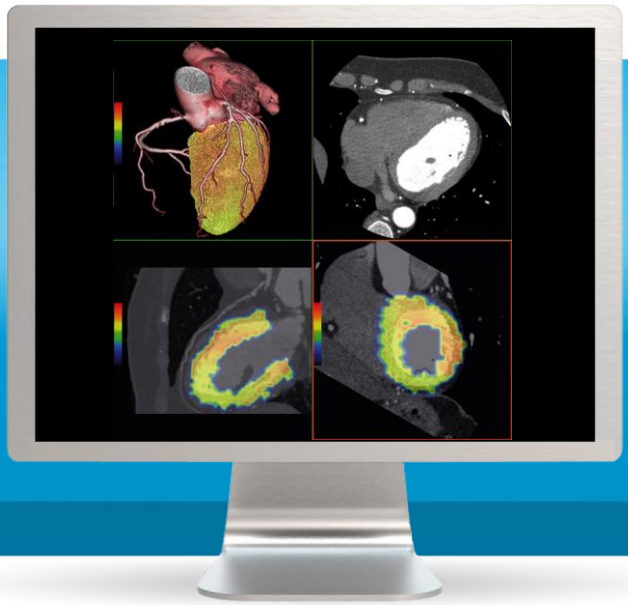
GE Healthcare



CardIQ Fusion*

Fusion of cardiac physiological and anatomical information right before your eyes.

Coronary artery disease remains one of the leading causes of death in the world today. Within CAD population, there are an increasing number of patients with disabling related to left ventricle function. In parallel to the developments in physiological imaging, CT technology has sought to offer a non-invasive assessment to detect CAD using anatomical information. Integration of clinical findings from a coronary CT angiography and a physiological study performed on a PET or SPECT system offers a non-invasive coronary artery assessment that is a valuable asset for diagnosis and treatment.

What's new

- Fast PET/CT exam in one visit for a comprehensive heart assessment
- Easy-to-use, time-effective tool for simultaneous anatomy and physiology assessment
- Patient-friendly and less invasive alternative to a diagnostic coronary arteriogram

Overview

CardIQ Fusion* offers you 2D, 3D, or reformatted protocols to help you analyze and measure the extent of compromised coronary arteries. With CardIQ Fusion*, you can visualize SPECT and PET physiological perfusion and viability data under stress and rest conditions. And it allows you to combine the anatomical and physiological data in fused 2D or 3D views.

Visit us:

www.gehealthcare.com/aw/applications/cardiq-fusion/

Features

- Extract, render, and display coronary vascular tree images.
- Reformat standard axial CT, SPECT and fused images automatically.
- Track, extract and display coronary arteries.
- Measure coronary vessel parameters including stenosis, density, and length.
- Dynamic AVA gives you the ability to add new vessels into the analysis with a single point deposit at any time.
- Vessel label data base provides names for each protocol for easy correction or addition of a vessel label.
- Coronary vessel analysis tool lets you track, extract, visualize, and measure coronary arteries.
- Cath orientations let you interactively position the view in RAO/LAO and CRA/CAU orientations.
- Cine mode lets you page through all slices of a vessel or through a limited range.
- Batch movie mode allows you to save multiple views of the heart and display them in a movie sequence.
- CardIQ Fusion* offers you a set of pre-defined protocols that you can modify to create your own customized protocols.

System Requirements

CardIQ Fusion* accepts standard CT, PET, and SPECT image sets acquired on qualified GE scanners using the appropriate cardiac imaging software. These images must meet the same image requirements as those for the basic Volume Viewer application.
The CardIQ Fusion* option can be installed on a GE AW workstation with AW Basic Display, Volume Share 2[†] or above platforms.

Indications for Use

CardIQ Fusion* is intended to provide an optimized non-invasive application to analyze vascular anatomy and pathology, aid in the assessment of functional data e.g. PET perfusion, and aid in tailoring treatment plans based on the fused anatomical and functional information. Anatomical data could be from a set of Computed Tomography (CT) Angiographic images while functional data could be from PET, SPECT, or processed CT data.

