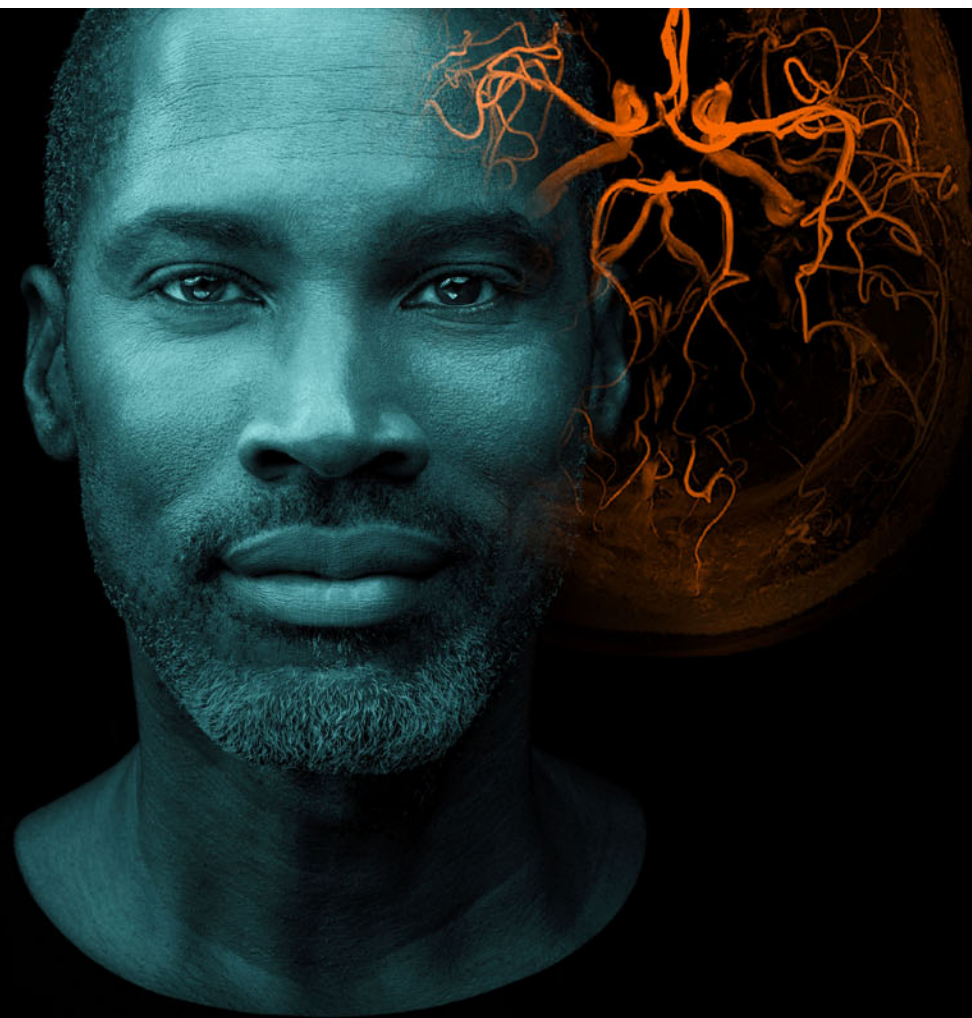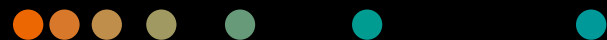# Cinematic Playground Research Application

**Instruction for use for version 0.7.5.0**

Cinematic Playground Research Application Overview & Restrictions for use

Siemens Healthineers has developed a novel physically-based volume rendering method called Cinematic Rendering which computes in real-time photorealistic 3D renderings of medical data, such as CT or MRI acquisitions.

Cinematic Rendering uses a significantly more complex illumination model, which integrates numerous light-scattering, absorption, and shadowing effects that are important for visual perception in the everyday environment. This makes the images very realistic.

