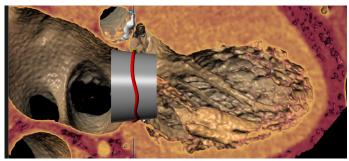
3mensio Mitral Valve

The pre-op assessment tool for Mitral valve repair and replacement

Determine the anatomy and dimensions of the patient's Mitral valve with this dedicated workflow. The 3D shape and dimensions of the annulus can easily be defined as well as the relationship with surrounding structures. Assess different approach routes to get a complete overview of the patient's anatomy.



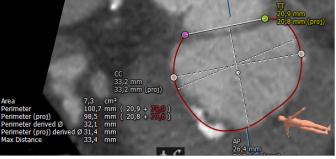
The heart with a defined Mitral annulus and a virtual valve





Saddle shape and D-shape

Mitral annulus



Annulus dimensions

Mitral annulus anatomy

Annulus annotation

A single click brings you into the Mitral space. Trace the saddle shaped annulus using an easy and reproducible method. From the annotated annulus the dimensions are automatically calculated.

A D-shape model is also available.

Anatomical assessment

Different views are available to assess the shape and position of calcium and vessel centerlines can be traced and visualized.

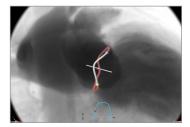
Multimodality mitral assessment

Optimal projection

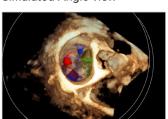
The simulated Angio view can be used to find optimal projections in order to save time during the procedure.

3D echo with virtual valve and neo-LVOT

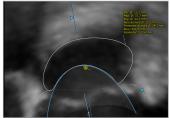
A virtual valve can be placed, and a neo-LVOT measurement can be done directly on 3D TEE measurements. The 3D ultrasound data can be linked with the CT-analysis for a better assessment. After tracing the annuli within both modalities, the data can be linked, combining the best of both worlds.



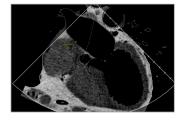
Simulated Angio view



3D ultrasound



3D TEE neo-LVOT measurement

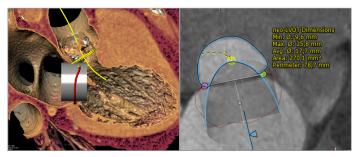


CT-derived virtual TEE

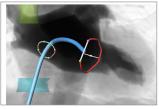
3mensio Mitral Valve

Virtual valve and neo-LVOT on CT

A virtual valve can be placed by means of importing an STL file or creating a custom valve. After a virtual valve is placed the LVOT obstruction can be measured and saved to the report both in end-systole and end-diastole.



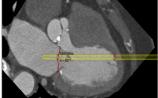
Left: Virtual valve Right: Short axis view on the LVOT

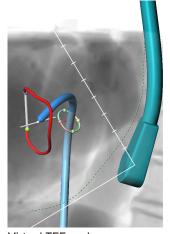


Septal Crossing

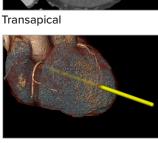


Femoral and Subclavian





Virtual TEE probe



Transapical

Approach route assessment

Septal Crossing: This workflow can be used to plan and visualize the catheter path through the Vena Cava and Fossa Ovalis by determining the septum anatomy.

Virtual TEE: Make your pre-op planning complete with the virtual TEE module that helps to assess and plan TEE probe position, angles, and views in either mono or bi-plane echo views.

Transapical: The trajectory of a catheter is automatically determined perpendicular from the Mitral valve towards the Apex. The entry point and structures like ribs, skin and vessels can be visualized.

Reporting

A complete report can be created by labeling the measurements in the different workflows. The most important measurements are shown in a summarizing infographic. Customize your report by adding screenshots of the assessment.



Quality Assurance:

Pie Medical Imaging develops, produces and sells products in accordance with internationally accepted standards. 3mensio Workstation is FDA 510(k) cleared and CE marked. (60123