



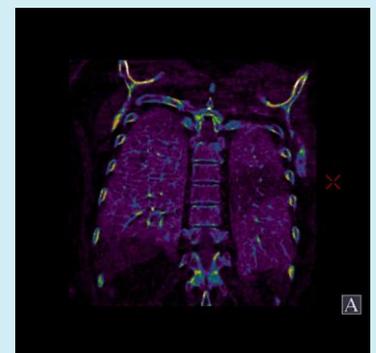
GSI Viewer

Confident diagnosis with easier workflow

GSI has the exciting potential to be used as a routine scan acquisition mode offering additional anatomical and functional information to help expedite and assist in an accurate CT diagnosis.

What's new

- Select from 101 monochromatic energy levels for image visualization.
- Visualize virtual non-contrast like image
- View material density and effective atomic number images to discriminate tissue type.
- Use image overlay tool to fuse material and effective atomic number information on monochromatic image
- VOI tool to selectively visualize a volume of interest.



Overview

Gemstone Spectral Imaging (GSI) is a novel dual energy application that uses rapid kV switching to acquire the dual energy samples almost simultaneously to generate material density data that can be used for the separation of materials and derivation of monochromatic spectral images using a projection based reconstruction algorithm.



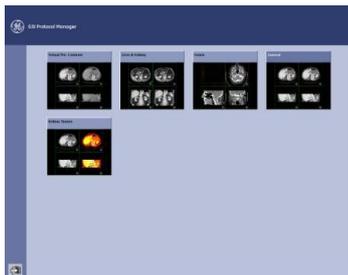
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Features

- Material Decomposed images allow for the separation of materials like calcium, iodine, and water.
- Visualize a virtual non-contrast like image using the water-iodine basis pair image.
- Adjusting monochromatic energy levels can optimize image contrast and reduce beam-hardening artifacts.
- Discriminate different tissue types based on material density and monochromatic image data.
- Image overlays to visualize different material attributes in a single view.
- Vessel analysis to evaluate the extent of lumen occlusion when used with VessellQ Xpress
- Iodine suppressed images with the dynamic range of regular CT images in addition to a virtual non-contrast like image using the water-iodine basis pair.



Intended Use

The GSI Viewer accepts images from a CT System that can acquire CT images using different kV levels of the same anatomical region of a patient in a single rotation from a single source. The differences in the energy dependence of the attenuation coefficient of the different materials provide information about the chemical composition of body materials. This approach enables images to be generated at energies selected from the available spectrum to visualize and analyze information about anatomical and pathological structures. GSI provides information of the chemical composition of renal calculi by calculation and graphical display of the spectrum of effective atomic number. GSI Kidney stone characterization provides additional information to aid in the characterization of uric acid versus non-uric acid stones. It is intended to be used on non-contrast studies as an adjunct to current standard methods for evaluating stone etiology and composition.

System Requirements

- AW Workstation Volume Share 4.
- AW Server

Recommendations

16 GB RAM
2 display monitors (compatible with one or two monitor systems).

Regulatory Compliance

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



GE imagination at work