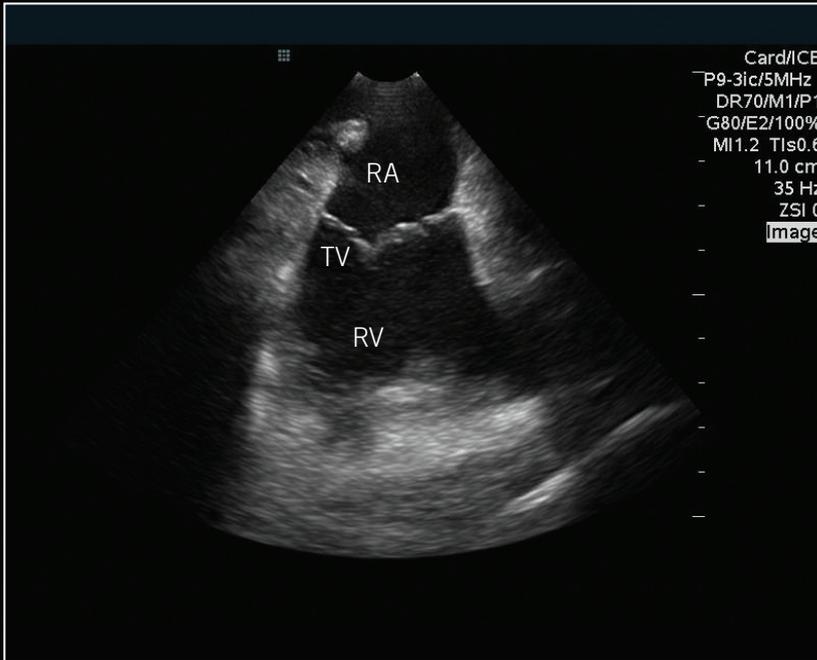


## Orientation

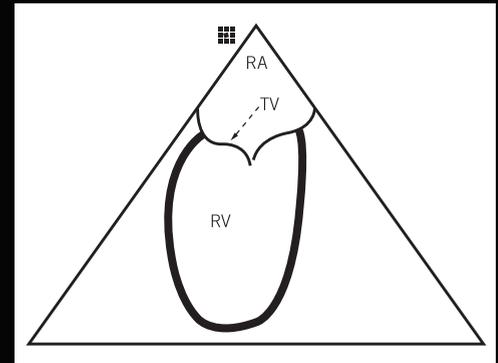


# Home View

- Continue advancing the catheter to the level of the mid-right atrium
- The ultrasound array should be facing anteriorly
- There is no flexion on the catheter

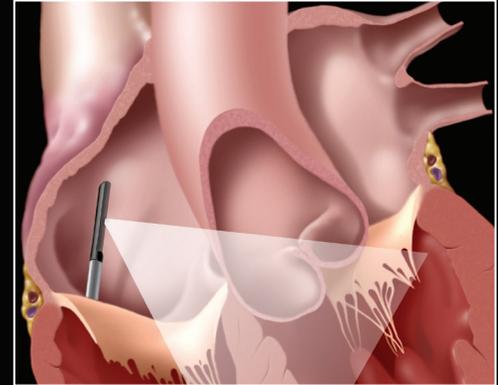
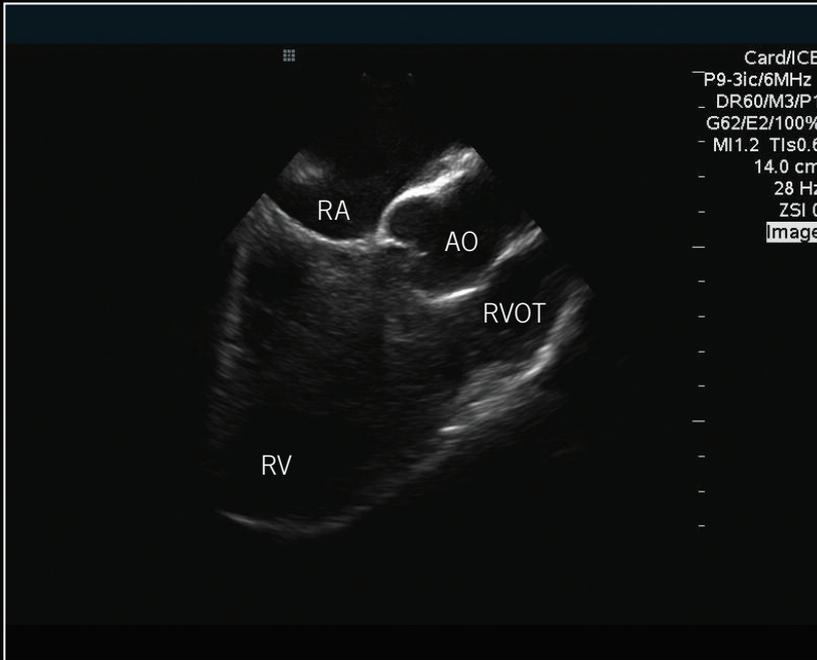


