TVA – Time Volume Analysis

Ejection Fraction

1. From the patient list, load a Cardiac exam that has multiphase series associated with it

2. Choose a cardiac workflow from either the right mouse menu or from the pop up menu after selecting the Load icon from the Data Management Tool Bar

OR

3. After the study finishes loading into the Viewer, Scroll down in the Cardiac Workflow and select the LV EF element
   a. If only a single phase is loaded, the application will display the series list to choose a multiphase series. Select the appropriate series and select Ok.

4. Ejection fractions are calculated automatically.
   a. By default this calculation is performed using the end diastolic and end systolic phases
b. Can be changed from within the preference setting to automatically calculate using all phases or for manual calculation. Select OK after making any changes.

5. When using automatic TVA (LV), the EF value is shone on the LV EF workflow element once the calculation in complete and is also listed in the TVA(LV) tool.

6. Check the end diastolic and end systolic phases. Jump to each phase quickly by selecting the corresponding icons on the right side of the screen.
   a. Toggle between the phases to double check the accuracy of the application.
   b. The user can choose a different phase by using the drop down arrow located next to the End Diastole or End Systole Icon and selecting a new phase from the list.
   c. Left Click on the Update icon to display the new EF.
To perform a Manual EF or Make adjustments to Auto EF results:
1. Left click on Reset All button located in the tool panel directly under the current EF value or select the **Position** tab

2. Position the Axis by orienting the image to the cardiac long and short axis positions with the crosshair that the center of the ventricle

3. Edit the threshold by adjusting the slide bar or by manually typing the HUs

7. To perform wall corrections do the following:
   a. Select the **Wall** Tab
b. To redraw: Hold the shift key and left click multiple times along the edge of the wall

c. Left click on the Next button when wall corrections are complete