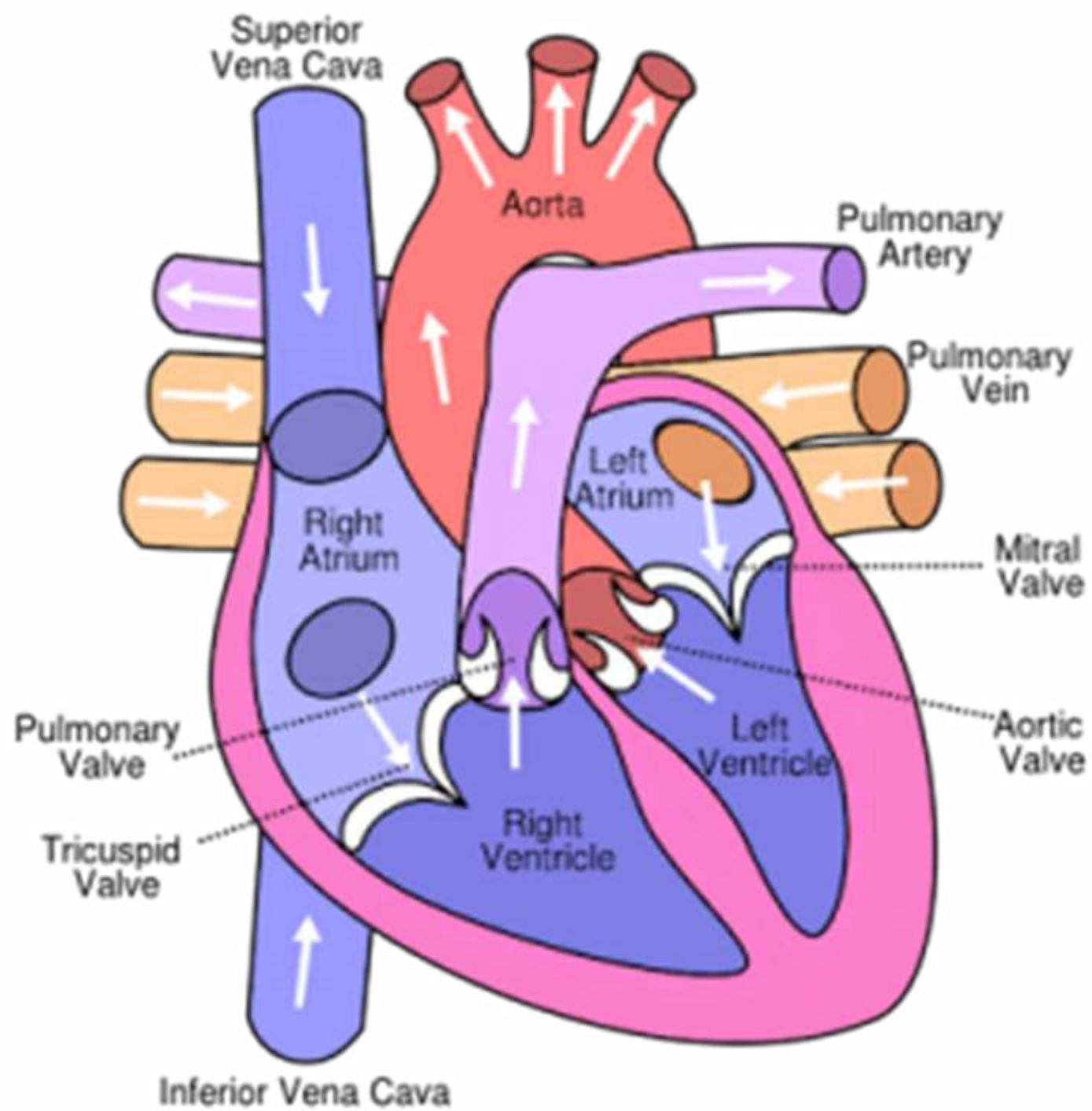
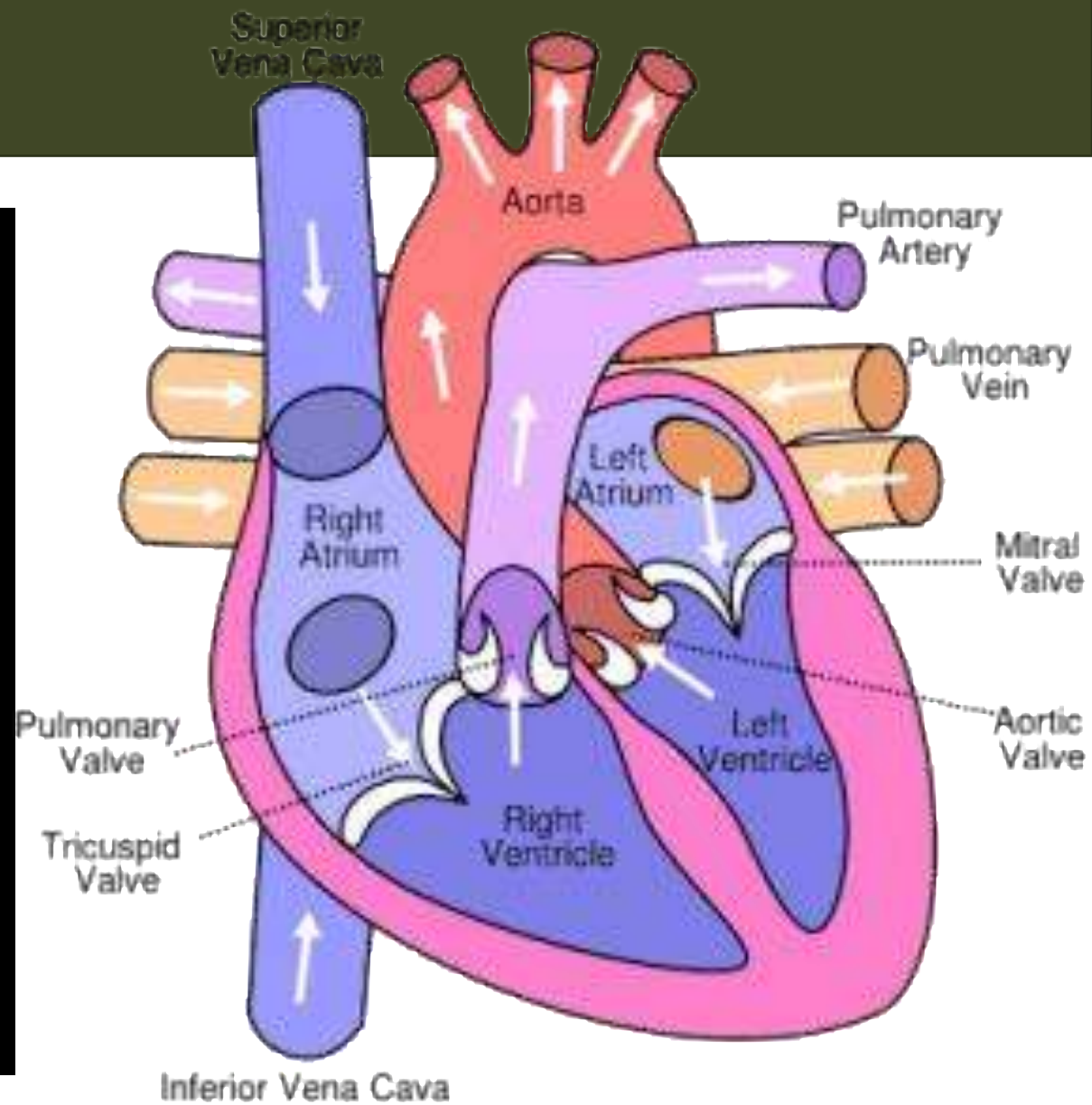
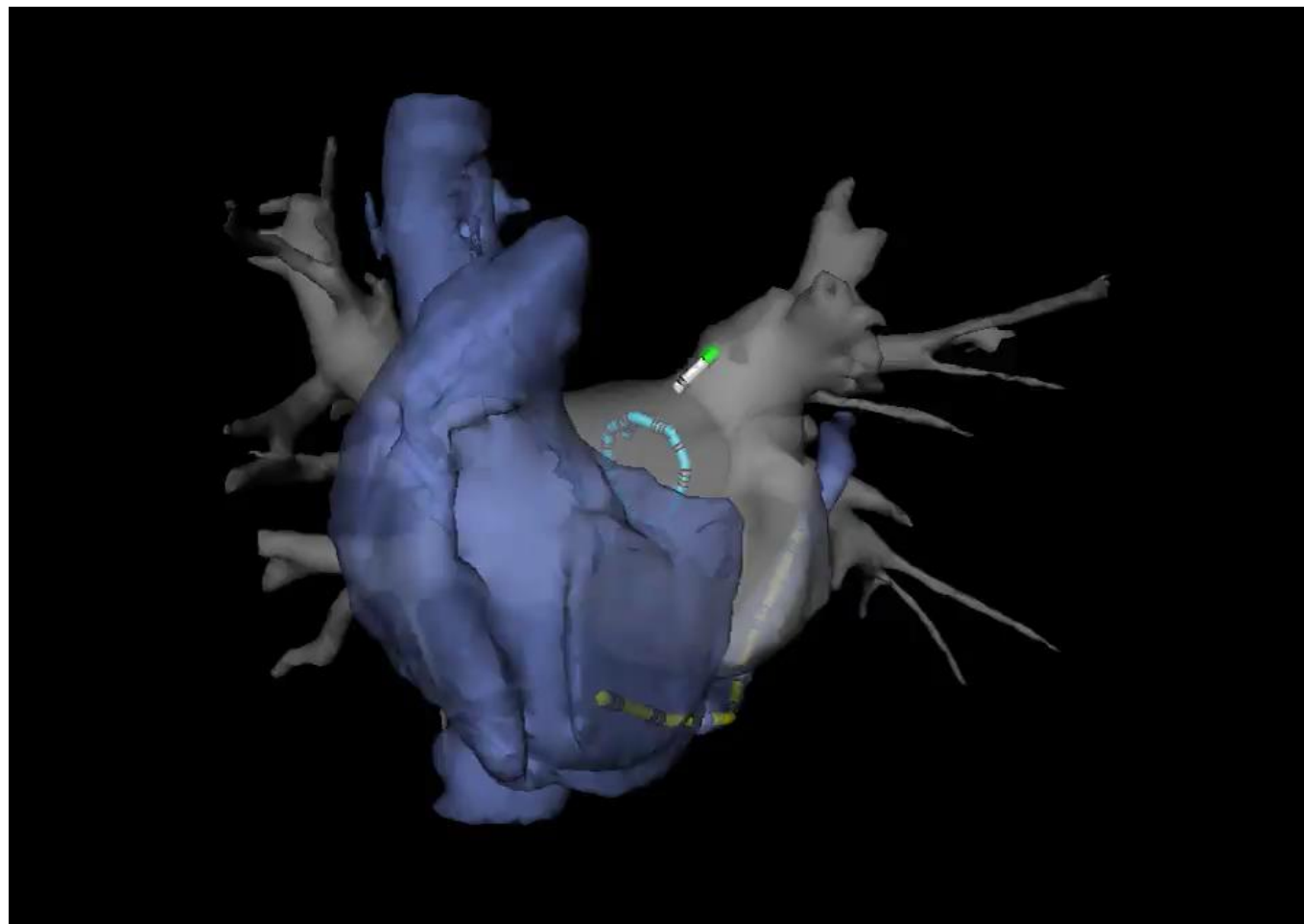