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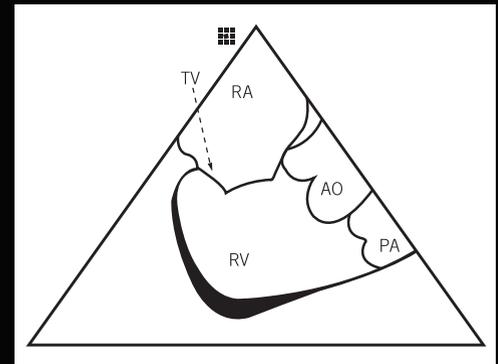


# Aorta, Right Ventricular Outflow Tract

- From the “Home View,” rotate the catheter clockwise
- No flexion on the catheter is necessary

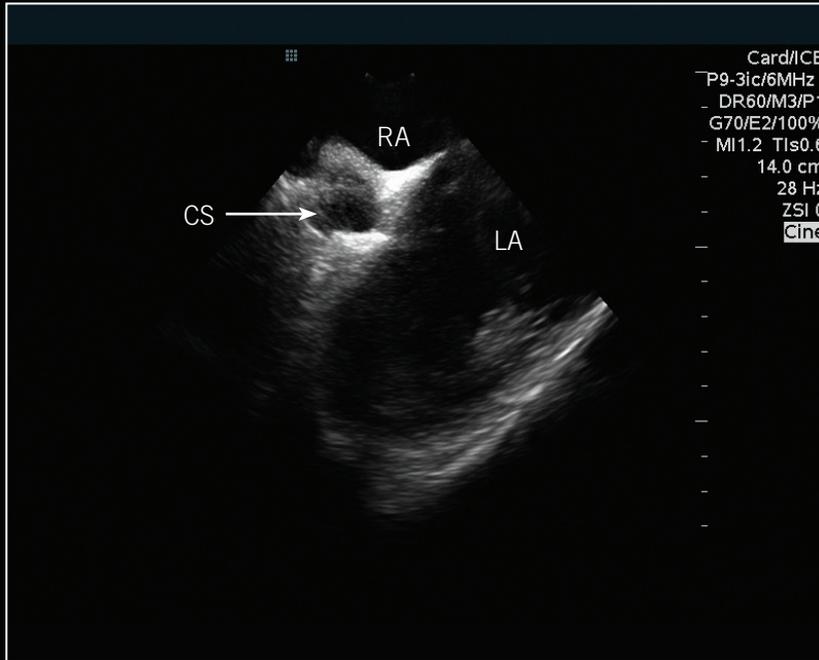


Orientation

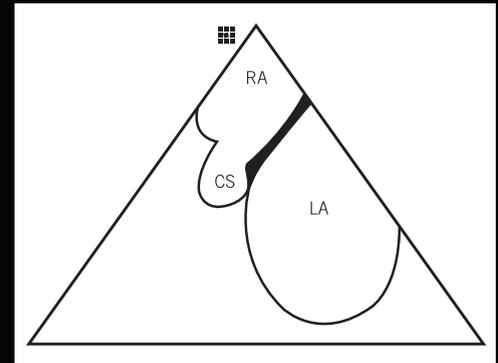


# Coronary Sinus

- Gradually rotate the catheter clockwise to visualize the ostium of the coronary sinus

