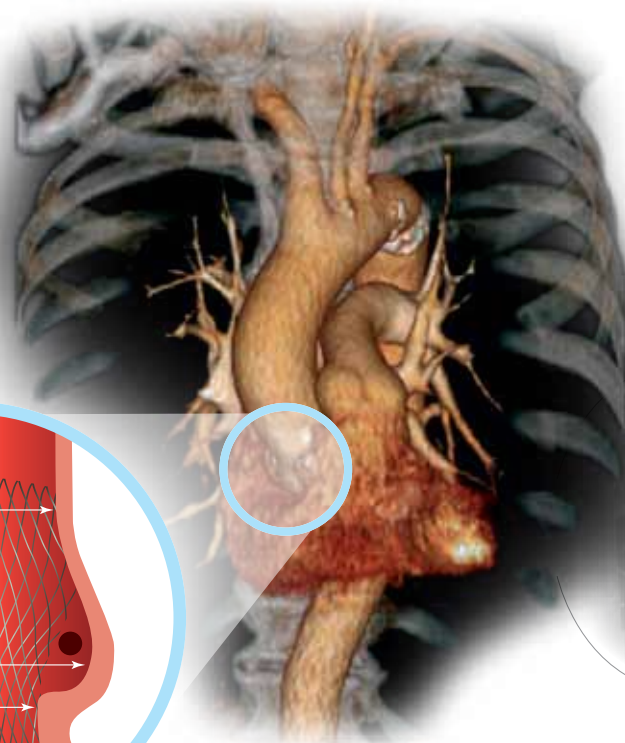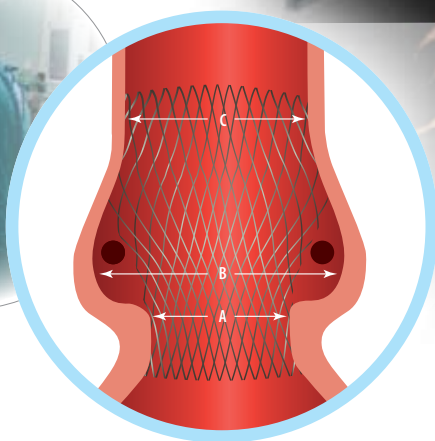# iNtuition™
TAVI/TAVR

Applying iNtuition to provide 3D decision support for transcatheter aortic valve implantation/replacement (TAVI/TAVR)

Preparing for success, with iNtuition

TeraRecon

iNtuition Feature Set

REVIEW

- Preview from study list
- Load full cardiac cycle and choose preferred phase
- Automated heart segmentation
- Auto bone removal
- Auto centerline extraction even in smallest vessels
- G-Bar Tool to display vessel
  cross-section embedded in 3D view
- Angio View Tool
- MAR (Medial Axial Reformat)
- Fisheye View
- Cube View
- Volume rendering, MIP, MPR, MinIP and Thick-MPR
- Synchronized center of rotation viewing
- Double oblique views

ANALYZE

- Distance Pair - single click major/minor diameter
- Customizable Workflows Templates
- Customizable Measurement Protocols
- Plaque Analysis
- CPR (Curved Planar Reformat)
- Profile Graph Display
- Straightened View
- Clock Face
- Angulation tools

STORE / SHARE

- Save system state to Workflow Scene
- Restore Workflow Scene to resume editing
- Import and export from and to DICOM
- CD burning including free 3D-Viewer
- Report

*Aquarius*WEB Viewer

- Zero-footprint, secure web viewing of images and scenes.

iNtuition CLOUD

- fully-featured iNtuition via web browser. Upload your images and process in the CLOUD.

iNtuition ON THE ROAD

- iNtuition can be run fully stand-alone from a typical performance laptop, enabling access to the powerful application suite even when away from a network.

VALVE ANALYSIS

Plan and prepare from anywhere with iNtuition

When preparing for TAVI, reliance on imaging is high. iNtuition offers an innovative and intuitive workflow combined with a sophisticated suite of advanced clinical applications for speed and accuracy, including reporting functionality and Workflow Scenes to store a volumetric state, so that the entire workflow can be saved for later, and then restored and further adjusted as needed. The *Aquarius* iNtuition Advanced Visualization environment is designed from the ground up as a true client-server solution. As many iNtuition Clients as needed can be connected to a single rendering server simultaneously to provide optimized workflow for reading and planning efficiency. iNtuition features the *Aquarius*APS Advanced Preprocessing Server, so that images are preprocessed based upon user preferences and made ready for efficient clinical interaction. iNtuition´s Workflow Templates can be modified and customized as required, to suit your specific workflow needs.
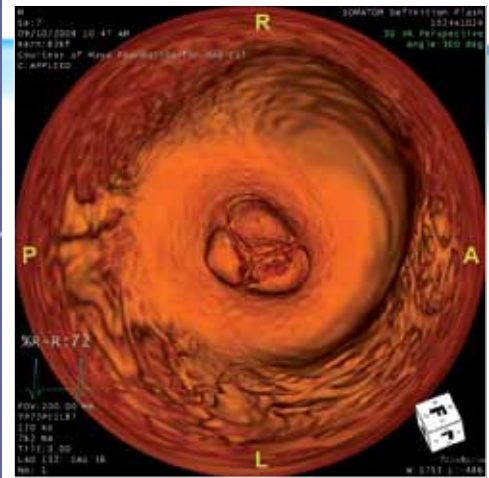
Powerful tools, thoughtfully organized to optimize your pre-op time

