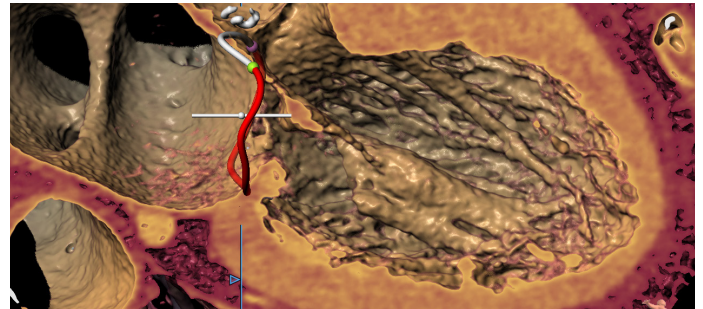


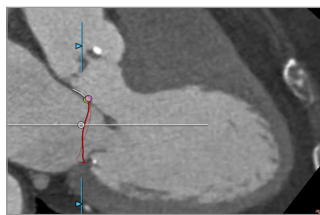
# 3mensio Mitral Valve

## Pre-operative planning for Mitral valve repair and replacement

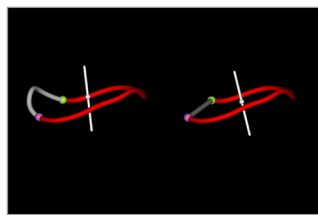
Determine the anatomy and dimensions of the patient's Mitral valve with this dedicated workflow. The 3D shape and dimensions of the annulus can easily be defined as well as the relationship with surrounding structures. Assess different approach routes to get a complete overview of the patient's anatomy.



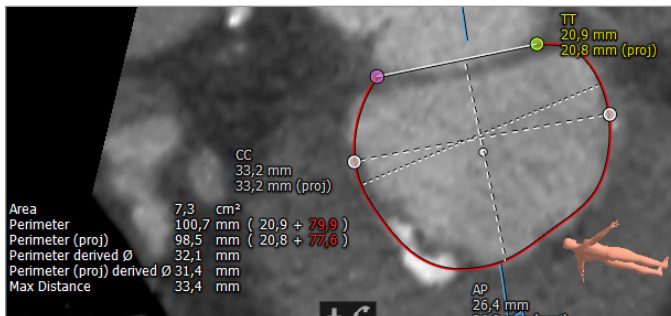
The heart with a defined Mitral annulus and a virtual valve



Mitral annulus



Saddle shape and D-shape



Annulus dimensions

## Mitral annulus anatomy

### Annulus annotation

A single click brings you into the Mitral space. Choose for automatic tracing of the saddle-shaped annulus over the full cardiac cycle, providing all key measurements and characteristics. Both for the saddle and D-shaped annulus.

### Anatomical assessment

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

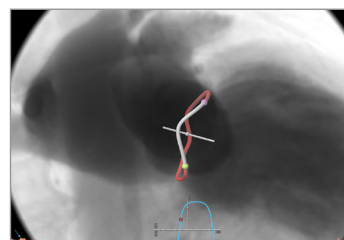
## Multimodality mitral assessment

### Optimal projection

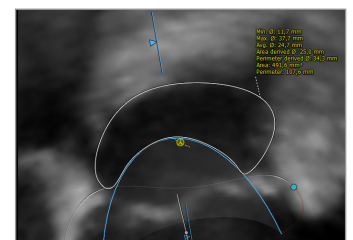
The simulated Angio view can be used to find optimal projections in order to save time during the procedure.

### 3D echo with virtual valve and neo-LVOT

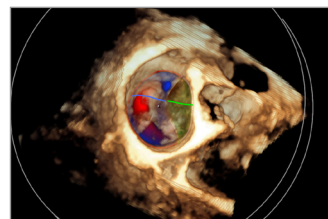
A virtual valve can be placed, and a neo-LVOT measurement can be done directly on 3D echo measurements. The 3D echo data can be linked with the CT-analysis for a better assessment. After tracing the annuli within both modalities, the data can be linked, combining the best of both worlds.