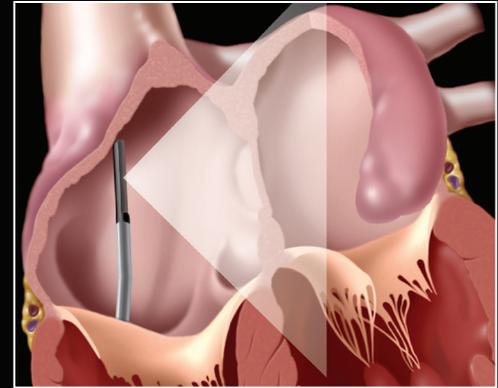
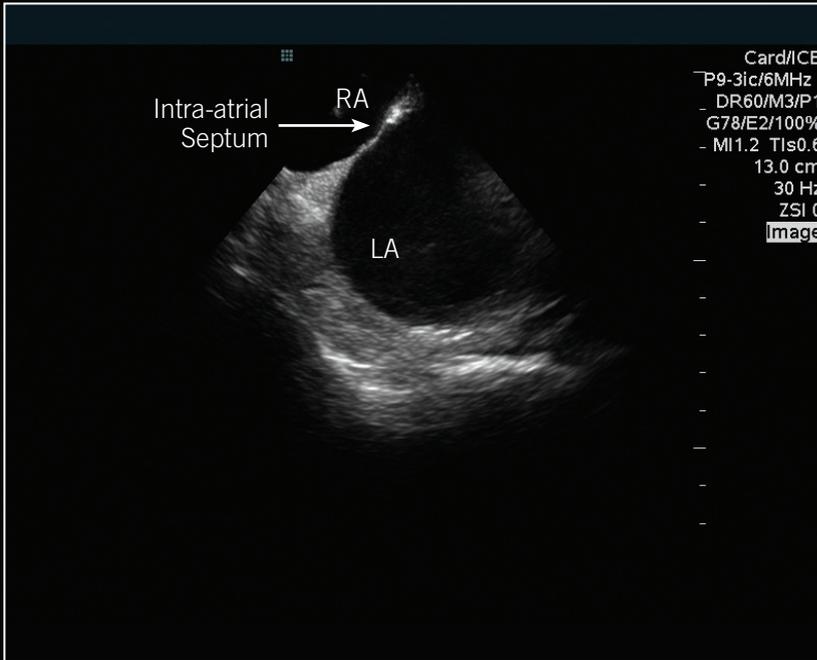


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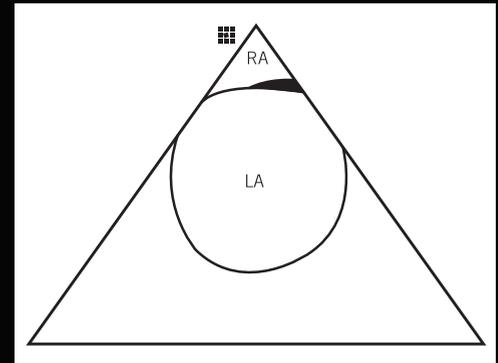


# Intra-atrial Septum, Fossa Ovalis

- Rotate the catheter clockwise
- Posterior flexion can be used if necessary to view more of the right atrium

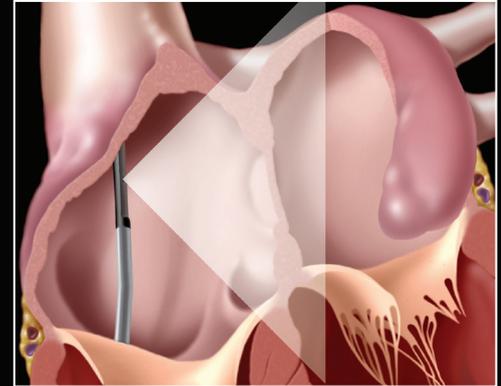
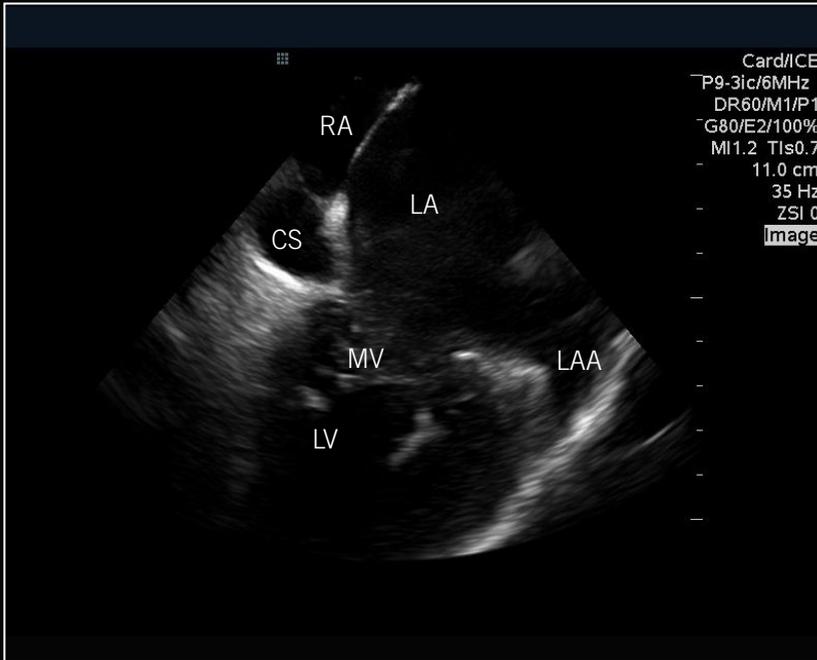