iNtuition's powerful Workflow Templates bring the right tools together in a focused set, to optimize your analysis of the aortic valve for TAVI procedures. The Workflow Templates can be customized, and support intuitive capture of measurements into the powerful Measurement Protocol tool. This enables you to define sets of measurements according to individual valve specifications, to be obtained step by step. Supported features include auto-centerline extraction, straightened view, diameter and length measurements, CPR and axial renderings, Vessel Tracking (MIP-View in two orthogonal planes that travels along and rotates around the vessel centerline), enhanced algorithms for the smallest vessels, distance along centerline, Plaque Analysis and loading in 4D.

CPR – TOOL VALVE ANALYSIS

FISHEYE VIEW
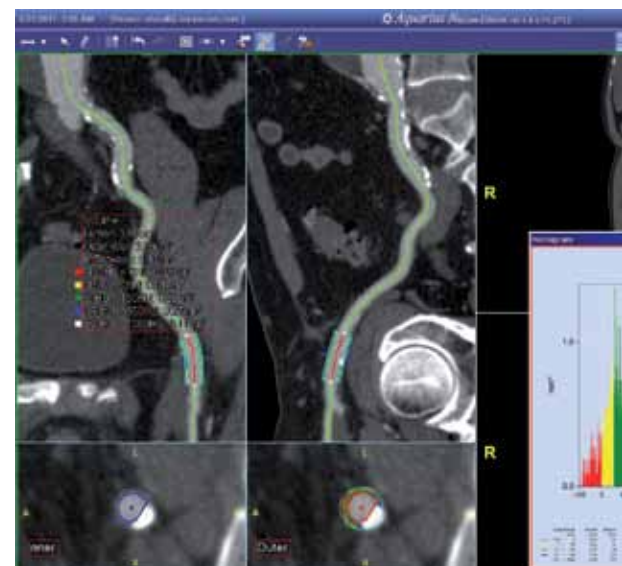
Create and optimize your workflow

- Automatic centerline creation in any vessel
- Automatic algorithm for small or large vessels
- Easy edit function
- Measurement tools for diameter, area, length
- Straightened view
- Measurement protocols
- Diameter measurements on perpendicular view
- Obtaining double oblique views along a curved reformat

Valvular Analysis

- Easily assess anatomy of the aortic valve
- MinIP tool reveals valvular morphology without the
   obstruction of calcifications
- Fisheye view gives an excellent visualization of the aortic valve.
- Dynamic 4D review to study valvular kinetics

Measurement Protocols

- Define your own set of standardized measurements
- Follow your protocol step by step for each case
- Select measurements from a wide range of options:
  - Axial diameters perpendicular to the centerline
  - Axial diameters on original axial images
  - Sinus width measurements on perpendicular sectional view
  - Aortic to coronary ostium distance measurements
  - Angulation tool for tortous vessels, including aortic arch
- Straightened View
- Clock Face
- Angulation tools

FEMORAL ANALYSIS

Decision support for approach selection

Assessment of the possibility of a transapical approach made easy. Accurate measurements are made possible, such as distance from aortic annulus to mitral annulus, angulation of left ventricular outflow tract. Determine a straight access line from the apex entry point to the center of the aortic valve and then define the entry angle to the aortic valve annulus. iNtuition visualization also supports detailed analysis of intercostal spaces.
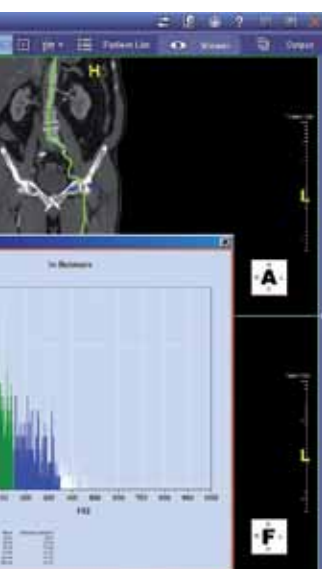
Femoral characterization and qualification

Once the automatic selection of aorto-iliac centerlines is complete, calcified and soft plaques can be identified with iNtuition's AQPlaque Analysis, revealing HU ranges with a color template overlay to help visualize plaque composition. The straightened view helps to reveal bifurcation morphology and pathology, path line and diameter on the iliac arteries. This assists in the assessment of best femoral approach. Visualize the surrounding structures and tissues by adjusting the image opacity.

iNtuition™ CLOUD

Try for FREE today! Visit terarecon.com/cloud

- Work via your browser from anywhere
- Secure data upload with iNtuition UPLOADER
- Full capability of entire suite of iNtuition advanced visualization tools
- No requirement of in-house server hardware
- Automatic anonymization and/or compression possible

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