The Cinematic Playground research application is for research use only. The software and any generated results must not be used for diagnostic purposes.
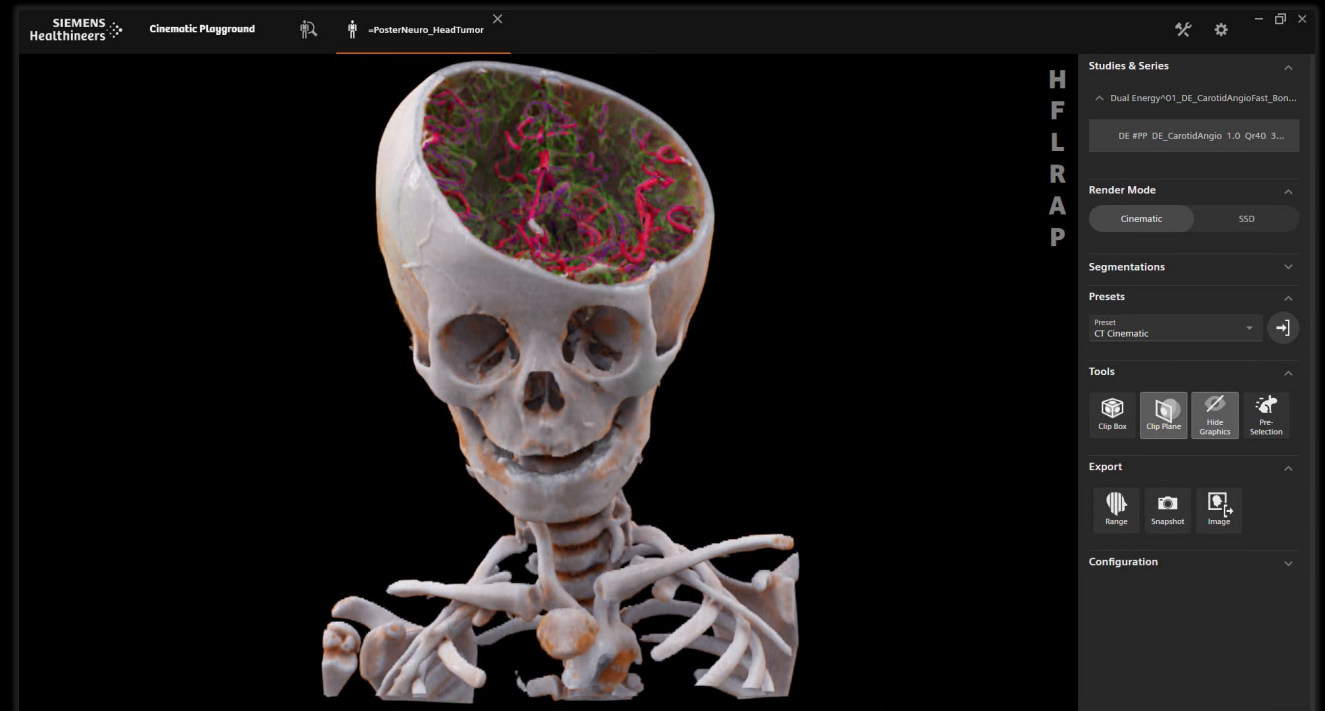
How To Use It
Load Images

① Open *syngo*.via.

Then click once on the desired data set so that it is highlighted in gray.

② Select the Open with icon in the upper right corner and choose Cinematic Playground.

② Alternatively, when clicking on the desired data set, a selection menu can be opened by means of a right mouse click, in which Cinematic Playground can also be opened via Open with .

The dataset will open in a new window.

② Select & choose

② Right mouse click

Open	Ctrl+O
Open with	▶
View as Read-Only with	▶
Batch Open	▶
Assign Workflow	▶
Group Studies	▶
Batch Assign Workflow	▶
Cancel Workflow	
Search Patient with DICOM Q/R	
Send to Archive	Ctrl+Shift+S
Add to Demo List	▶
Remove from Demo List	
Set Mark state	▶

37   5555

▼ Favorites
Cinematic Playground
CT Pneumonia Analysis Frontier
MM Reading
▼ Suggested
3mensio Structural Heart
3mensio Vascular
ADAS 3D
CERCARE Perfusion
Cinematic Playground
CT Body Perfusion
► More

Open with   DICOM Q/R   Send to Archive   Import   Export

▼ Favorites
Cinematic Playground
CT Pneumonia Analysis Frontier
MM Reading
▼ Suggested
3mensio Structural Heart
3mensio Vascular
ADAS 3D
CERCARE Perfusion
Cinematic Playground
CT Body Perfusion
► More

Open   Print   Open with   DICOM Q/R   Send to Archive   Import   Export   Correct   Delete

① Desired dataset

Cinematic Playgro...   PosterNeuro_HeadTumor

SIEMENS Healthineers

How To Use It
Display and Alignment of Images

To view the dataset from all sides there are two navigation options.

On the one hand, the image can be clicked with the left mouse button and moved horizontally and vertically by moving the mouse. To rotate the image, the right mouse button can be held while the mouse pointer is be moved. On the other hand, the anatomical view variations on the right side of the image can be used by simply clicking on them.

To zoom, click and hold the mouse pointer on the left or right outer edge of the image while moving the mouse pointer up (zoom in) and down (zoom out).