Orientation

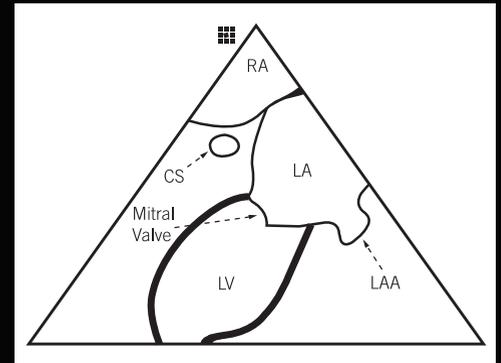


# Mitral Valve, Left Atrial Appendage

- From the “Intra-atrial Septum View,” gradually rotate the catheter clockwise

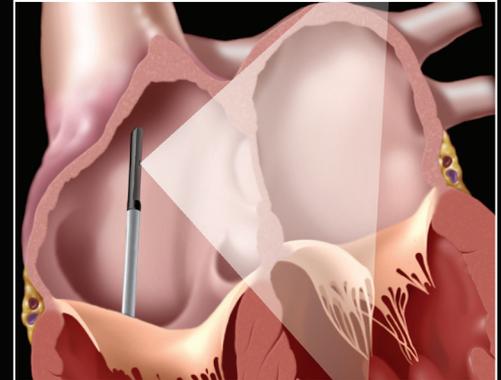
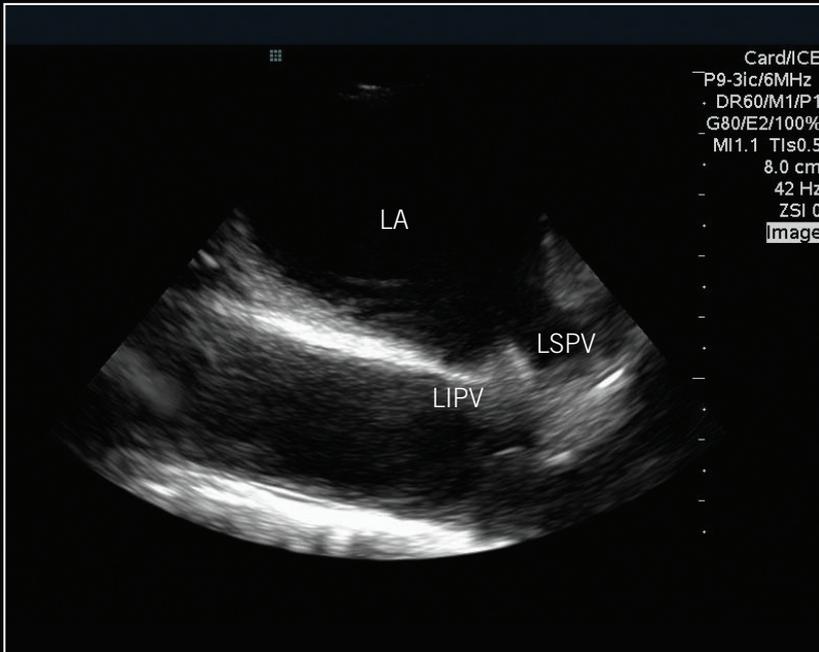


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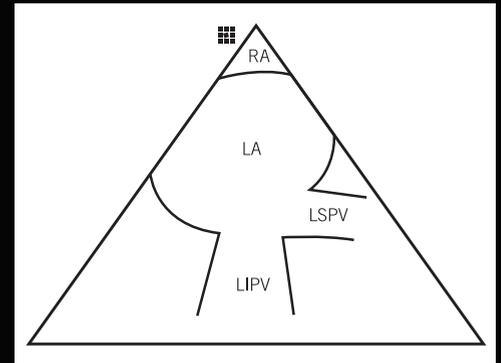