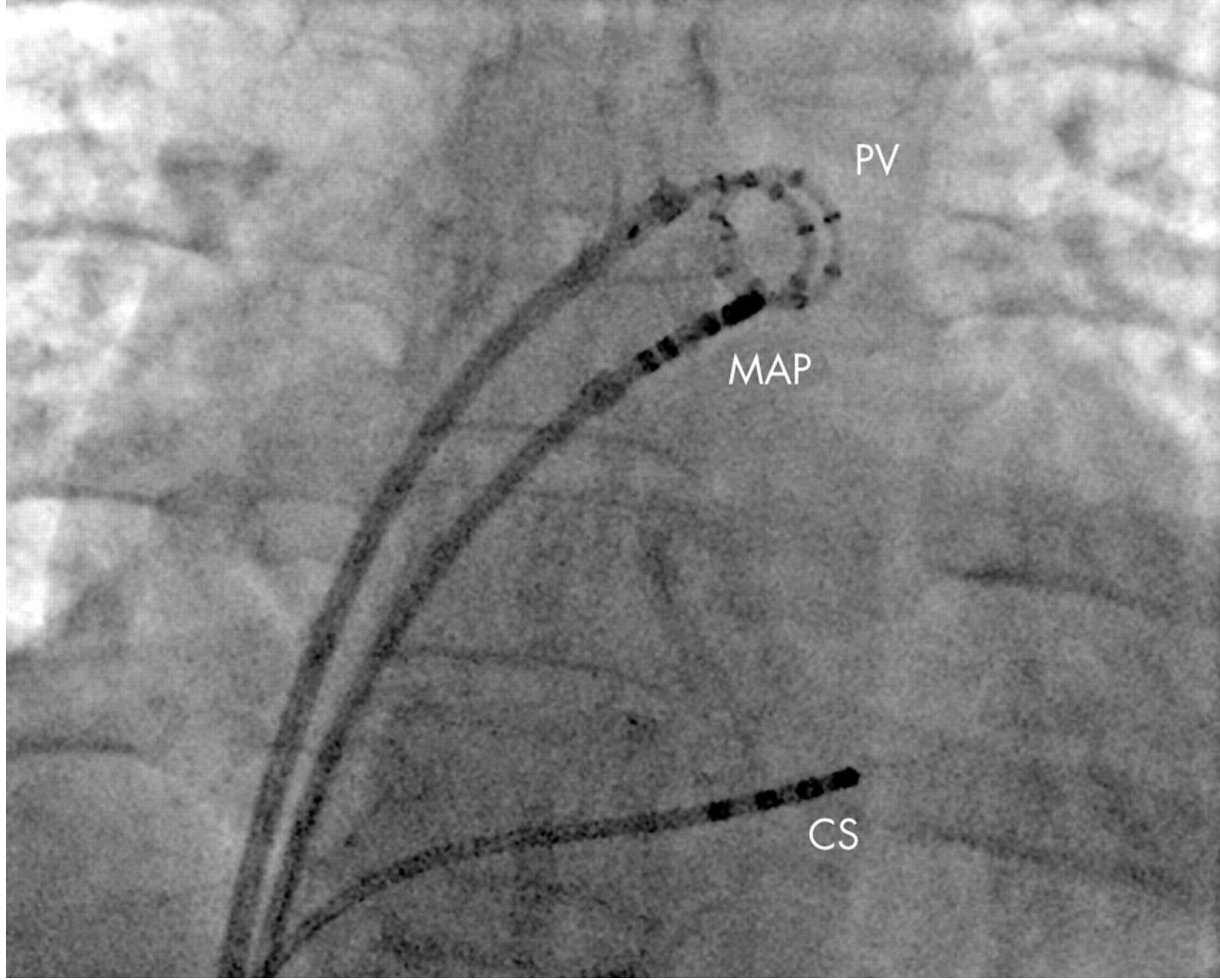
# Implementing a Fluoroless Approach to Ablation **The Unleaded Experience**