To change the transfer function, the middle mouse button is clicked into the image and the pointer is moved vertically.

move

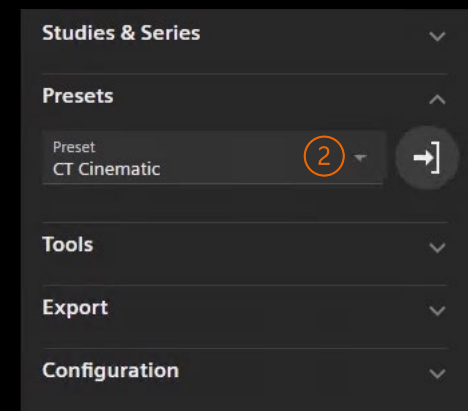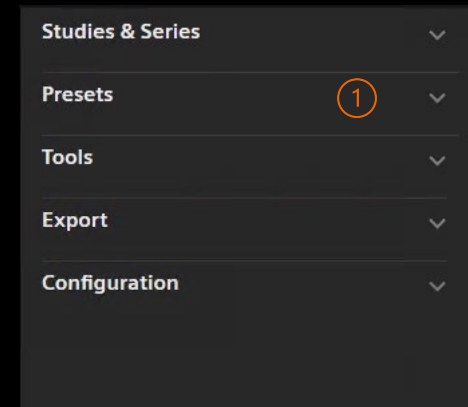Anatomical view

zoom

zoom

move

rotate
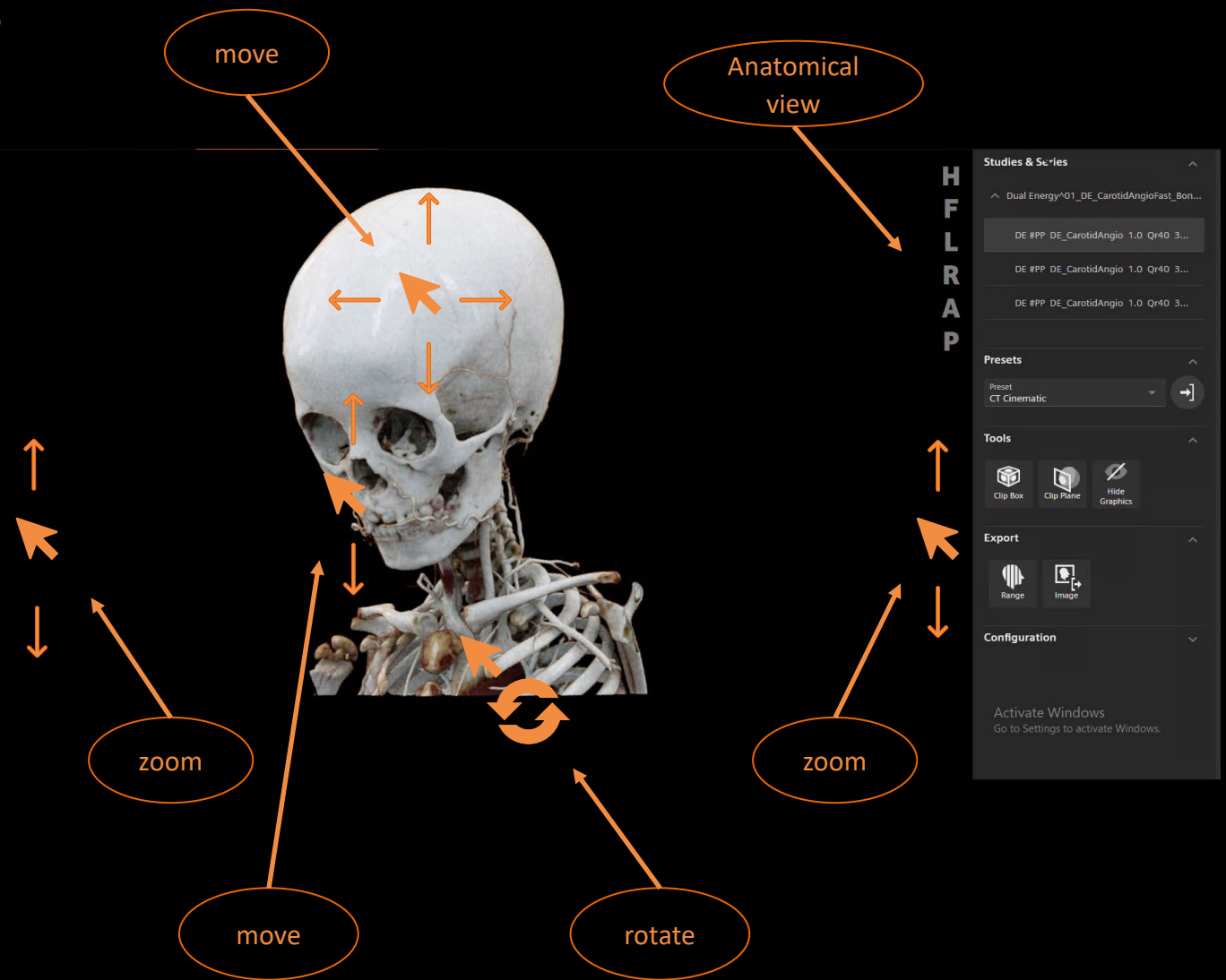
How To Use It
Change Series or Study

① To change the series or study, go to **Studies & Series** in the selection menu on the right. If several series or studies are displayed, they can be changed by clicking on one of them.

