# **GE** Healthcare





# Autobone and VessellQ Xpress

Fast routine analyses and simplified studies of routine CT angiography exams.

While various clinical tools are used to diagnose peripheral vascular disease (PVD), Computed Tomography Angiography (CTA) has become the modality of choice for gathering information for therapy planning. One of CTA's advantages is that it shows both vascular and non-vascular anatomy along with 3D information for more comprehensive assessment. Additionally, CTA is useful for patients with limited or no peripheral access and those with stents, for whom MRA assessment is not an option. Thoroughly analyzing the data provided by these studies involves a considerable investment of time. You need a tool to expedite the assessment process

## Overview

Autobone and VessellQ provide you with easily accessible, user-friendly tools with which to analyze 3D angiographic data including stenosis analysis, thrombus, pre and post stent planning procedures, and directional vessel tortuosity visualization. The display, measurement, and batch filming/archiving features this application provides will help you maintain a more streamlined and productive workflow.



# What's new

- Zero-click bone segmentation for head, neck, and other anatomy.
- Zero-click tracking of most vascular studies where thoracic and abdominal aorta is displayed down to the iliac arteries.
- Comprehensive, one-click (Quick AVA) stenosis measurement and plaque analysis of any vasculature, including the coronary arteries.
- Semi-automatic thrombus segmentation of aortic or other major vessel aneurysms.





#### Features

- Lets you track centerline of any vessel and perform multiple measurements.
- Offers you supplemental information for:
  - The angiographic detection and diagnosis of vessel diseases
  - Quantification of abnormal anatomical structures and their evolution.
  - Directional vessel tortuosity and colored plaque visualization.
  - Surgical planning.
  - Stent deployment planning
- Pre- and post-surgical assessment.
- Multiple studies comparison.
- Quick bone structure removal for efficient review of vasculature.
- Displays first clinically relevant image via automatic vessel tracking with rapid 3D visualization.
- Auto Aorta fully automates aorta
  and illiac tracking
- Lets you change protocols and review steps without leaving the current sate.
- PlaqID lets you colorize calcified and non-calcified plaque based on CT numbers.
- One- or two-click Quick AVA from any Volume Viewer protocol lets you analyze all vessels, including coronary arteries, in curved reformat, lumen, or MPR view.
- Lets you save current processing state to include measurements, 3D views, segmentation, and tracking.

- Exclusive multiple-study comparison mode makes your disease follow-up review more efficient.
- Customize layouts take advantage of dual screen review capability.
- Lets you capture measurement tables and associated image sets to include in your reports.

#### System Requirements

- AW Workstation VolumeShare 2 or later
- Volume Viewer 3 or later software installed
- Color Landscape Monitor
- 2 Display Monitors

### Indications for Use

VessellQ Xpress is intended to provide an optimized non-invasive application to analyze vascular anatomy and pathology and aid in determining treatment paths from a set of Computed Tomography (CT) Angiographic images.

VessellQ Xpress is a post processing application option for the AW Workstation, CT Scanner or PACS stations, which It can be used in the analysis of 2D and 3D CT Angiographic images/data derived from DICOM 3.0 compliant CT scans for the purpose of cardiovascular and vascular disease assessment. This software is.

designed to support the physician in assessment of stenosis analysis, pre/post stent planning and directional vessel tortuosity visualization.

VessellQ Xpress automatic visualization tools provide the users with the capabilities to facilitate segmentation of bony structures for accurate identification of the vessels. Once vessels are visualized, tools are available for sizing the vessel, analyzing calcified and non-calcified plaque to determine the densities of plaque within a coronary artery, measure area's of abnormalities within a vessel.

AutoBone Xpress is an optional software extension of the Volume Viewer application for AW Workstation system. It is dedicated to the automatic segmentation of bones from head, neck, thorax, abdomen and extremity CT angiography data.

#### **Regulatory Compliance**

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