**David Weisman, MD, FHRS**









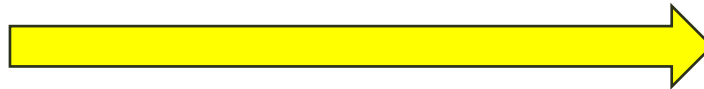
PV

MAP

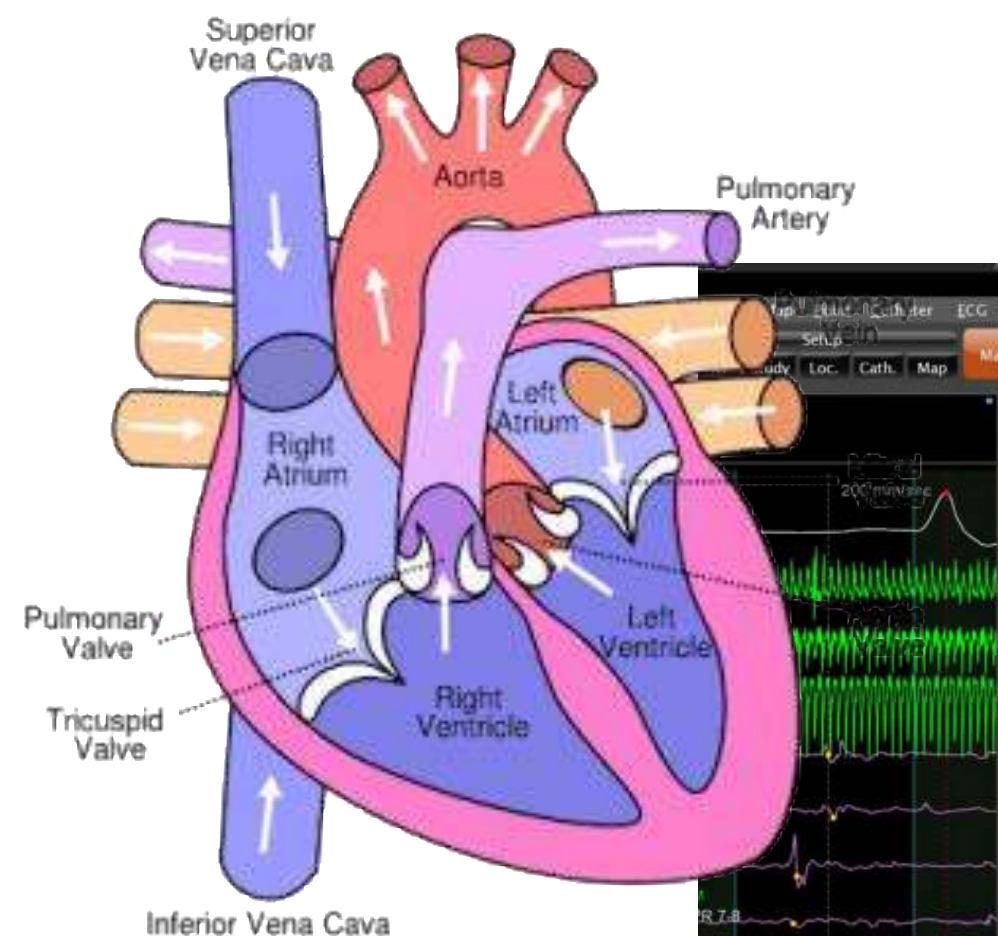
CS

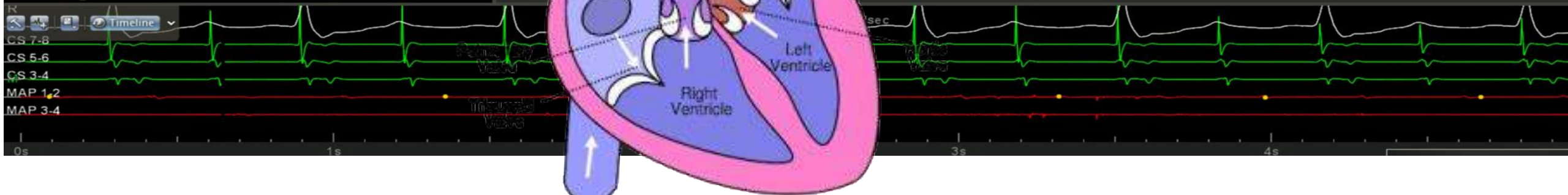
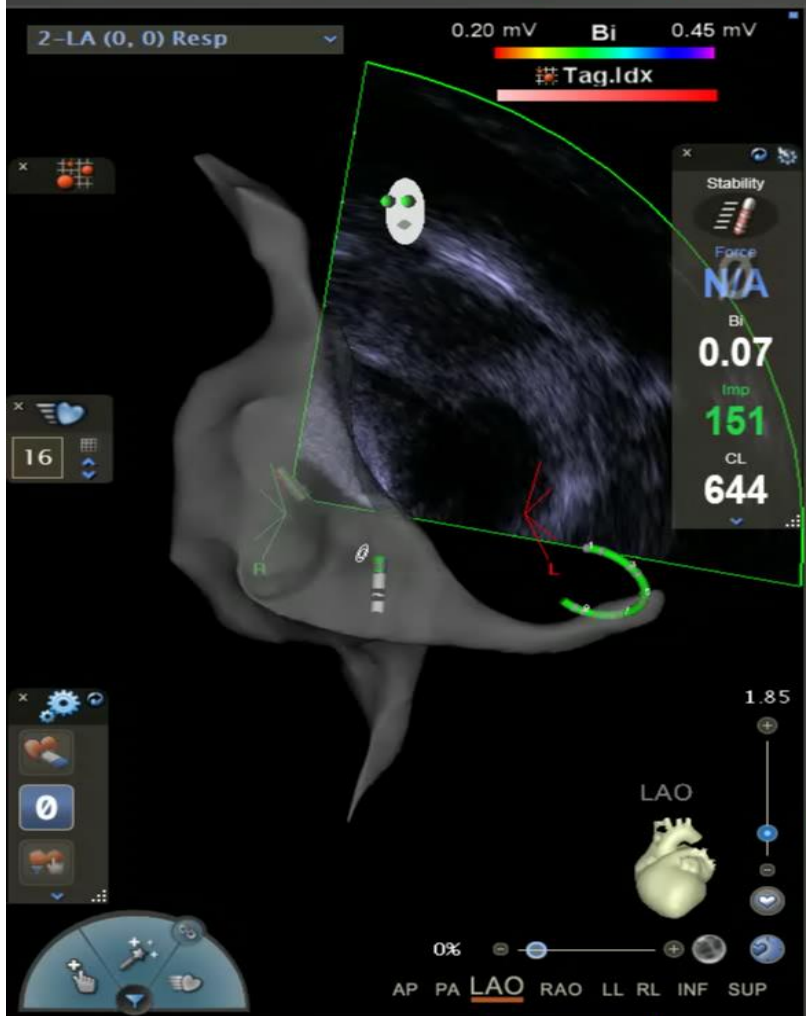
# Radiation Risk

- Radiation exposure from CV imaging has been identified by the American College of Cardiology as a safety concern
  - ALARA - As Low As Reasonably Achievable
- Background radiation exposure 3.1 mSv/year
  - 1 mSv = 10 chest X-rays
    - Diagnostic Cath 7.6 +/- 6 mSv
    - TAVR 25.6 +/-6.2 mSv
    - Cardiac CTA 8-12 mSv
    - AF ablation 15 mSv
- Obese patients have 75% greater dose during imaging

