

Quick Card: 3DQ and 3DQ Adv Q-App QLAB 10.0 on Xcelera

Requirement Needed to Perform: 3DQ: A valid 3D data set apical 4 chamber view with ECG.

3DQA: A valid Full Volume in HVR, 2,4, or 6 beat.

Auto ES: Improves workflow by automatically advancing to the End Systolic frame. Reduction of Steps as well as enhanced workflow.

3DQ Adv. Workflow Tasks:

Select 3D dataset from an active study in US Viewer and click the yellow pyramid icon to open QLAB. Open **QApps** tab, click icon **3DQ Adv**.

- 1) **Find the End Diastolic Frame:** Confirm ED Frame then align the corresponding MPR's to center LV from Apex to Base. Press **Next**
- 2) **Enter ED Reference Points:** Place the points on the mitral medial and lateral annulus and Apex for the 4 and 2 chamber views. Edit if necessary by left clicking, hold, drag and release. Press **Next**
- 3) **Find the End Systole Frame:** Confirm ES frame then align the corresponding MPR's to center the LV from Apex to Base.
- 4) **Enter ES Reference Points:** Place the points on the mitral medial and lateral annulus and Apex for the 4 and 2 chamber views.
- 5) **Edit Borders** if necessary. Once this step is completed will see the EF calculated in the Right Panel Results region. (figure 1)

To Delete all measurements and steps click **Delete All**. To (un)hide click the **Borders, Ref. Mesh, Segments** tabs.

To Reset MPR's: Press **Controls** tab, then **View** tab, then **Reset MPR**.

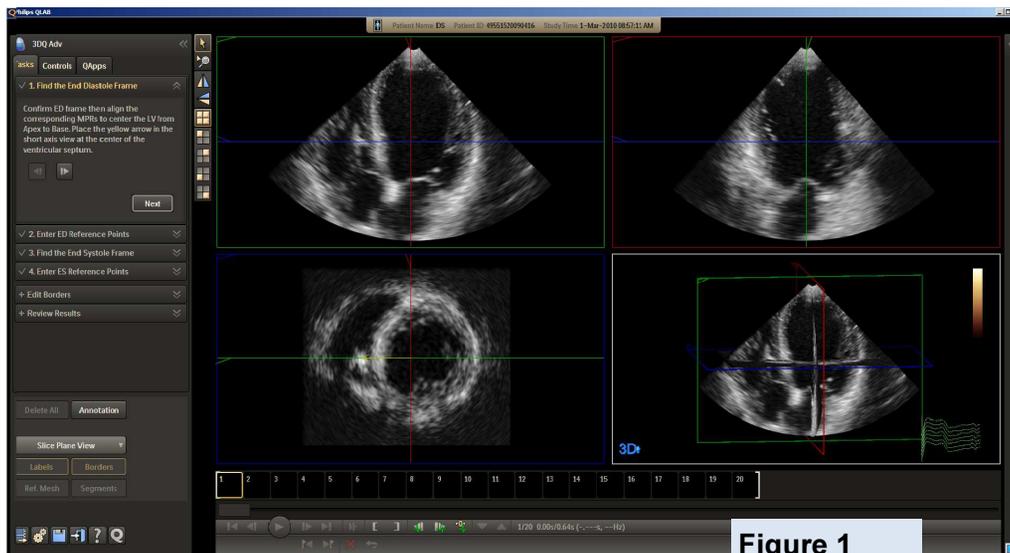


Figure 1

Within the **Controls** Tab workflow tabs for:
View, Slice, Trim/Crop and Image Adjust (figure 2)

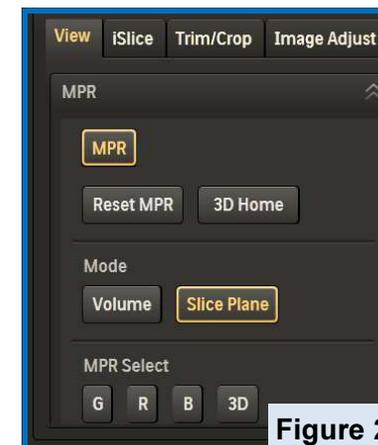
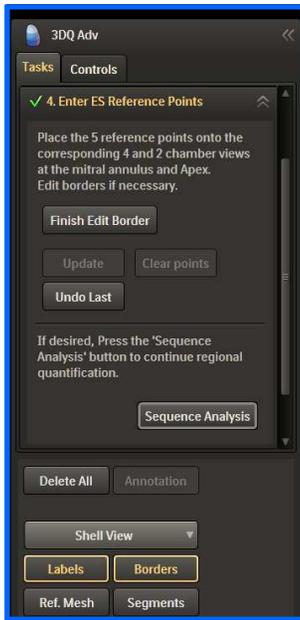


Figure 2



3DQ Adv Workflow

- 1) **Find the Diastole Frame:** Confirm Ed. Align MPR's to center the LV Apex to Base. Place yellow arrow in the short axis view at center of the interventricular septum.
- 2) **Enter ED Reference Points:** Place the 5 reference points on the 4 and 2 chamber views. Edit if necessary. Click **Finish Edit Border**. Click **Next**
- 3) **Find the End Systole Frame:** Confirm Auto ES frame; and align LV from Apex to base. Press **Next**
- 4) **Enter ES Reference Points:** Place the 5 reference points on the 4 and 2 chamber views. Edit if necessary. Click **Finish Edit Border**. If desired Press the "Sequence Analysis" button to continue regional qualification.

Steps 5 and 6 are Optional Steps.

Step 5 Review and Edit Borders: Selections - **Start Edits** or **Start Smooth**

Step 6 Review Results: **Enable ring** Select button, **Report Page** and **Override Heart Rate**.

TIP: If user would like to see Ring larger, click on chevron located at the bottom of the waveform to collapse the waveform and make selections on ring, then click on chevron to open waveform .

Report Page : User's will have choices of Global (figure 5), Region (msec) (figure 6), Regional (% R-R) (figure7) and Parametric Imaging (figure 8) tabs.

Figure 5

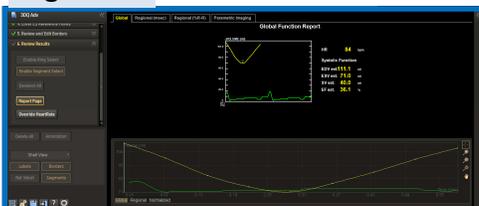


Figure 6

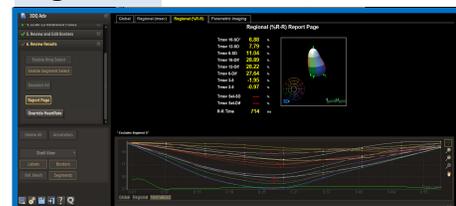


Figure 7

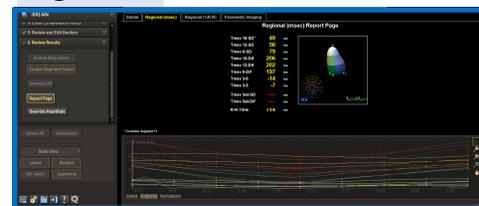


Figure 8

