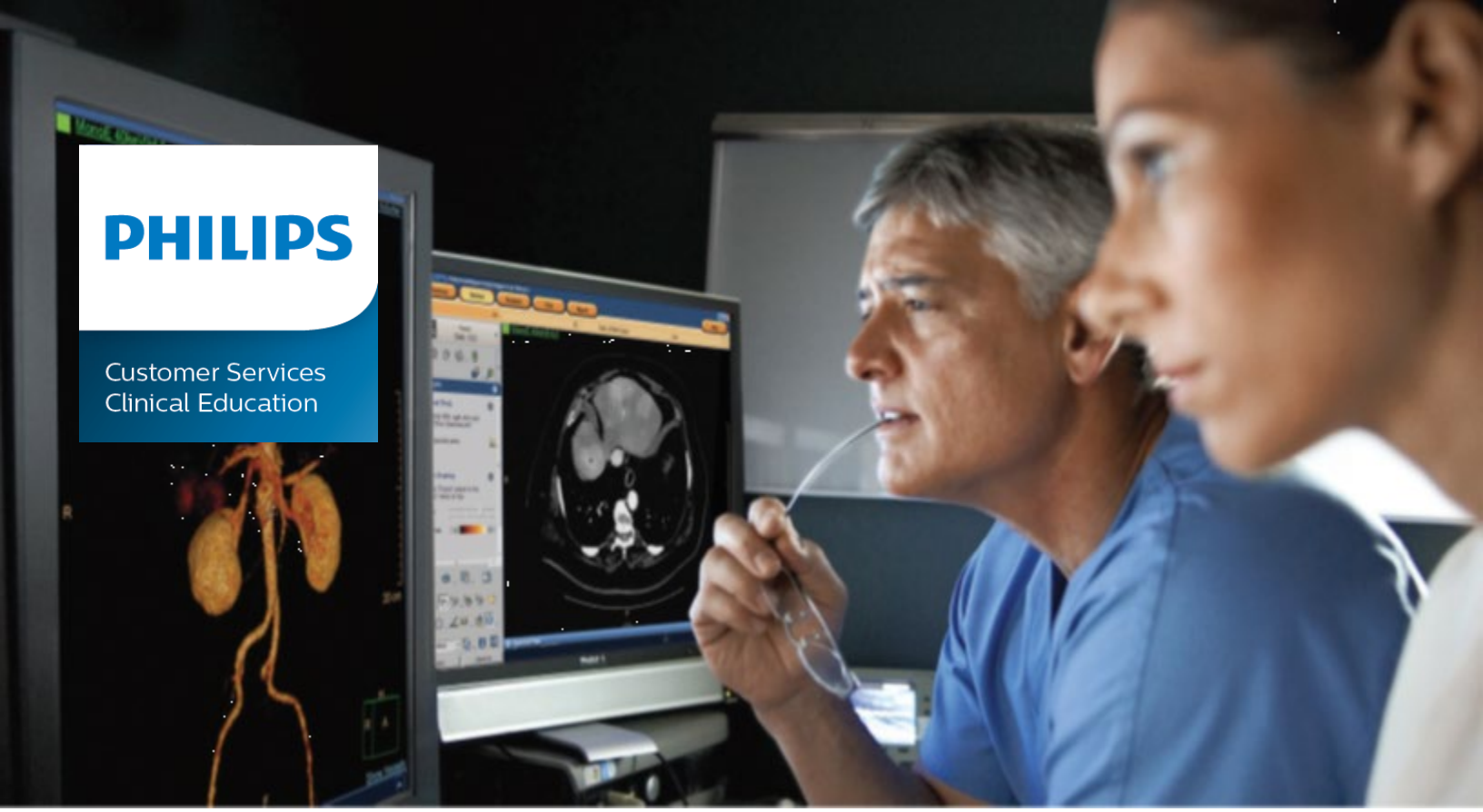


MR Advanced Diffusion Analysis

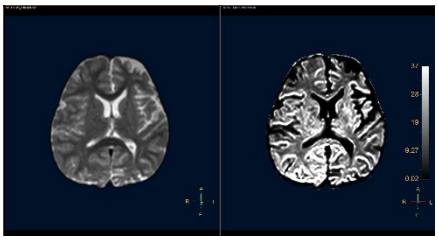
Purpose

The aim of cDWI is to calculate theoretical diffusion weighted images at user defined b-values based on the acquired b-values.

The application offers the capability of creating the calculated additional DW images and saving them as a separate series in the study, which can be reviewed in any viewer.

cDWI Analysis provides the following options for calculation of diffusion images:

- Mono-exponential
- Simplified IVIM
- Bi-Exponential



Workflow

Launch a Diffusion Study to the MR ADA Application:

1. From the Task Guidance Panel, select **Compute DW image**
2. The left viewport displays the DWI image series used as input while the right viewport displays the calculated DWI series
3. To change the model, select one of the available models from the drop-down menu in the task guidance panel (**Step 1, Select Model**)
4. To change the b-values used for calculation, click **Edit input b-values** and select or deselect the corresponding b-values in the dialog box.
5. Select a b-value to be calculated by dragging the b-value slider in the task guidance panel, step 3 **Select b-value for output DWI.** The slider moves in increments of 100, but a specific value can also be typed in directly.
6. The calculated cDWI image series will be displayed in the right viewport.

Generate a new series

7. To generate a new series for the selected outputs, click **Generate Series** in the task guidance panel, name the new series and select if the series should be registered before generating.

The generated series and images can be opened in MultiModality Viewer, the MR Diffusion Application or sent to a PACS system. The file names of the generated series and images contain details of the model and the b-values used. This information is also available in the DICOM tag.