

Fine Tuning the Basal Plane for Perfusion

The **Pmap-QA Screen** is a quality assurance screen for the polar maps quantification. The user has the option of adjusting the basal extent of LV myocardial activity sampling (effective length of the heart) used to compute the polar maps.

STEP 1: Select the Pmap-QA Screen.

Once the processing limits have been set on the Setup Screen and the data processed (see the [Setting the Processing Limits on the Setup Screen](#) help sheet), and the LV surface estimates checked (see the [Fine Tuning the Basal Plane for Function](#) help sheet), the Pmap-QA screen should be displayed. Select the Pmap-QA button as highlighted and circled in red in Figure 1. This will present the ED and ES-ventricular horizontal long-axis (HLA) images for Step 2.

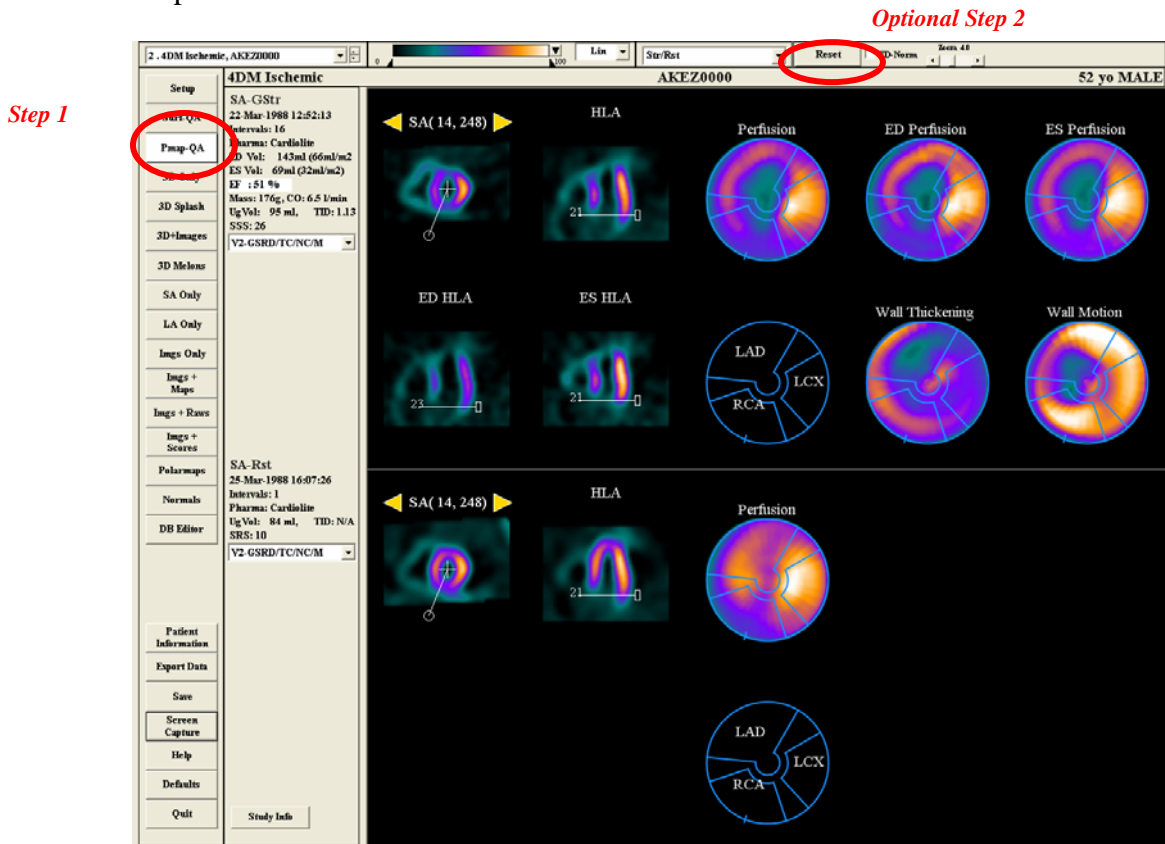


Figure 1. Polarmap QA (Pmap-QA) screen in 4DM-SPECT application.

STEP 2: Verify the Basal Limits

View the basal limits of quantification for polar map generation. If they are acceptable, no further adjustment is required.

Figure 2 displays correctly positioned basal limits. The basal limit should be approximately 1-2 slices from the membranous septum towards the left atrium. This should be roughly midway between the extent as defined by a 50% drop intensity as seen in the septal and lateral walls.

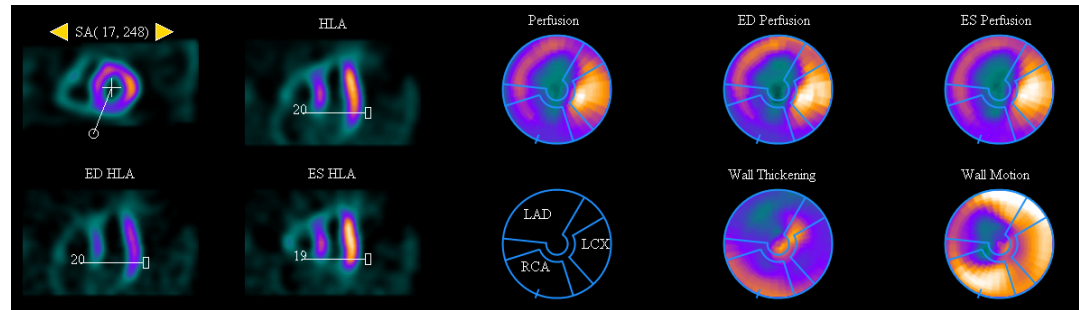


Figure 2 Proper placement of the basal limits of quantification for polar map generation.

NOTE: Changing the basal limits on either the ED or ES images will affect the respective perfusion map, and the changes will also affect the wall thickening and wall motion maps. The location for ED and ES should be consistent, and set similar to that described above for the ungated frame.

STEP 3: Adjust the Basal Limits

To adjust the basal limits of quantification for polar map generation:

- Position the mouse pointer over the **Rectangular Grab Handle** of the horizontal bar on the HLA slice.
- Hold down the left mouse button while dragging the bar to the basal limit (positioning 1 – 2 slices above the membranous septum as visualized on the septal wall).
- Release the left mouse button.

NOTE: Any user modification(s) in the location(s) of the basal limits may be restored to their original 4DM-SPECT values by left clicking the **Reset** button as shown in Figure 1.