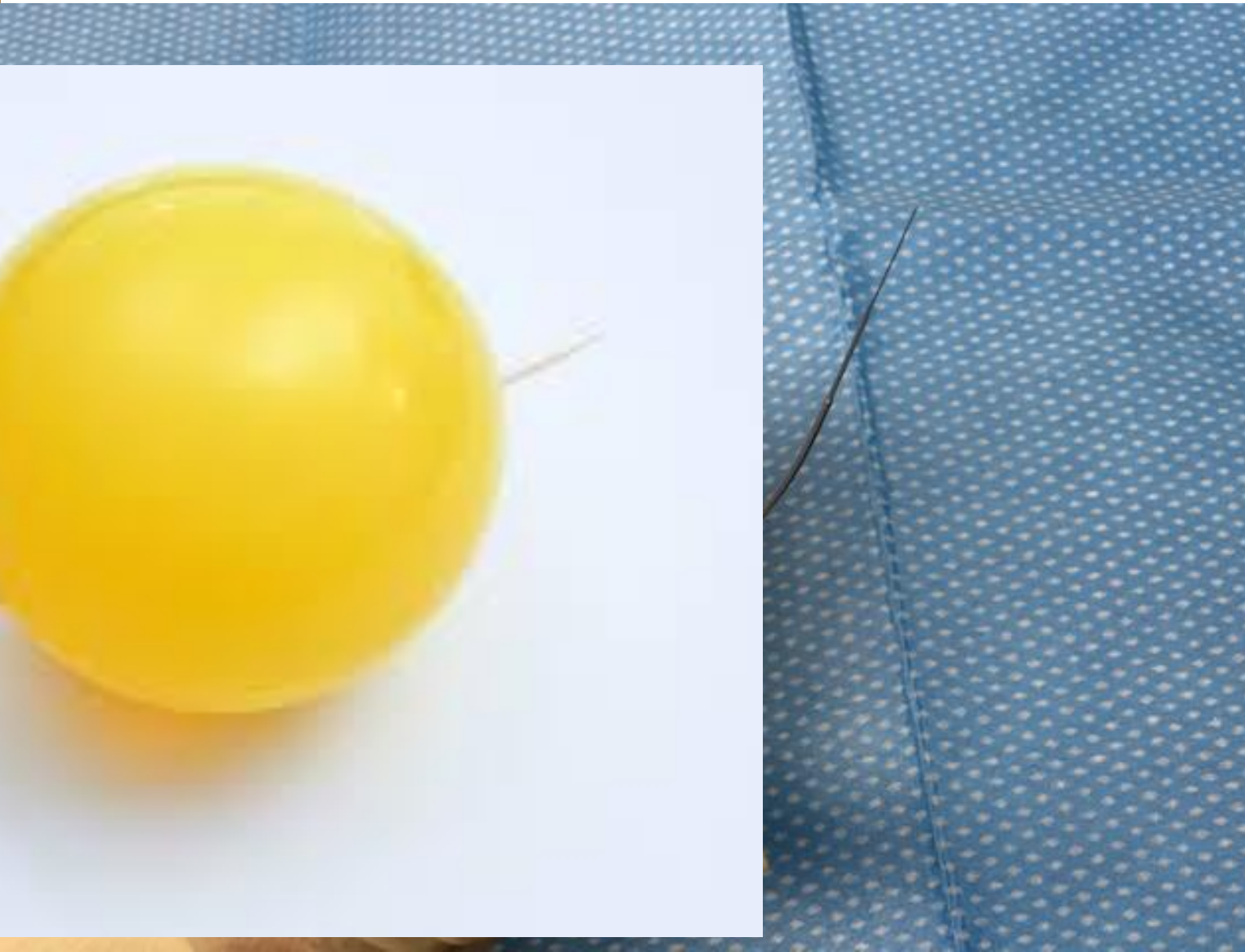
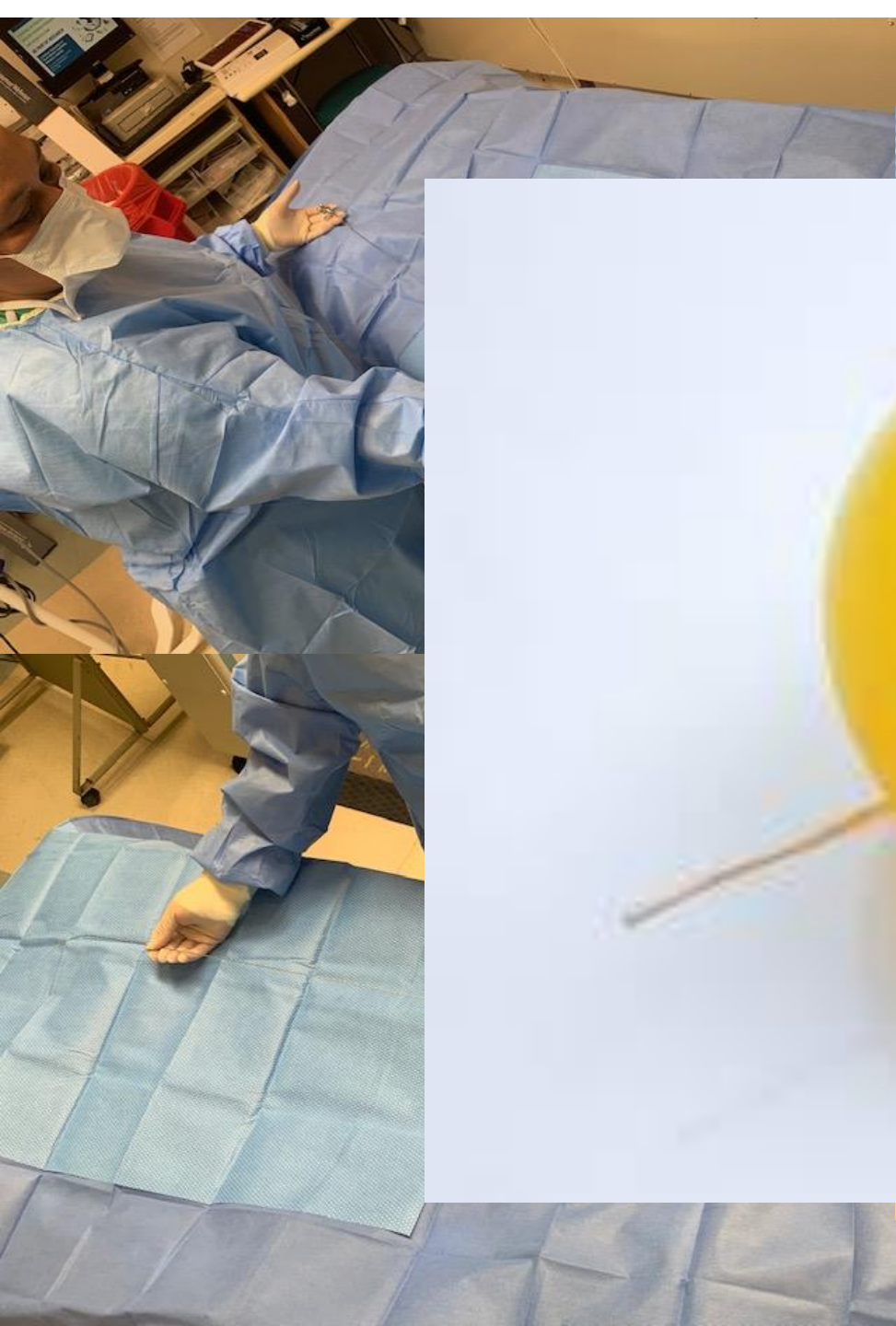