Standards and Regulations

This product complies with the European CE Marking regulation for Medical Devices Directive: Directive 93/42/EEC, dated 14 June 1993.

(†) 2GBRAM and 2 display monitors required

GE imagination at work

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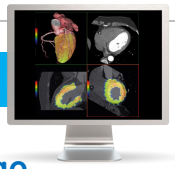
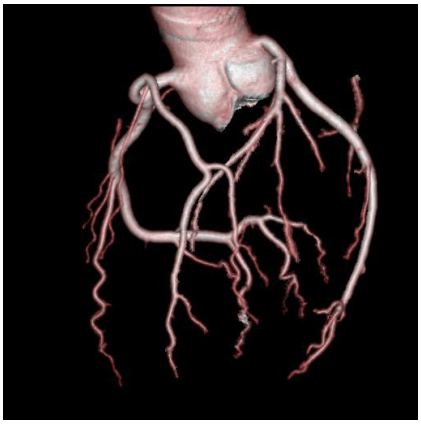


Dynamic AVA Image

Dynamic AVA

- Ability to add new vessels into the analysis with a single point deposit of a vessel at any time.
- Real-time tracking of the center line with instant visualization of a unfolded view for quick inspection of the vessel
- Capability to launch vessel analysis tools subsequent vessel Tracking



Quick AVA

- Capability to perform vessel analysis from any 3D, or reformat images by a single or dual point clicks
- With a single point deposit, automated extraction of the vessel and launches vessel analysis for quick review of a vessel in a curved reformat, cross-sectional, lumen and MRP view
- Ability to extend tracking proximally or distally for full view of the vessel
- In the case of a lesion, ability to analyze this section of the vessel, by dropping one point above and below the lesion and launching the vessel analysis tool
- Ability to launch Quick AVA feature at any time.

Vessel Label Image

Vessel Label Data Base

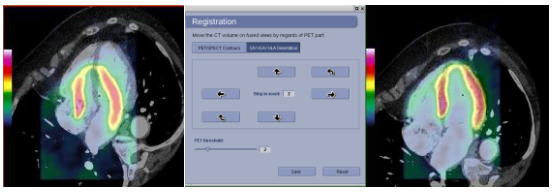
- New data base of vessels names for each protocol for easy correction or addition of a vessel label
- Right click on the vessel name for the list of the vessel names per anatomy
- Ability to add vessel names into the data base

Coronary Vessel Image

Coronary Vessel Analysis

- A semi-automated coronary vessel analysis tool (CVA) based on the Advanced Vessel Analysis (AVA) technique allows the users to track, extract, visualize and measure coronary arteries (physical dimension and stenosis sizing) from either single or multiple cardiac phase image data sets
- Curved, oblique, longitudinal and cross-sectional reformatted fused views of individual vessel can be generated
- Current state of tracking points within vessel analysis may be saved for future review and/or manipulation of the images.
- Generate and save rotational movies from Curved planar reformation and cross-sectional (lumen) views
- Generate and save movies from Best L Section Reformatted images
- Quantitative or qualitative coronary vessel assessment on user-selected vessel segments. These measurements are:
  - Distance measurement
  - Cross-sectional area
  - Single or Dual Reference point comparison
  - Relative percentage stenosis
  - Volume measurement
  - Mean diameter

FusionQC



- CardIQ Fusion* software provides semi-automatic registration within FusionQC protocol.
- For optimized image review, the CardIQ Fusion* software automatically displays the heart in predefined views. Images are displayed in the
- Short Axis
- Horizontal Long Axis
- Vertical Long Axis
- Single phase images can be loaded into the cardiac reformat protocols
- With a single click the reformat images can be viewed in standard cardiac cath views for quick and easy review of the coronary arteries