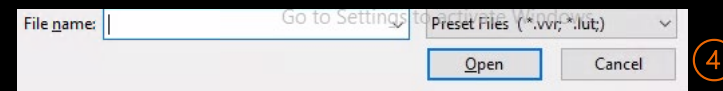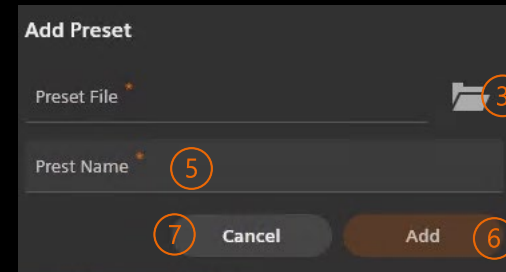② The currently displayed series or study is highlighted in gray.

Studies & Series	① ⌄
Presets	⌄
Tools	⌄
Export	⌄
Configuration	⌄

Studies & Series   ⌃

⌃ Dual Energy^01_DE_CarotidAngioFast_Bon...

② DE #PP DE_CarotidAngio 1.0 Qr40 3...

DE #PP DE_CarotidAngio 1.0 Qr40 3...

DE #PP DE_CarotidAngio 1.0 Qr40 3...

Presets   ⌄

Tools   ⌄

Export   ⌄

Configuration   ⌄
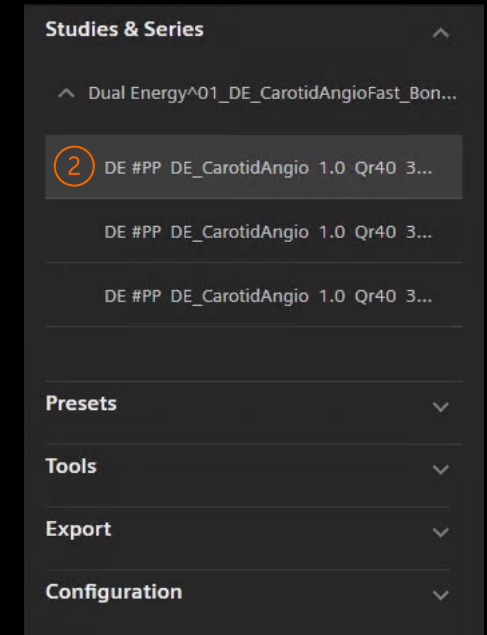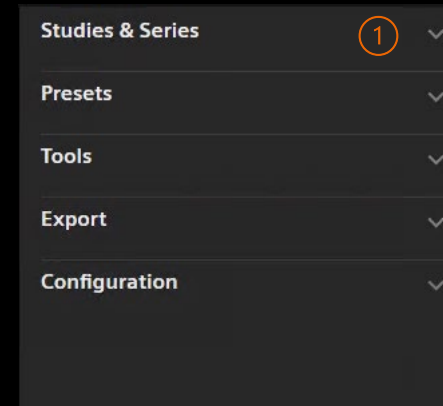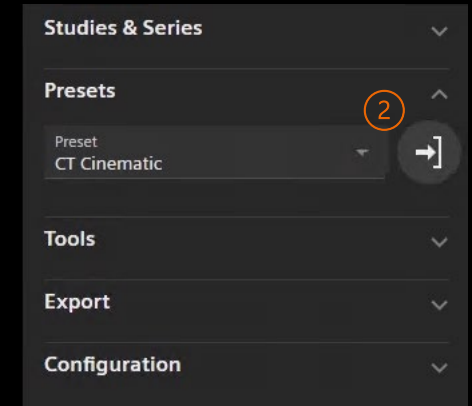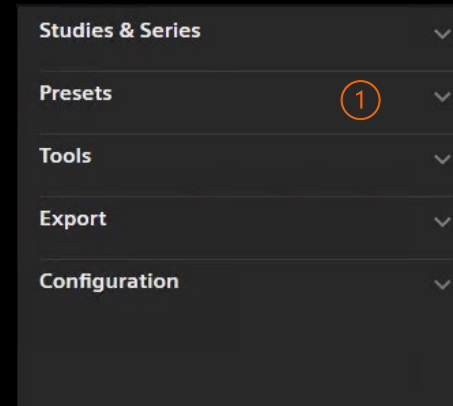
How To Use It
Change Presets

① To change the preset, open the Preset tab in the
② selection bar on the right and open the preset selection
menu.

③ The slider can be used to look through all available
④ presets and by clicking on one of the names, the
corresponding preset is selected and applied to the
dataset.

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① To change the preset, open the Preset tab in the selection bar on the right and open the preset selection menu.

② By selecting the right arrow next to the preset selection option, new presets can be loaded. Only one preset can be loaded at a time.

③ **Add Preset** window opens. Here you can search for a new preset on your PC by clicking on the folder symbol. The selection is confirmed by open. The previous name of the preset file appears in the Preset File field.