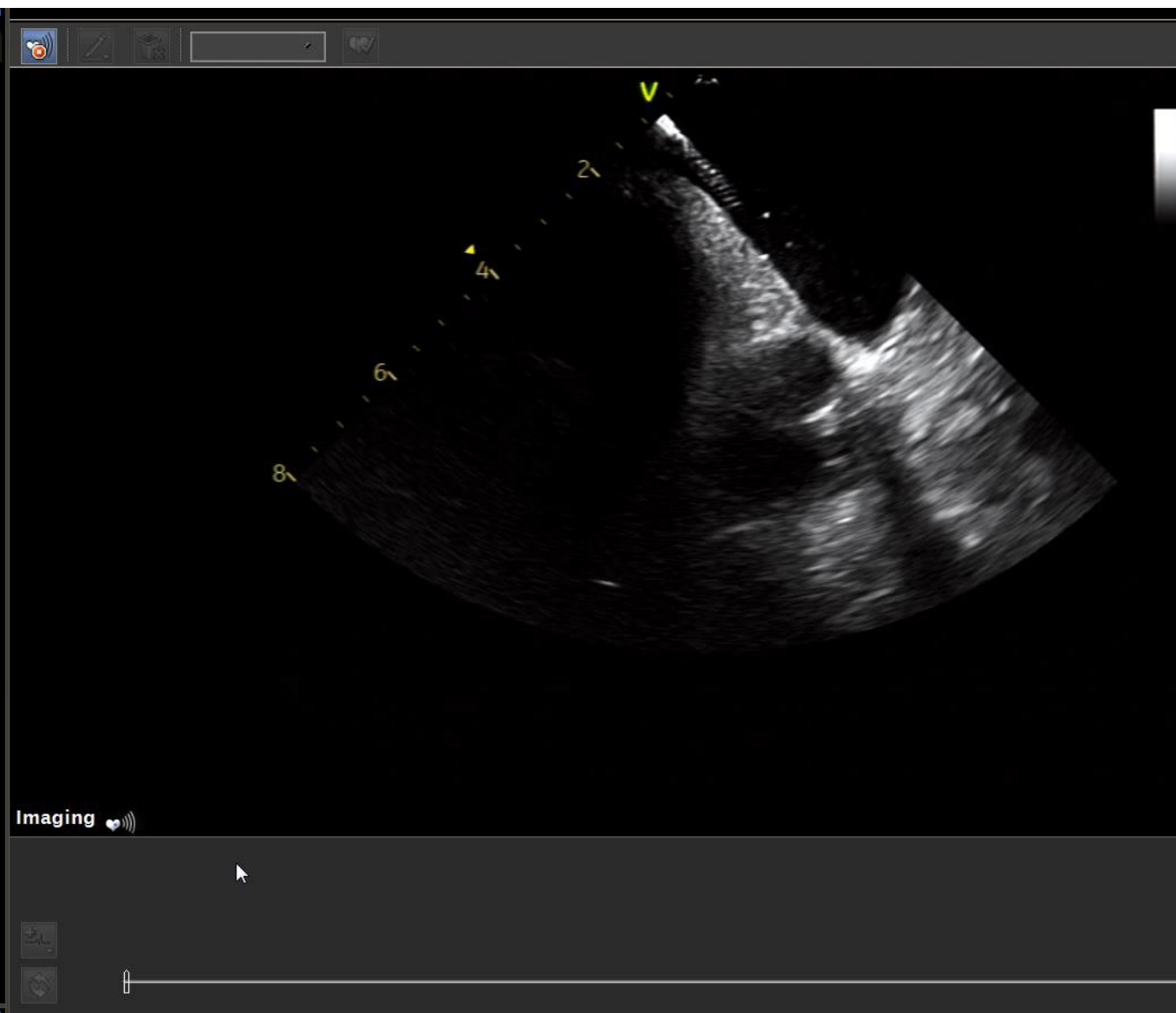
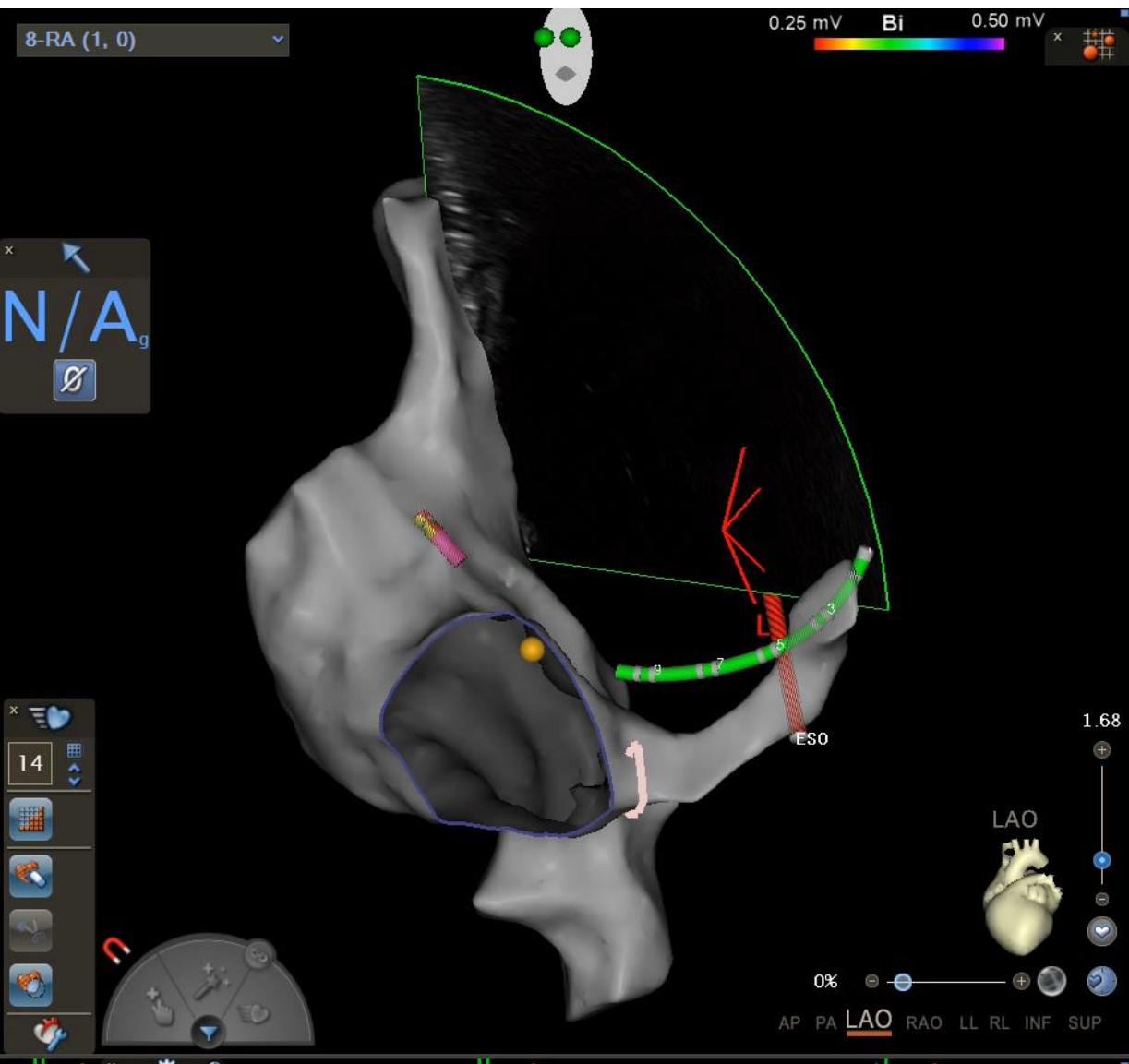




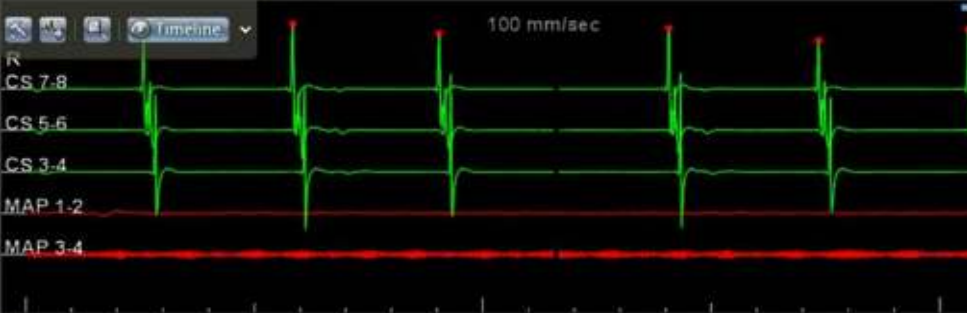














6. Switch the PIU Power Supply off and on again, and wait few minutes for communication to be established between the PIU and the workstation.  
If the problem persists, contact Biosense Webster Service and Support Department.



