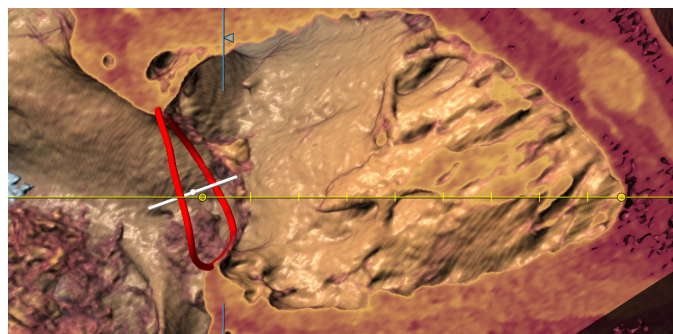


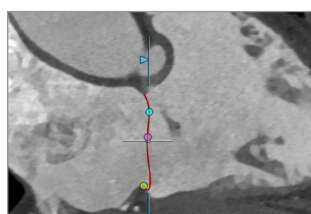
# 3mensio Tricuspid Valve

*Pre-operative planning for tricuspid valve repair, replacement and transcaval interventions.*

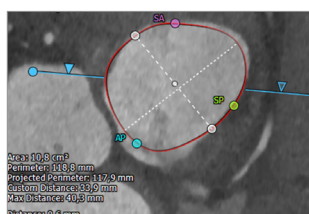
Based on CT-data the 3D shape of the Tricuspid Valve and surrounding structures can be visualized and analyzed. A virtual valve or anchor device can be placed. The distances towards the RCA can be easily assessed and detailed analysis of the inferior and superior Vena Cava dimensions can be performed.



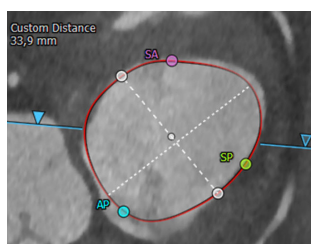
The heart with a defined tricuspid annulus



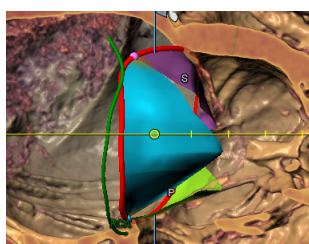
Tricuspid annulus



Annulus dimensions



Surgical view



Tricuspid leaflets

## Tricuspid annulus measurements

### Automatic annulus annotation

Automatic tracing of the tricuspid annulus over the full cardiac cycle provides all key measurements, such as area, perimeter, and custom diameter, which are automatically calculated. The commissures are depicted as well, additional commissures can be added and the tricuspid leaflets can be annotated. Commissure distances, leaflet length, coaptation length, and (3D) tenting are given automatically.

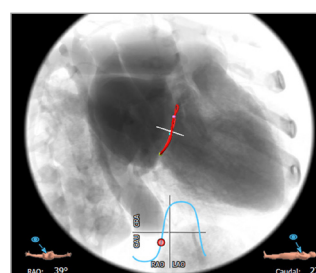
## Tricuspid valve or device placement

### C-arm projection

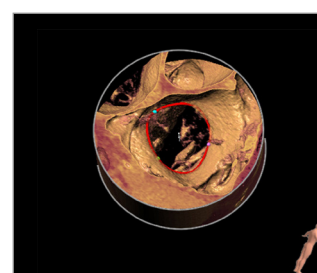
The simulated angio view can be used to find best C-arm projections, which can be used during the procedure.

### Virtual valve or device

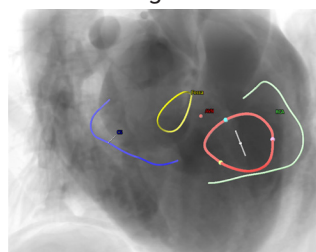
A virtual valve can be placed by means of an STL file of a valve or by creating a custom valve. This will aid in the assessment of implantation depth, valve selection, and anchoring possibilities. When anchors are placed, a ring-like device can also be visualized.