⑤ In the Preset Name field, the display name of the preset within the app is defined.

⑥ If both fields are filled in, the Add button turns orange and the preset is added to the previous selection by selecting the button.

⑦ The Cancel button cancels the option.

Studies & Series

Presets ①

Tools

Export

Configuration

Studies & Series

Presets ②

Preset
CT Cinematic

Tools

Export

Configuration

Add Preset

Preset File * 📁 ③

Prest Name * ⑤

⑦ Cancel Add ⑥

File name: Go to Settings to Preset Files (*.vvr; *.lut;) ⌄

Open Cancel ④

How To Use It
Remove Presets

① To remove the preset, open the Preset tab in the selection bar on the right and open the preset selection menu.

② Presets that you have added yourself can be removed. For this purpose, a trash can item appears next to the star. Selecting the item removes the preset.

Presets that are supplied by the developer cannot be deleted in this way.

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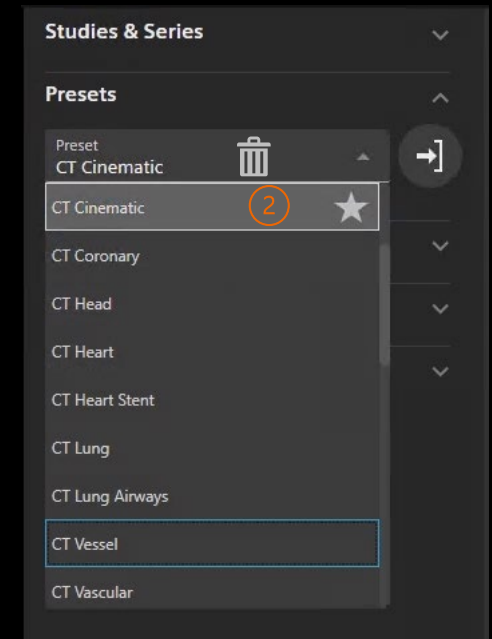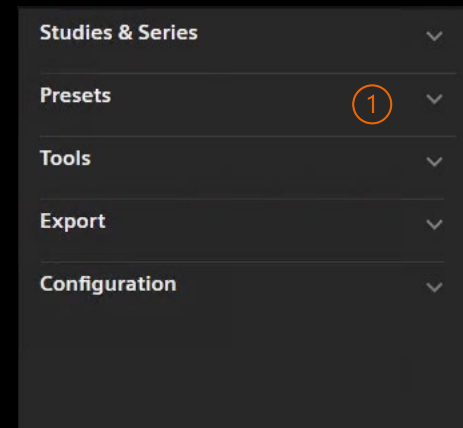
How To Use It
Tools – Clip Box

① After opening the **Tools** tab in the selection menu on the right, three icons appear.

② By selecting the ⬡ **Clip Box** icon, one appears in the image.

③ With the ⬡ **Clip Box** , the data set can be clipped from all 6
④ directions. To change the size of the box, click on the corners and move them. Alternatively, right-click on one of the surfaces and hold it while moving.

⑤ By pressing on the edge of the box, the symbols for changing the position can be made visible again.
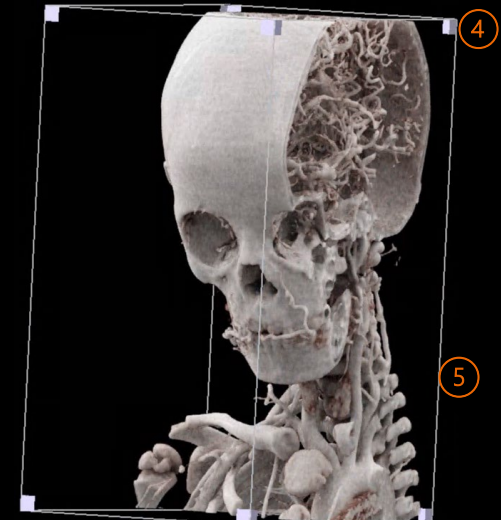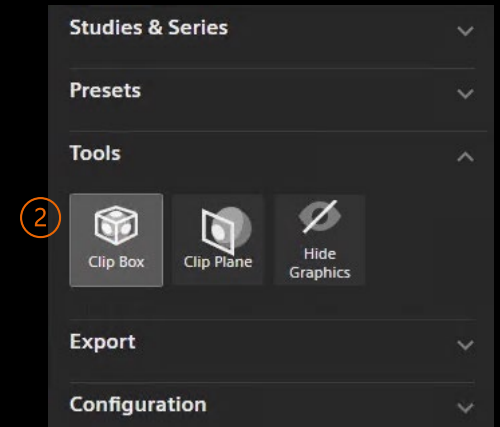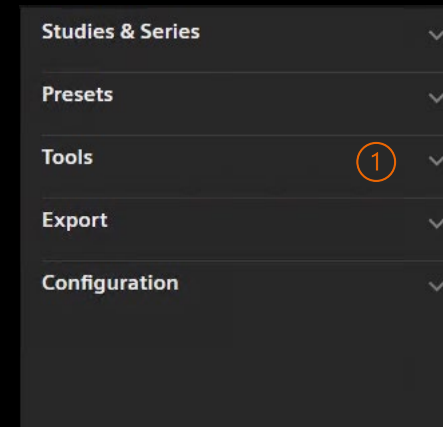
How To Use It
Tools – Clip Plane

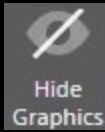① After opening the **Tools** tab in the selection menu on the right, three icons appear.