# Left Pulmonary Veins

- From the “Left Atrial Appendage View,” slightly rotate the catheter clockwise
- Color Doppler can be used to identify the left pulmonary veins

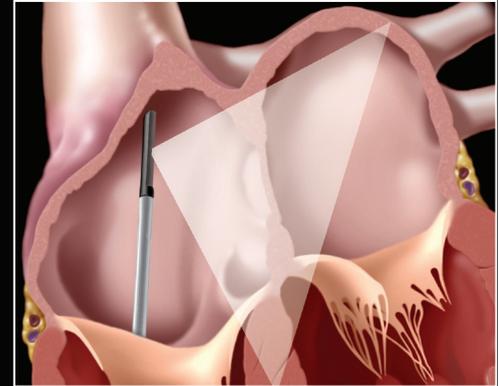
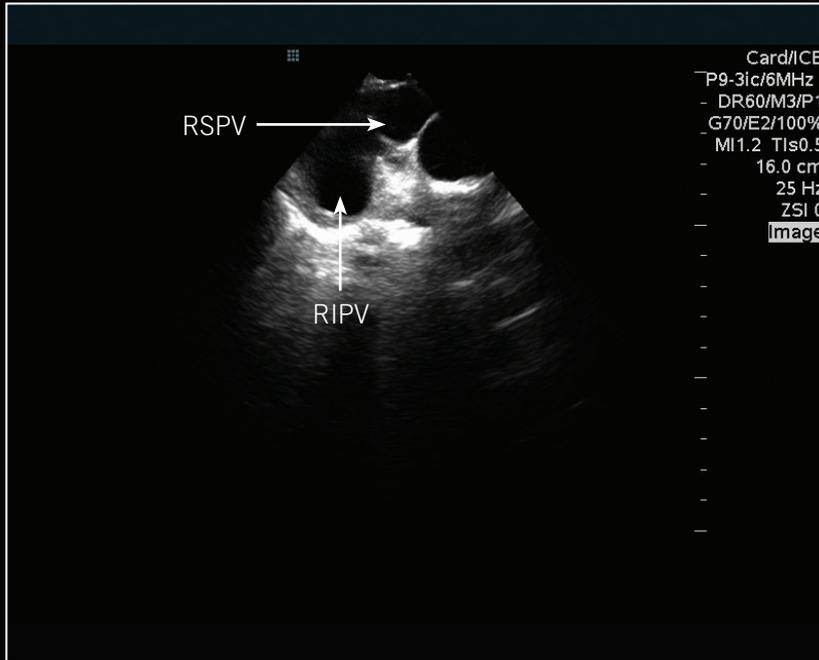


Orientation

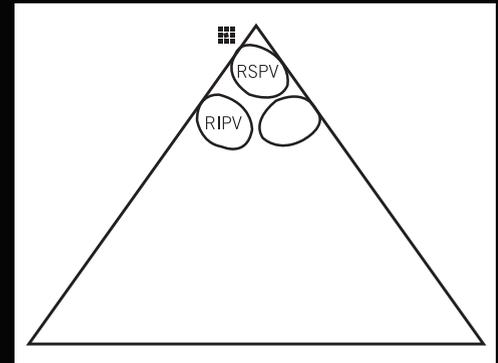


# Right Pulmonary Veins

- Rotate the catheter clockwise past the left pulmonary veins
- Advance the catheter slightly to obtain a better view of the right pulmonary veins