FileTime: 13218129423898397, Time: 2019.11.13.14.37.3.898

3-Map (0, 0)

LAT

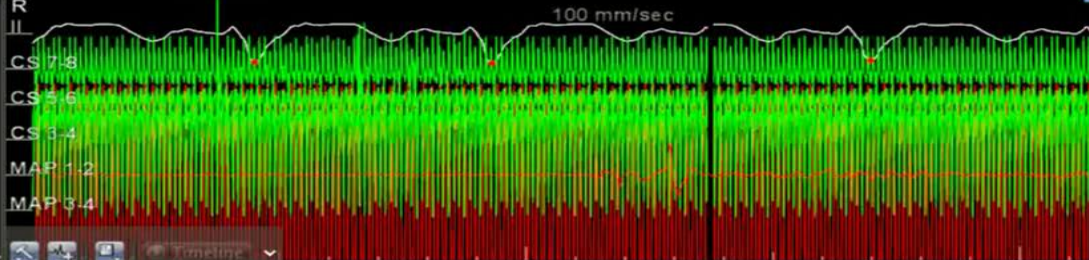
100 gs FTI 500 gs

Force N/A  
Stability 1.29  
CL 484  
Bi 0.53  
Imp N/A

2-RA (0, 0)

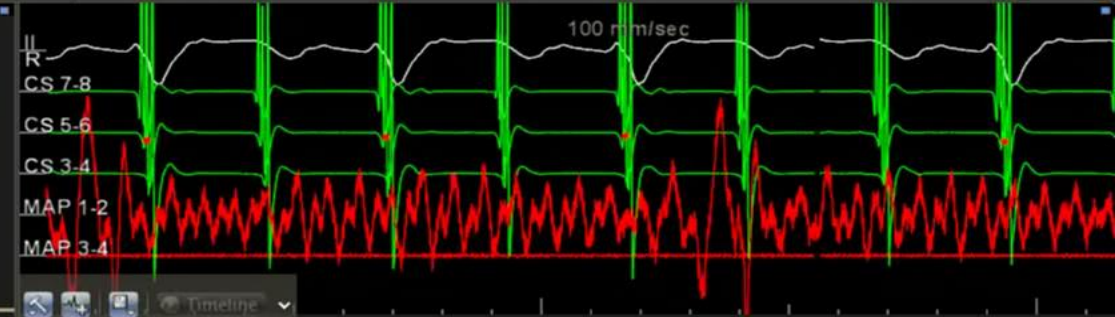
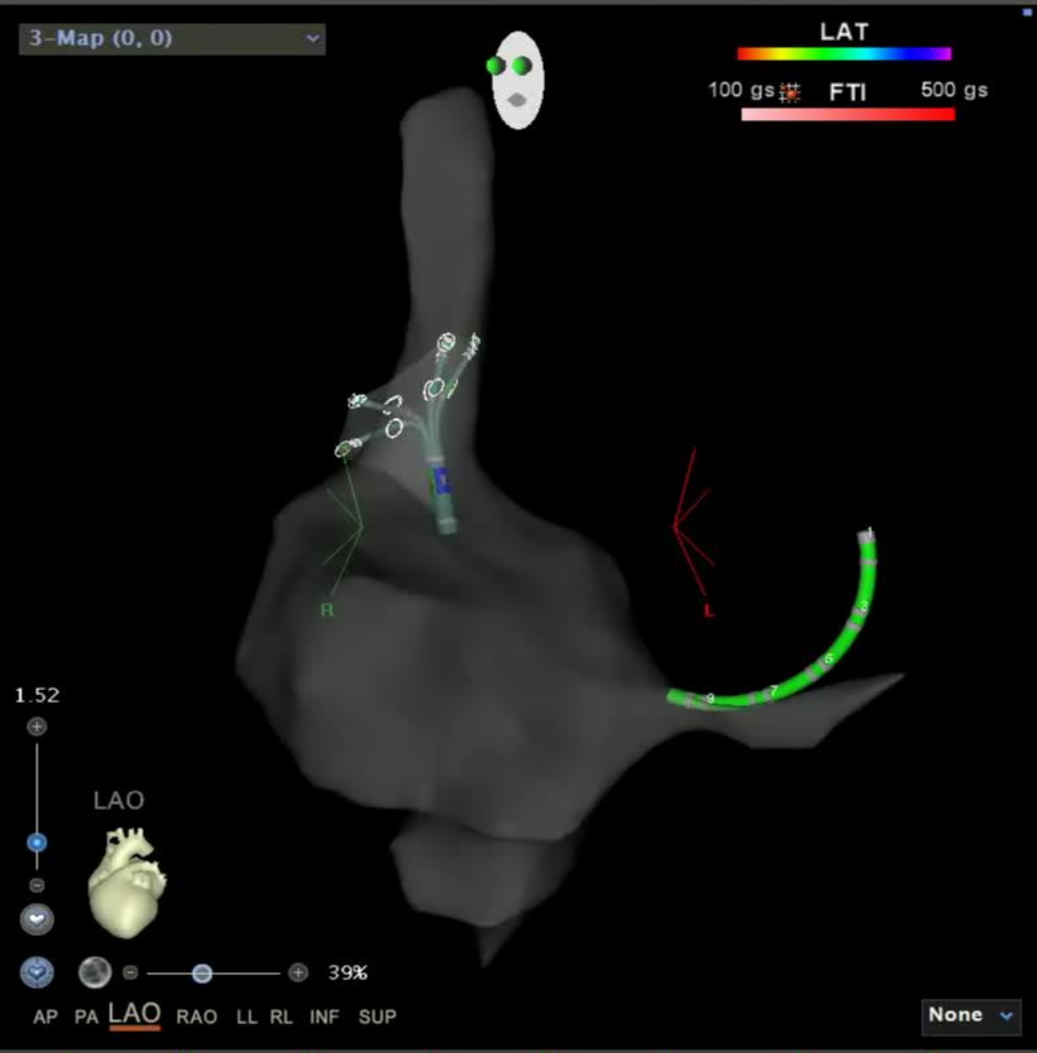
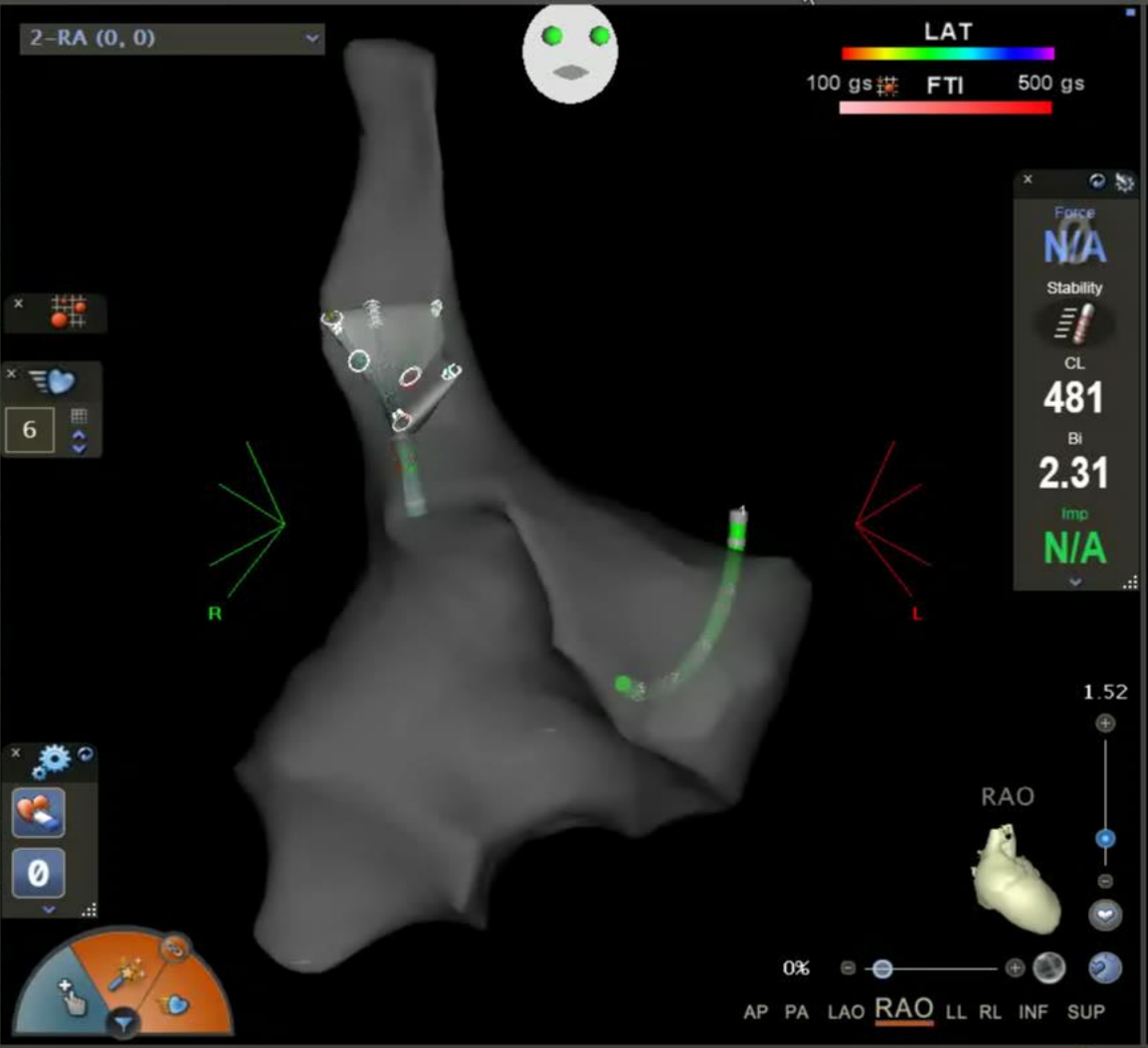
LAT