② With the **Clip Plane** the dataset can be clipped with a
③ movable plane. This can be moved by clicking on the corners and moving the mouse pointer. Or by right-clicking on the plane and holding it while moving. By
④ selecting the points in the middle of the connecting lines of the plane, it can be rotated.

⑤ By clicking on the edge of the layer, the symbols for changing the position can be made visible again.
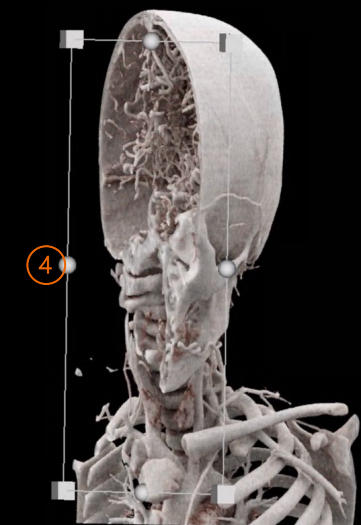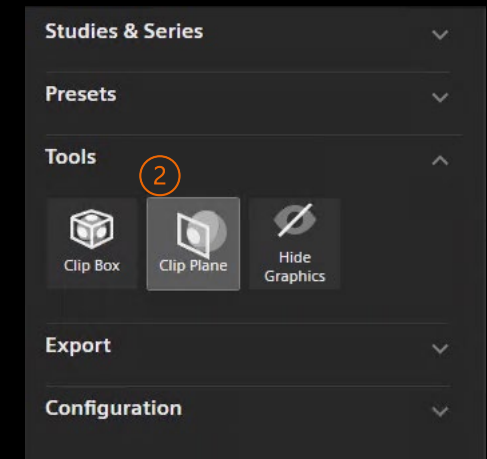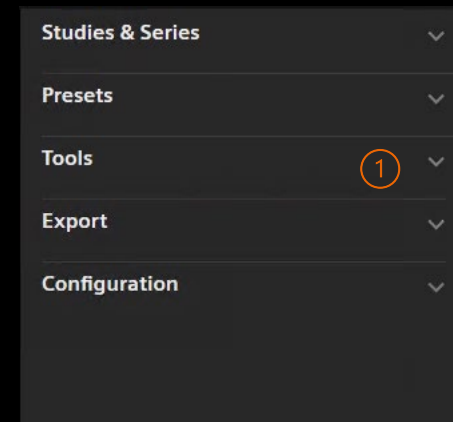
How To Use It
Tools – Hide Graphics

① After opening the `Tools` tab in the selection menu on the right, three icons appear.

② The ⊘ Hide Graphics icon hides the layer or box so that only the
③ modified data set is visible. By selecting the icon again, the selection is undone and the layer or box becomes visible again.
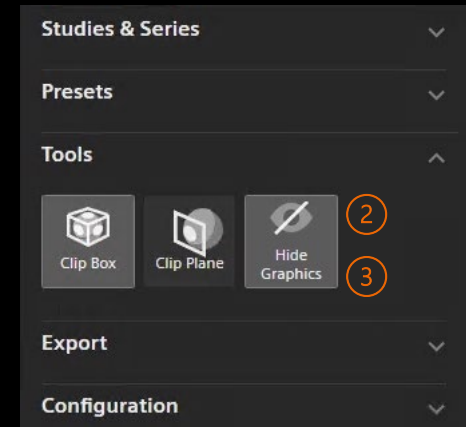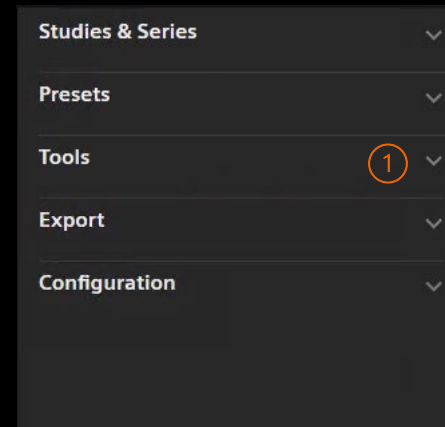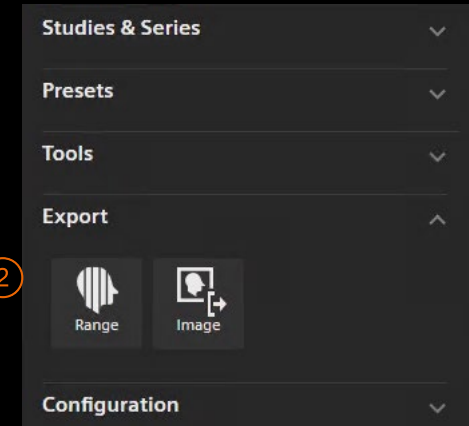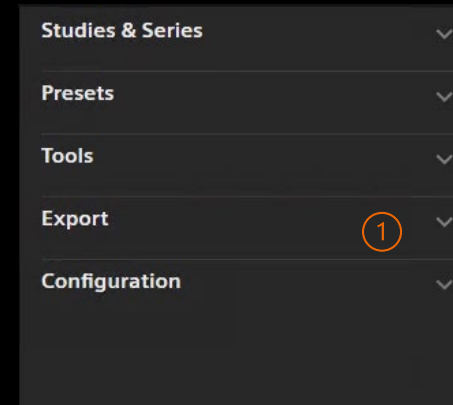
How To Use It
Export - Ranges