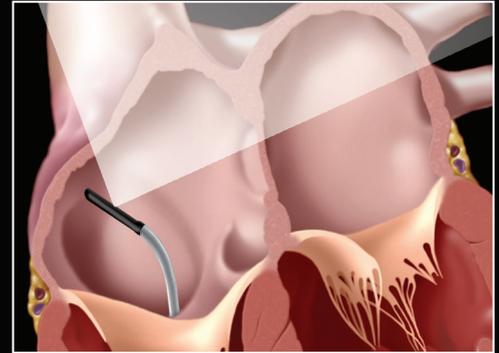


Orientation

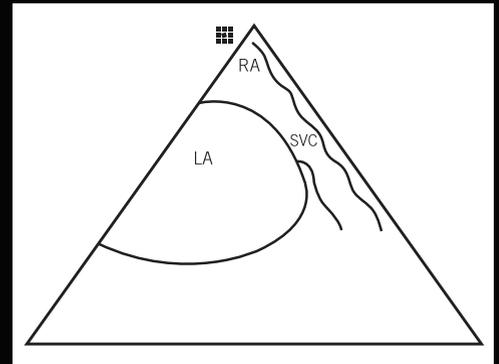


# Superior Vena Cava, Right Atrium

- Place the catheter in the mid-right atrium
- Flex the catheter posteriorly
- If necessary, rotate the catheter counter-clockwise to obtain a better view of the superior vena cava and right atrium

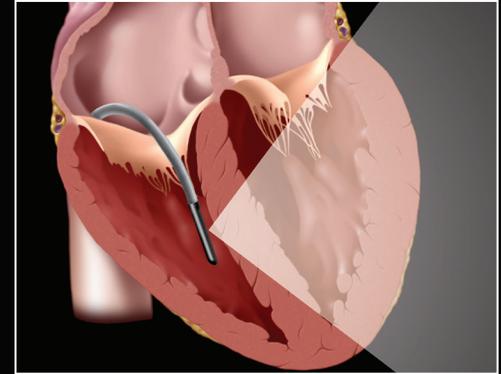
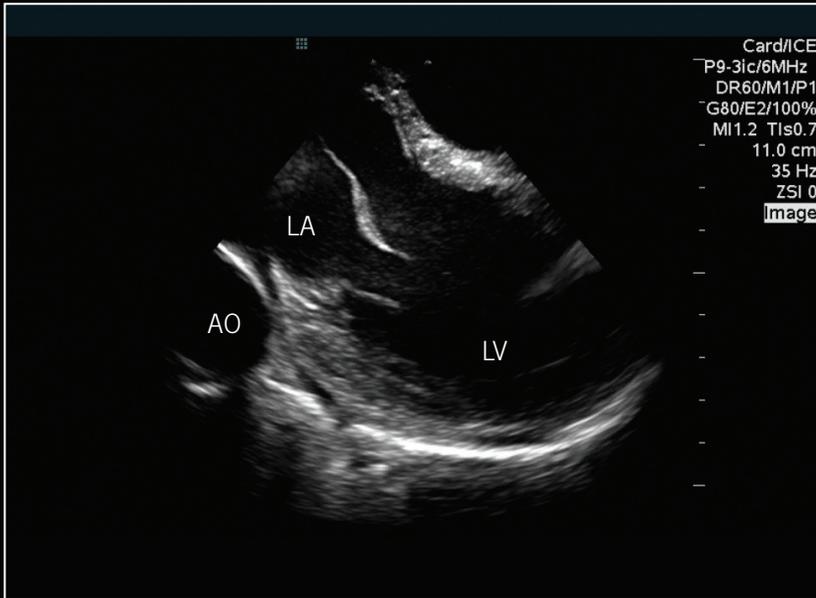


## Orientation

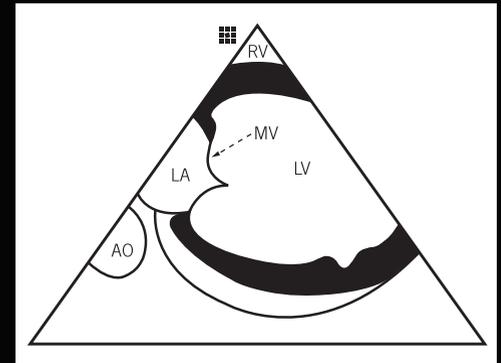


# Left Ventricle Long Axis

- Re-establish Home View
- Once the tricuspid valve is clearly visible, flex the catheter anteriorly (toward tricuspid valve)
- Utilizing fluoroscopy and ultrasound, advance the catheter past the tricuspid valve annulus into the right ventricle and then remove anterior flexion
- Rotate the catheter clockwise until the intraventricular septum comes into view



## Orientation



ATRIAL FIBRILLATION

CARDIAC RHYTHM MANAGEMENT

CARDIOVASCULAR

NEUROMODULATION

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**Rx Only**

**Brief Summary:** Please review the Instructions for Use prior to using these devices for a complete listing of indications, contraindications, warnings, precautions, potential adverse events, and directions for use.

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