# 3mensio SH 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 anatomy.



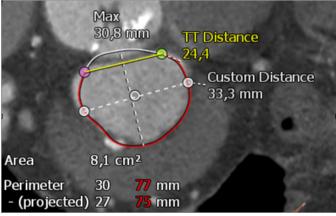
Mitral Assessment and Approach Route modules





Mitral Annulus

Saddle shape and D-shape



Annulus Dimensions

#### **Mitral Annulus Measurements**

### **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.

#### **Annulus Dimensions**

- Area
- 2D and 3D perimeter
- Trigone-to-trigone distance
- Max distance from anterior to posterior
- Custom length distance

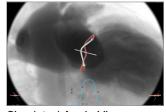
#### Mitral Assessment

### **Optimal Projection**

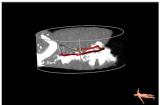
Use the Simulated Angio View to find an optimal projection which can help save time during the procedure.

#### **Calcification Assessment**

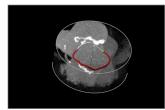
There are different views available to assess the shape and position of calcium.



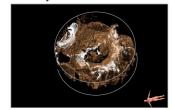
Simulated Angio View







Hockey Puck



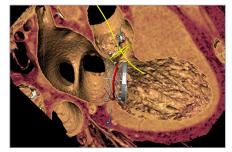
Volume Rendered HP



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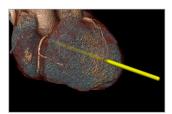
## Virtual Valve and LVOT Obstruction

Place a virtual valve when planning for a replacement procedure. Different valves can be imported using stl files. After virtual valve placement the LVOT obstruction can be assesed using dedicated views.

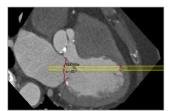




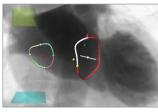
Left: Virtual Valve Right: Short and long axis view on the LVOTO



Transapical



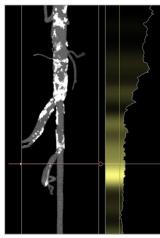
Transapical



Septal Crossing



Femoral and Subclavian



Femoral Assessment Graph

# **Approach Route Assessment**

**Transapical**: Automatically a catheter is placed perpendicular to the mitral valve. Different views can be used to assess the entry point to the patient and the heart. Structures like ribs, skin, vessels and calcifications can be visualized.

**Septal Crossing**: Appreciate and visualize anatomical structures of the heart on the Simulated Angio View. Structures that can be defined are the aortic valve, intra-atrial septum, superior and inferior vena cava, and mitral annulus.

**Femoral and Subclavian**: Assess the vessel diameters, calcifications and tortuosity.

# 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 (MDD compliant).