① After opening the **Export** tab in the selection menu on the right, two icons appear.
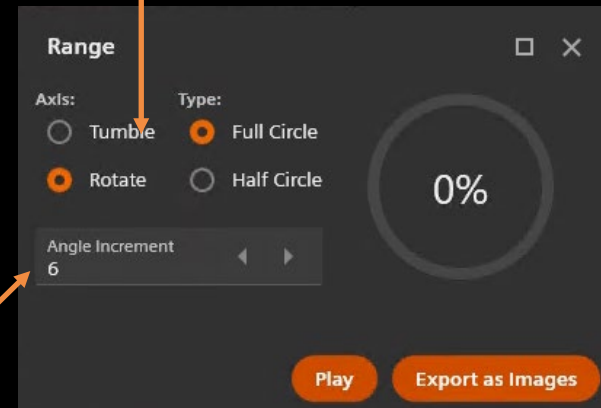
② By selecting the **Range** icon, a window opens. In this

③ window you can select the rotation direction (horizontal or vertical), the type (half or full circle) and the rotation angle (in 1 degree steps) of the images.

④ With **Play** a preview of the generated images is played. The percentage indicates how far the preview has been played through.
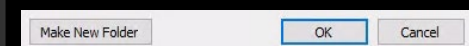
⑤ The button **Export as Images** opens a window in which a folder can be selected or created in where the generated images will be stored. Click "OK" to save the images.

How To Use It
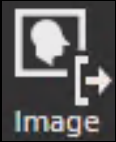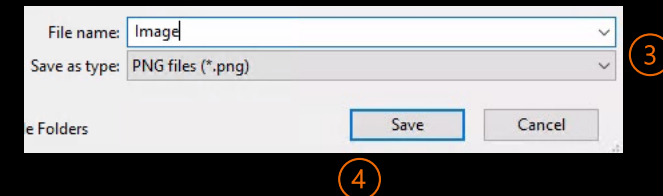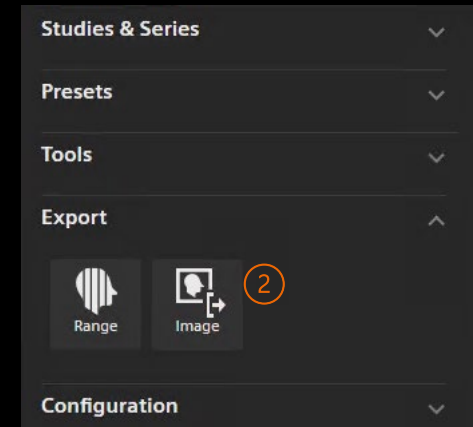# Export - Images

① After opening the **Export** tab in the selection menu on the right, two icons appear.

② By selecting the **Image** icon, the current image view is
③ saved. A window opens in which the destination of the image is selected. In addition, the name is entered and the format of the image is selected.

④ The image is saved by pressing the "Save" button.

Studies & Series	⌄
Presets	⌄
Tools	⌄
Export ①	⌄
Configuration	⌄

Studies & Series	⌄
Presets	⌄
Tools	⌄
Export	⌃
Range Image ②	
Configuration	⌄

File name:	Image	⌄	③
Save as type:	PNG files (*.png)	⌄	
e Folders		Save Cancel	
④
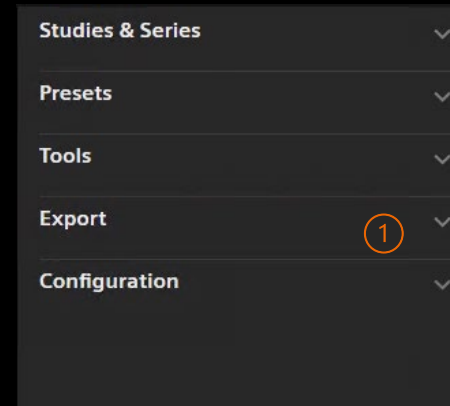
How To Use It
Configuration

① To change the configurations, go to **Configuration** in the selection menu on the right.

