

## ACUSON Redwood ultrasound system

# syngo® Velocity Vector Imaging (VVI)

## Quick Reference Card

[siemens-healthineers.com/ultrasound](https://siemens-healthineers.com/ultrasound)



### Step 1

- For Global Longitudinal Strain (GLS), choose Apical 4 chamber (A4C), Apical 2 chamber (A2C), and Apical 3 chamber (A3C) views
- For Global Circumferential Strain (GCS), choose Parasternal Short Axis at the mitral valve level (SAX MV), papillary muscle level (SAX PM), and apex level (SAX APEX)

**Tip:** Frame rate range of 70–90 fps is recommended for optimal tracking results.

### Step 2

- Enter **Review**
- Select images needed for VVI analysis
- Select **Show Selected** to view selected images
- Select syngo VVI

Show Selected

syngo VVI

### Step 3

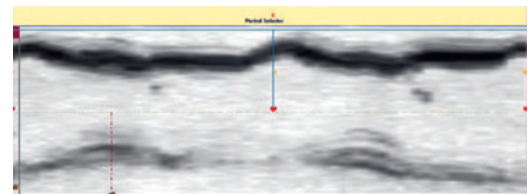
- Select image(s) from the thumbnails and assign to the corresponding views

**Tip:** To delete an image, select the X in the upper right-hand corner.



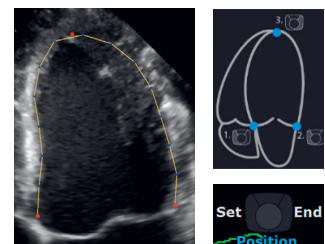
### Step 4

- If multiple cardiac cycles have been acquired, proceed to Sequence / M-mode selection icon to define one cardiac cycle within the period selector
- If only one cardiac cycle is to be analyzed, drag and drop the red markers to desired cardiac cycle
- Select the gray arrow in the top right corner of the screen to return to the contour page



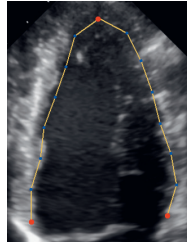
### Step 5

- Place landmarks within endocardium
  - Press left **Set** key for medial and lateral annulus
  - Press right **Set** key for apex



## Step 6

- For a manual trace, place a series of points using the left **Set** key along the endocardium
- Position the last point using the right **Set** key



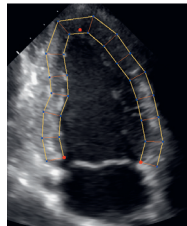
## Step 7

- Press the right **Set** key or select the **Start Analysis** key to begin



## Step 8

- At the end of the systolic phase, a full contour is visible and will initiate the tracking of the contour at the end of the diastolic phase
- To modify the proposed contour, drag and drop the red or blue contour points to the desired area



## Step 9

- Select gray arrow in top right corner to **Accept Changes**



## Step 10

- To edit the contour, select the S or D icon:
  - Once **Correct ES Border** is selected, a new tracking will be initiated
  - Once **Correct ED Border** is selected, the ES remains untouched



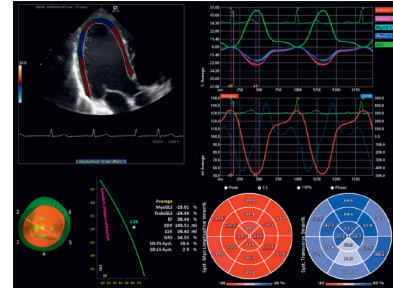
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## Step 11

- A main analysis page will be displayed



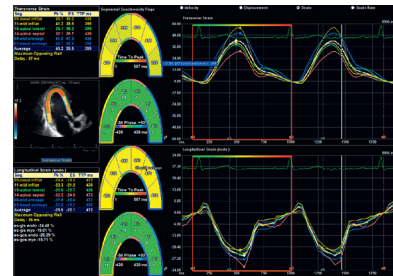
## Step 12

- Select **Segmental Analysis**



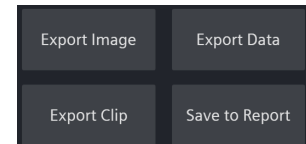
## Step 13

- Evaluate the Segmental Analysis page
- At the top of the page, different parameters can be selected such as **Velocity**, **Displacement**, **Strain**, and **Strain Rate**



## Step 14

- Options for analysis are:
  - Save to Report
  - Save Image
  - Export Clip
  - Export Data



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