100 gs FTI 500 gs



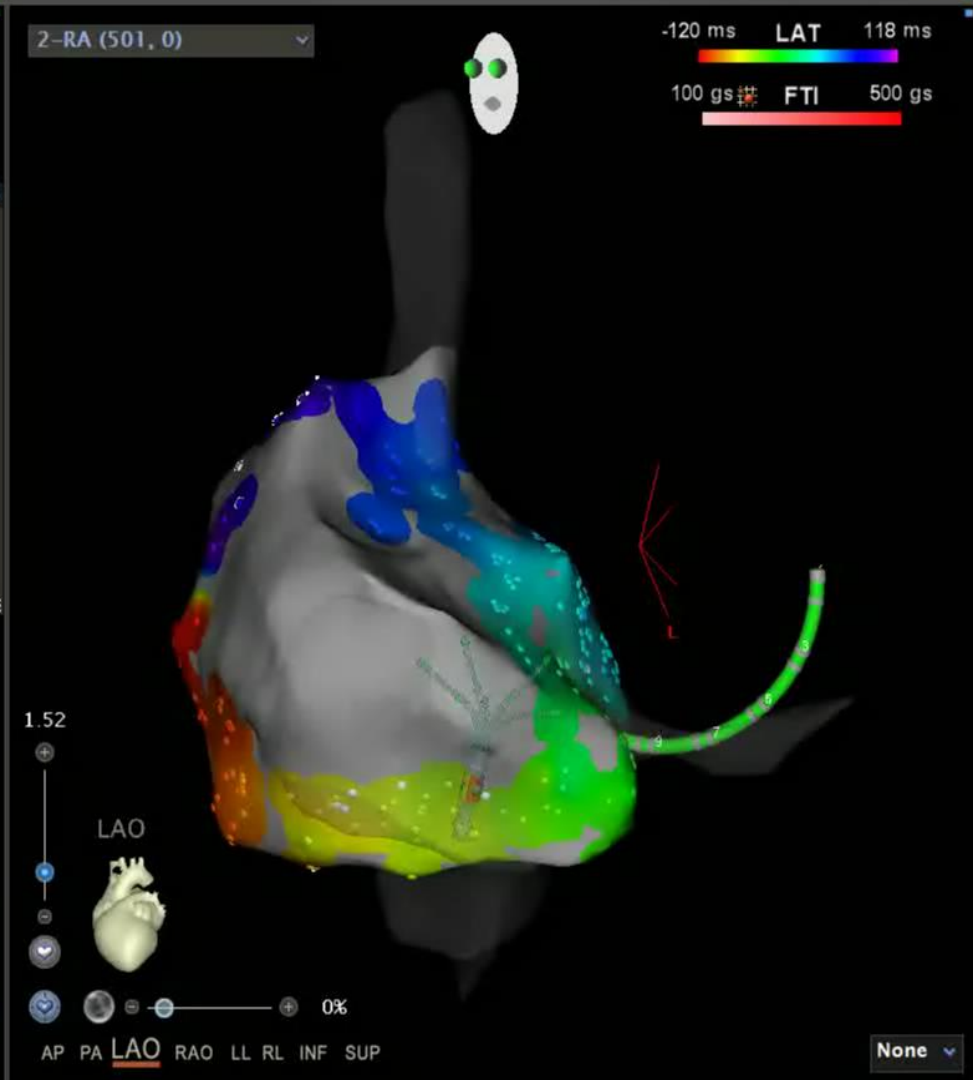
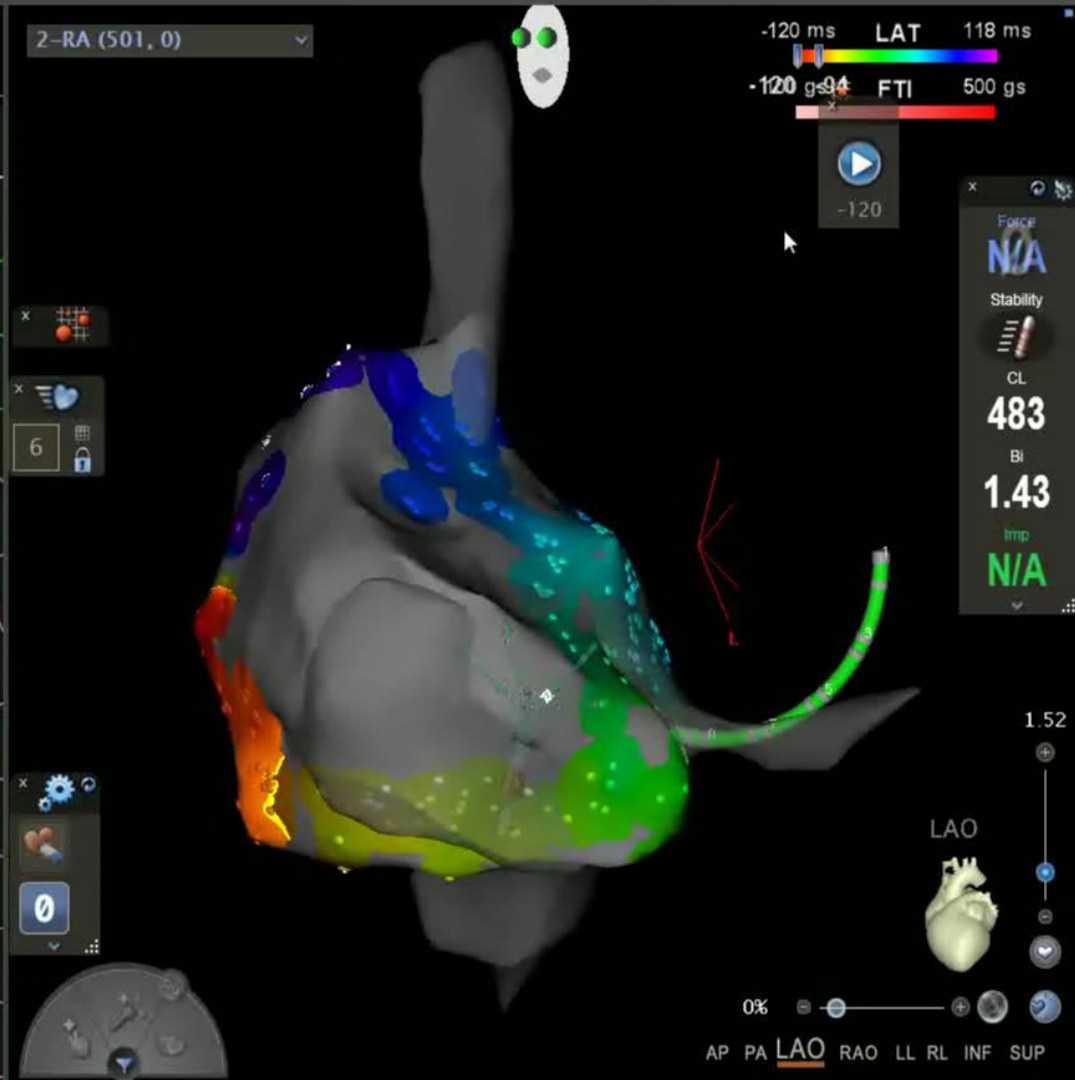
#	Time	Type	Electrodes	Preset	Comment
---	------	------	------------	--------	---------

