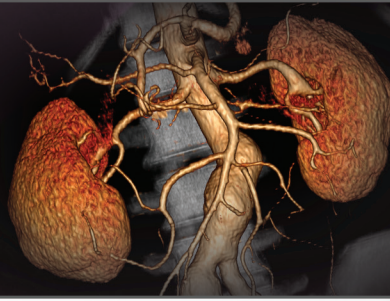


# Vitreax<sup>®</sup> fx 3.1



For full-power advanced imaging applications for Toshiba's Aquilion ONE scanner, Vitrea fx is the solution. Designed in close collaboration with Toshiba, the Vitrea fx software provides cutting-edge applications for 'functional' imaging using 4D data from dynamic volume scanners. This includes a novel 'Brain Analysis 4D' application for neuro stroke evaluations that can process a whole-brain dynamic study with over 6000 slices in less than 90 seconds to generate parametric maps of blood flow and volume.

## **Vitreax fx Advanced applications includes imaging solutions for:**

### **Cardiac**

This comprehensive suite of specialized CT cardiac applications enables the assessment of coronary calcium score, coronary artery analysis including plaque measurement, analysis of cardiac function, and interventional and EP procedure planning.

### **Vascular**

This suite of specialized tools facilitates quick, confident evaluations of CT angiography studies for identification, characterization and interventional planning for vascular diseases. Effectively assess vessels with Vessel Probe technology and communicate results and images with clinical impact.

### **Neuro**

This suite provides tools to visualize and characterize aneurysms, stenosis and other neurological defects in CT images. The 'CT Brain Analysis 4D' application, which works with the Toshiba Aquilion ONE<sup>®</sup> scanner, allows ER physicians to quickly and easily generate blood flow maps for suspected ischemic stroke in less than 90 second.

### **CT Brain Analysis 4D Features include**

- Automatic curve-fitting and alignment of the time-series CT images with motion correction
- Perfusion graph that displays the time intensity curve for the selected crosshair location
- Automated selection of optimal artery and vein locations for perfusion calculation
- Automatic calculation of quantitative brain perfusion results such as patient's regional cerebral blood volume (rCBV), mean transit time (MTT) and regional cerebral blood flow (rCBF), and Delay using mathematical algorithms based on SVD+ delay-invariant de-convolution technique
- 3D VR and MPR views of color image maps to display the perfusion results; user-selectable colormap preferences
- Perfusion measurement averages for multiple ROIs with ability to mirror an ROI from one hemisphere to the other; easy application of pre-defined ROI templates
- Automatic arterial and venous phase separation for 3D views of the arteriogram and venogram; 4D cine or DSA view of the contrast flow through the vessels
- Batch creation for 2D or 3D perfusion maps, including shortcuts for automated batches
- Special Gallery preset for supporting 2D Brain Perfusion processing of thick-slice reconstructions of images acquired on any multi-slice CT scanner.

“ Vital Images offers the easiest to learn and use enterprise-wide tools for reading cardiovascular images.”

Tony DeFrance, MD, FACC

Clinical Associate Professor at Stanford Medical School  
SCCT Board of Directors, National Director of SCCT Workgroups

## Oncology

From identifying regions of interest to tumor tracking, this suite of applications and tools provides advanced capabilities to support analysis and treatment decisions. The Lung Nodule Analysis helps analyze nodules through multiple studies to determine growth patterns and make comparative reviews.

## CT Virtual Colonoscopy

Enables both a 2D and 3D evaluation of the colon.

## Orthopedic Visualization

View different types of orthopedic anatomy, from metal hardware within the spine to actual joints.

## Key New Features in Vitrea fX 3.1 Include:

### New CT Cardiac Multi-Chamber Analysis Applications

- Adult and Pediatric
- Automated atrial and ventricular chamber segmentation and functional measurements
- Leverages low-dose CT scanning protocols

### Cardiovascular CTA Analysis

- Vessel Probe & Vessel Walk enhancements ease manipulation and navigation of complicated cardiac and vascular anatomy
- Multi-point vessel seed points, trimming and editing increase read flow accuracy and speed

### CT Brain Perfusion Enhancements

- Automatic W/L normalization

### Workflow Tools to Boost your Productivity

- Single-click Volume Segmentation
- Web-based access to the MeVis Visia™ CT Lung CAD and Medicsight ColonCAD™ results within Vitrea Enterprise Suite (ColonCAD™ available outside the U.S. only)
- Edge detecting contouring and automated table removal speed Multi-Region Segmentation read flow by anticipating your needs

### Additional Platform Support

- Microsoft® Windows® 7 clients
- Support for SQL 2008 and SQL Express editions

Vital Images, Inc. is a market leader in advanced visualization software solutions for physicians and healthcare specialists. The company's sophisticated technology gives radiologists, cardiologists, oncologists and other medical specialists productivity and communications tools that can be accessed throughout the enterprise and via the Web, anytime, anywhere to improve patient diagnosis and outcomes. Vitrea® software is utilized at more than 4,000 hospitals in over 80 countries. Established in 1988 and headquartered in Minneapolis, Vital Images also has offices in Europe and Asia. For more information, visit [www.vitalimages.com](http://www.vitalimages.com).

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