GE Healthcare

CardEP

## Streamlined post-processing for enhanced electrophysiology procedures.

CT cardiac exams provide critical information to practitioners of cardiac therapy. Precise information pertaining to the left atrium's complex anatomy, the pulmonary veins, the coronary sinus, or the cardiac veins has a major impact on the efficacy of subsequent cardiac therapy: It can speed procedures and facilitate treatment. But analyzing and reporting the wealth of information CT cardiac studies provides can be time consuming. A program that automates many routine functions and gives you tools to easily quantify and qualify many aspects of cardiac function would streamline your workflow and give you greater diagnostic confidence.

Overview

CardEP is an integrated post processing image analysis software for the application of cardiovascular and electrophysiology imaging on the AW Workstation. With it, you can process display, reformat, and analyze 2D or 3D cardiac images for qualitative or quantitative assessment of heart anatomy and pulmonary veins from single or multi-phase cardiac image data sets.

Highlights

- Visualize the anatomical layout of the left atrium and pulmonary vessels.
- Visualize the origins of the pulmonary vessels.
- Automatic heart segmentation.
- Helps you visualize and quantify cardiac venous pathways.
- Offers you a variety of 2D, 3D, or reformatted protocols with which to perform image analysis.
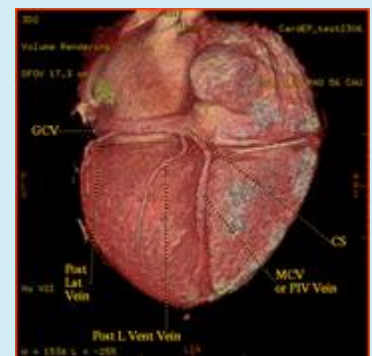
Features

CardEP offers a variety of features that give you image analysis flexibility:

- Volume render 3D heart and chamber views
- Obtain segmented 3D views of the left atrium and pulmonary veins
- View hollow 3D VR heart models
- Measure the pulmonary veins and left atrial appendage with predefined protocols
- Render and display 2D/3D views of the left chambers in single or multiple phases of the cardiac cycle with one-touch automatic extraction
- Reformat standard axial CT images of single or multiple cardiac phases into short or long axis and save the image series for further analysis.
- Automatically track, extract, and display pulmonary veins with the pulmonary vessel analysis tool
- Generate pulmonary vein measurements
- Automatically track, extract, and display coronary sinus and cardiac veins with the coronary sinus analysis tool
- Perform one-touch standard 2D reformation and 3D volume rendering, including hollow view, of cardiac anatomy with optimized AW Volume Viewer and 3D rendering tools

- Register images from different cardiac phases into a unique data set that you can save as a 3D object or use for further analysis
- Use predefined navigator views of the pulmonary veins to get a fly-through perspective of the vessels.

Image Requirements

CardEP accepts standard cardiac gated CT image sets acquired on CT scanners equipped with DICOM 3.0 standards. Images must meet the same image requirements as those for the basic Volume Viewer application.

System Requirements

The CardEP option can be installed on Advantage Workstation (AW) or AW Server with VolumeShare 7 or later software.

Compatible hardware:
- Z800, Z820 (and later)

- AW Server 3.2 and above (recommended monitor resolution is up to dual 2MP (1600 x 1200) or a single 3MP (1536 x 2048)

Indications for Use

CardEP is a post-processing software option for the Advantage Workstation (AW) Platform. This product can be used for the analysis of CT angiographic images for the assessment of the heart to include the atria, pulmonary veins and coronary sinus. It provides quantitative analysis tools which include a number of display, measurement and model export capabilities. This product can be used to aid trained physicians in the visualization and assessment of cardiac anatomy.

Regulatory Compliance

This product complies with the European CE marking regulation following Medical Devices Directive: Directive 93/42/EEC.

GE imagination at work