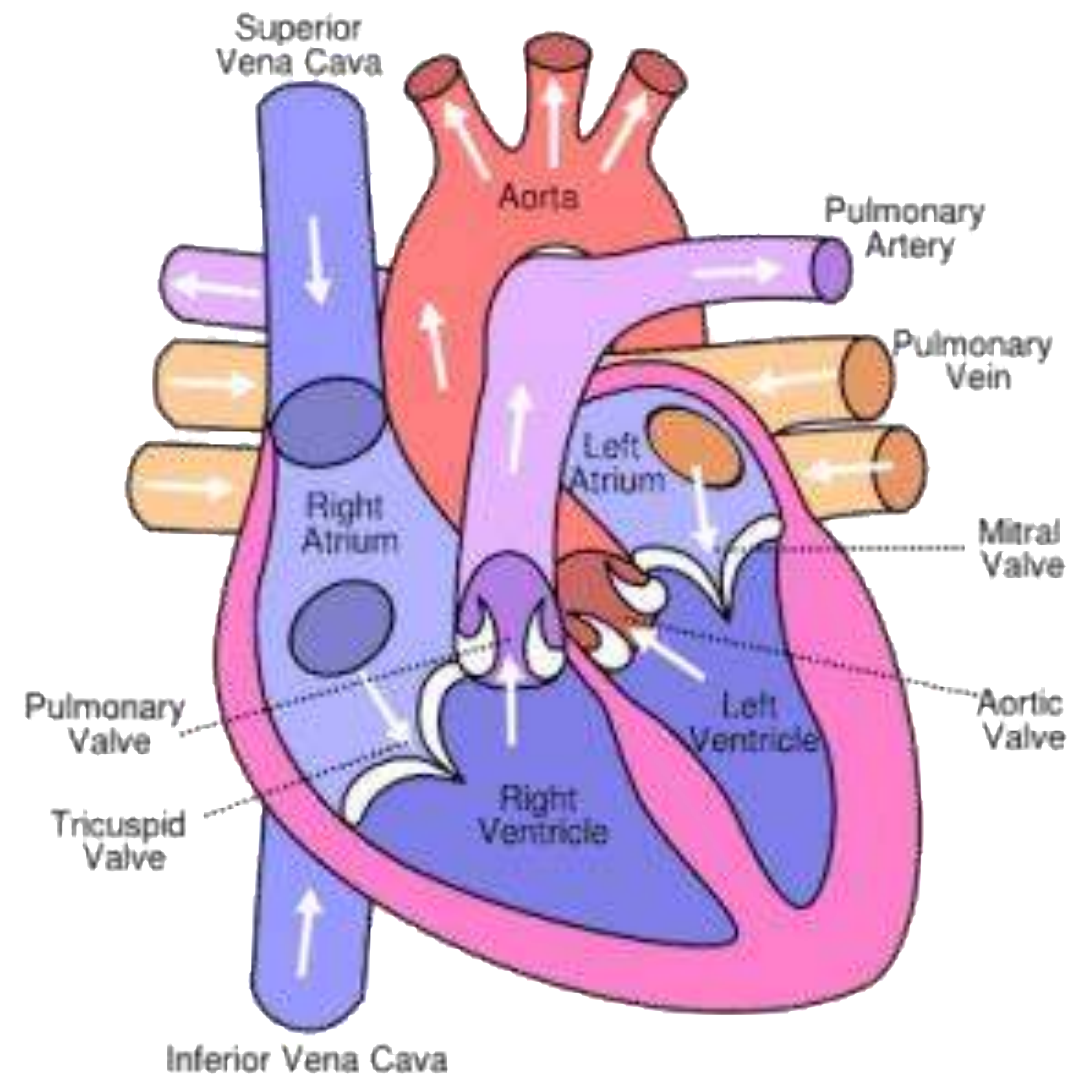
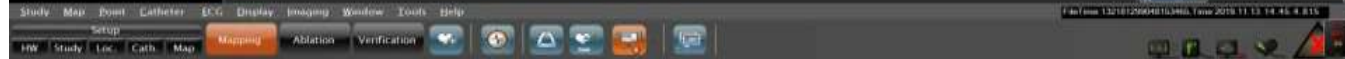
ECG waveforms for R II, CS 7-8, CS 5-6, CS 3-4, MAP 1-2, and MAP 3-4. Scale: 1s, 2s.



#	Time	Type	Electrodes	Preset	Comment













Study Map Point Catheter ECG Display Imaging Window Tools Help

Setup Mapping Ablation Verification

HW Study Loc. Cath. Map



# Benefits of Zero Fluoroscopy

- Reduce risks of
  - Malignancy
  - Cataracts
  - Benign tumors
  - Genetic defects
  - Radiation Burn
  - Orthopedic injury (lead aprons)

# Reduced fluoroscopy has its advantages...

- Repeated Exposure over time is dangerous to Patients, Physician, and Staff
- Especially advantageous for:
  - childbearing women
  - younger women who may be planning a family in future
  - younger patients
  - history of cancer
  - history of skin damage
  - patients who may need repeat procedures