Simulated angio view



Hockey puck



Atrial structures



Virtual valve

# 3mensio Tricuspid Valve

## Anchoring and RCA trace

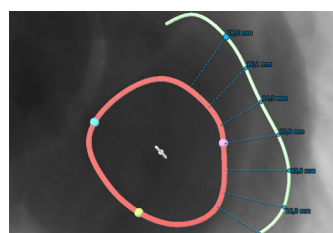
The anchoring workflow can help to assess anchor placement based on proximity to the annulus, the wall, and surrounding vessels. The RCA centerline can be traced either automatically or manually and the distance to the annulus is automatically calculated.

## Trabeculae

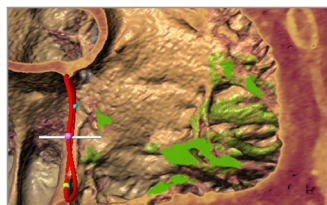
Trabeculae can be segmented automatically and are highlighted in the angio view. Possible interference with trabeculae can be assessed by implantation of a virtual device.

## Automatic Volume Measurements

The ventricular and atrial volumes can be measured automatically for all phases. This can help to find the ED and ES phases and make remodeling follow-up easy.



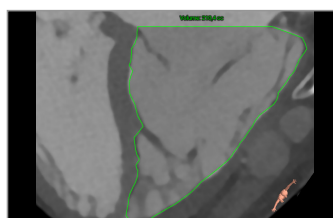
RCA distance to annulus



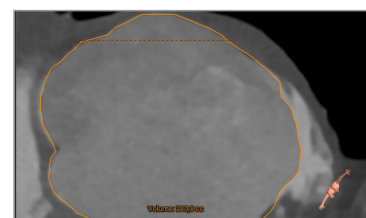
Trabeculae in VR



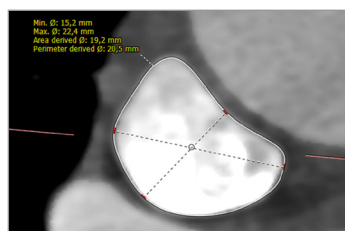
Anchors and virtual device



Automatic ventricular volume



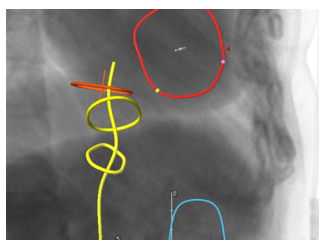
Automatic atrial volume



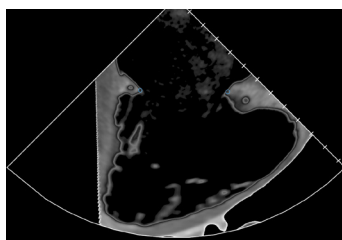
SVC dimensions



SVC segmentation



IVC represented in angio



Virtual ICE

## Preparing the procedure

### SVC and IVC assessment

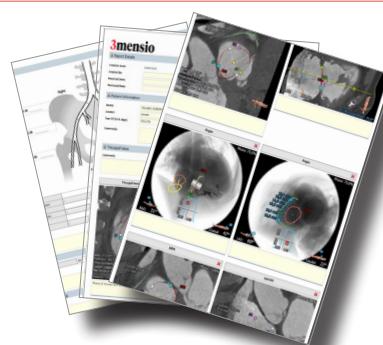
The superior vena cava can be segmented and centerlines can be drawn in the left and right brachiocephalic vein and the inferior vena cava. Dimensions like diameter, area and lengths of both IVC and SVC are easily obtained for approach or stenting.

### Virtual ICE and TEE

The virtual ICE and TEE workflows can be used to plan probe positions and angulations for your procedural guidance.

## Reporting

A complete report can be created by labeling the measurements in the different workflows. Customize your report by adding screenshots of the assessment.



Pie Medical Imaging develops, produces and sells products in accordance with international accepted standards. The regulatory approval status of 3mensio or any of its features may vary per region. Please contact: [regulatory@pie.nl](mailto:regulatory@pie.nl) to learn if clinical use of 3mensio or any specific features is allowed in your region.

Scan QR code for more information or a free demo license.



PIE  
MEDICAL  
IMAGING