② Selecting the button in front of the options enables or disables those options. For the Interaction Speed vs. Quality

③ setting, the button turns orange when pressed and can then be moved horizontally on the beam.

Studies & Series
Presets
Tools
Export
Configuration ①

Studies & Series
Presets
Tools
Export
Configuration
② Show Console Ouput
   Show Statistics
Interaction Speed vs. Quality
③
② Accelerator Mode (CPU / GPU)
② Realtime Version (1.0 / 2.0)
   Brute Force Final Rendering
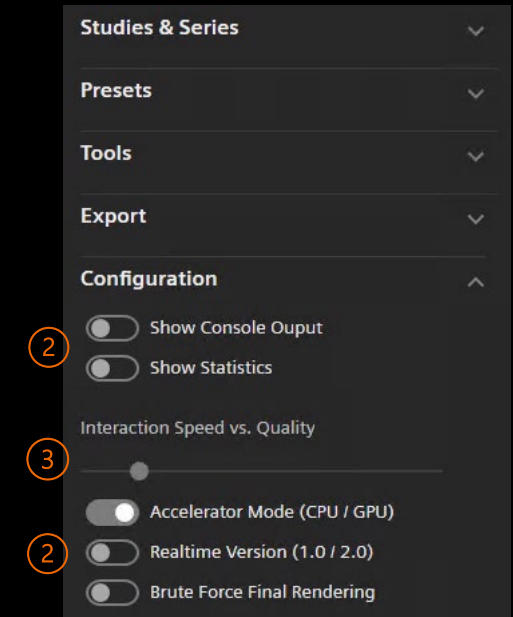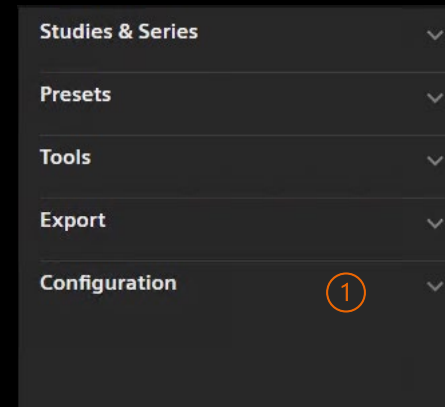
How To Use It
Close Cinematic Playground Research Application

① To close the dataset, click on the cross behind the dataset name at the top of the taskbar.
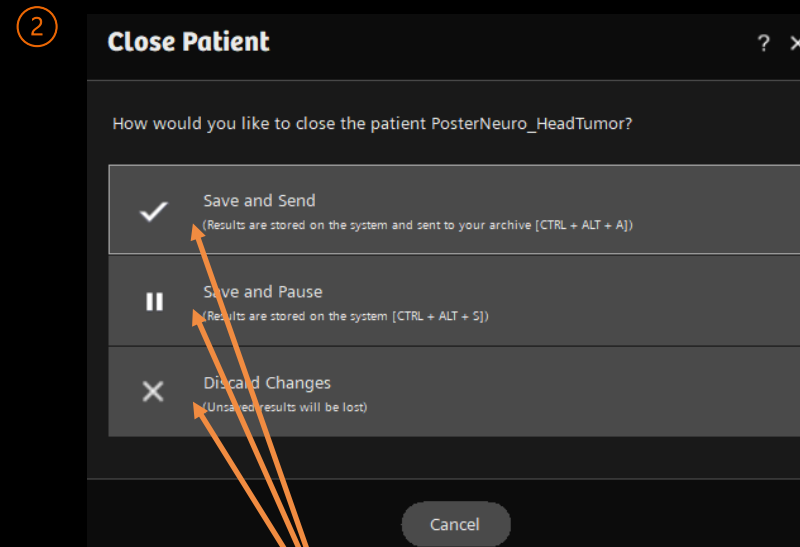
② The **Close Patient** window then appears in which the desired action can be selected.
Close *syngo*.via.

② **Close Patient**   ? ✕

How would you like to close the patient PosterNeuro_HeadTumor?

✓ Save and Send
   (Results are stored on the system and sent to your archive [CTRL + ALT + A])

❚❚ Save and Pause
    (Results are stored on the system [CTRL + ALT + S])

✕ Discard Changes
   (Unsaved results will be lost)

Cancel

② select

SIEMENS Healthineers   PosterNeuro_HeadTumor
                        * 1/1/2009 M 0

Not for clinical use

SIEMENS Healthineers   Cinematic Playground   =PosterNeuro_HeadTumor

① close