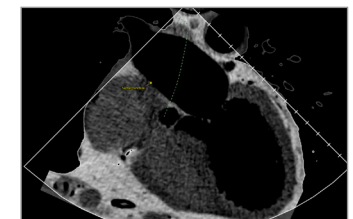
Simulated Angio view



3D TEE neo-LVOT measurement



3D ultrasound

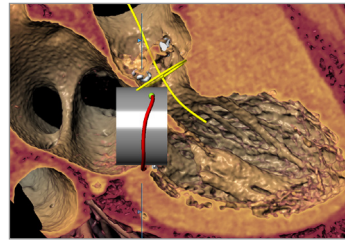


CT-derived virtual TEE

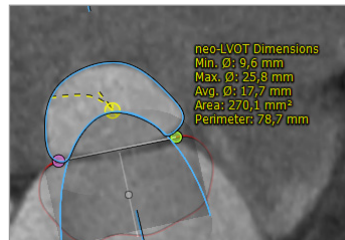
# 3mensio Mitral Valve

## Virtual valve and automatic Neo-LVOT on CT

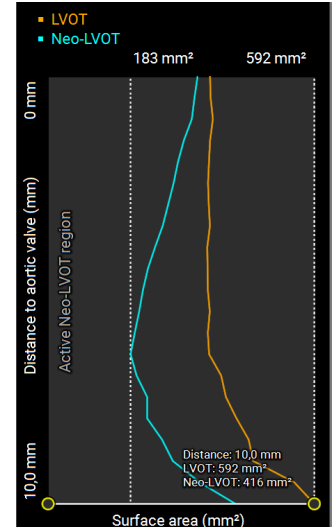
A virtual valve can be placed by means of importing an STL file or creating a custom valve. After a virtual valve is placed the LVOT obstruction can be measured automatically for the entire LVOT. The native LVOT and Neo-LVOT will be plotted together in a graph. The smallest Neo-LVOT can be saved to the report both in end-systole and end-diastole.



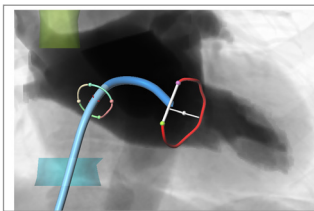
Virtual valve inside anatomy



Short axis view on the LVOT



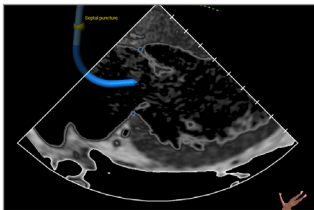
Auto Neo-LVOT graph



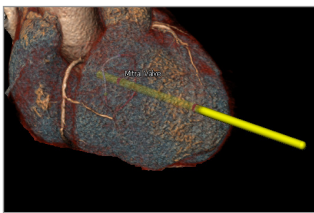
Septal Crossing



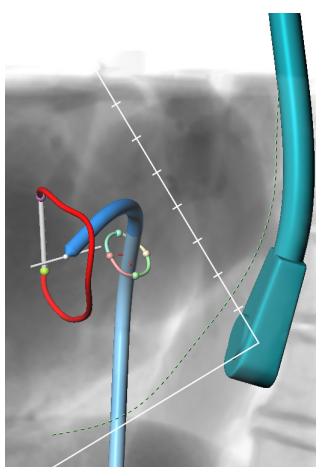
Femoral and Subclavian



Virtual ICE view



Transapical



Virtual TEE probe

## Approach route assessment

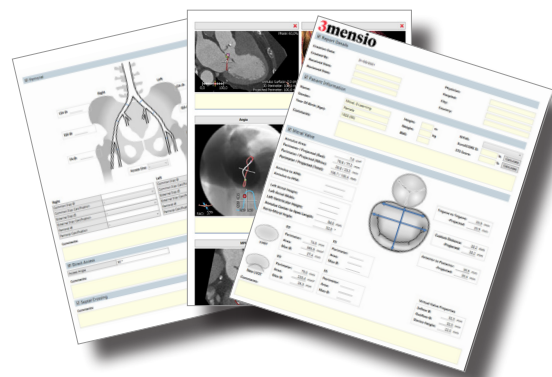
**Septal Crossing:** This workflow can be used to plan and visualize the catheter path through the Vena Cava and Fossa Ovalis by determining the septum anatomy.


**Virtual TEE and ICE:** Make your pre-op planning complete with the virtual TEE or ICE modules that helps to assess and plan TEE and ICE 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.



Pie Medical Imaging develops, produces and sells products in accordance with international accepted standards. 3mensio workstation is FDA 510(k) cleared and MDR compliant (CE marked). 

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