

3D Organon User Manual

for Desktop

XR Imaging

Available for: Windows 10/11, MacOS

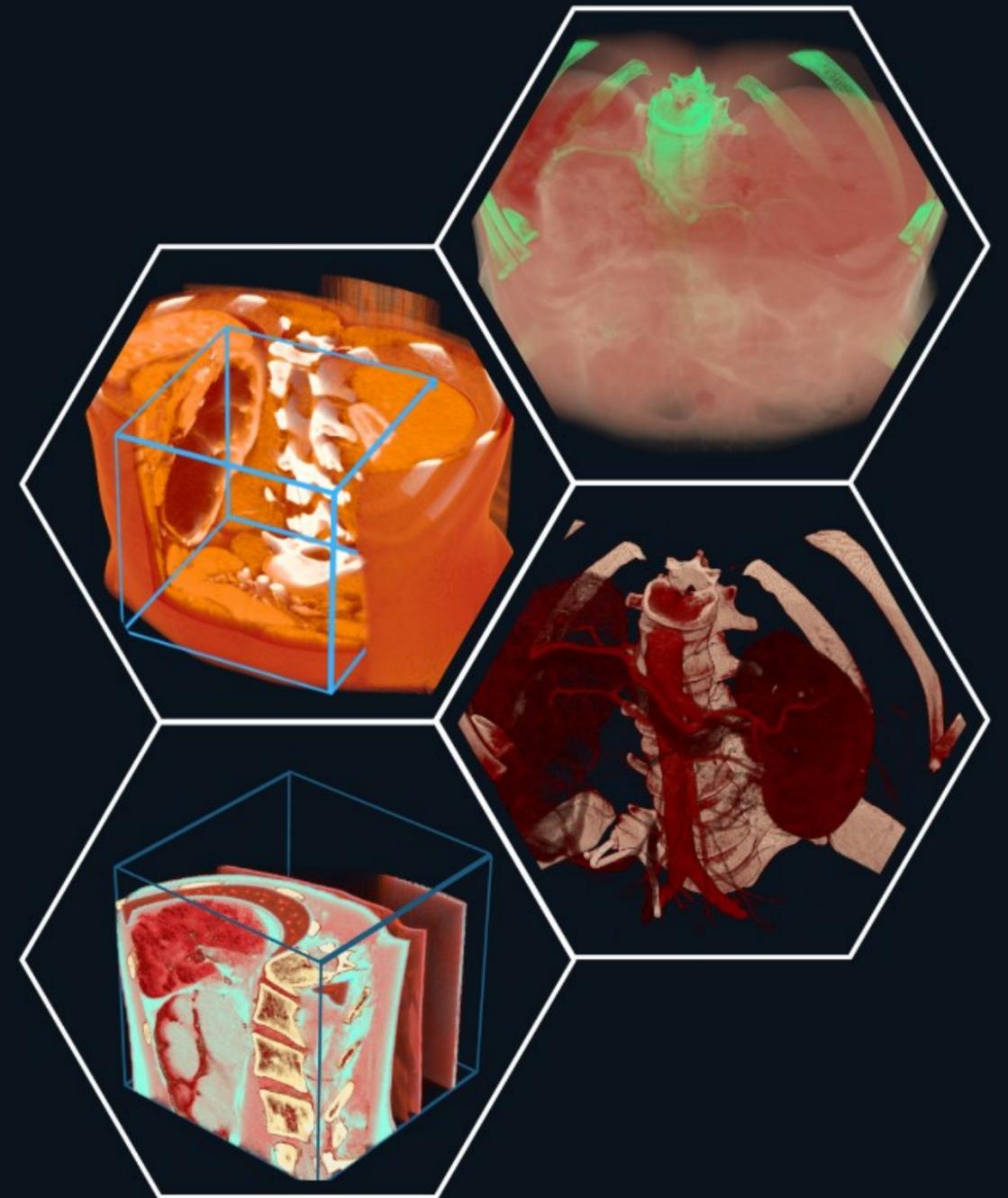


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Hardware Requirements

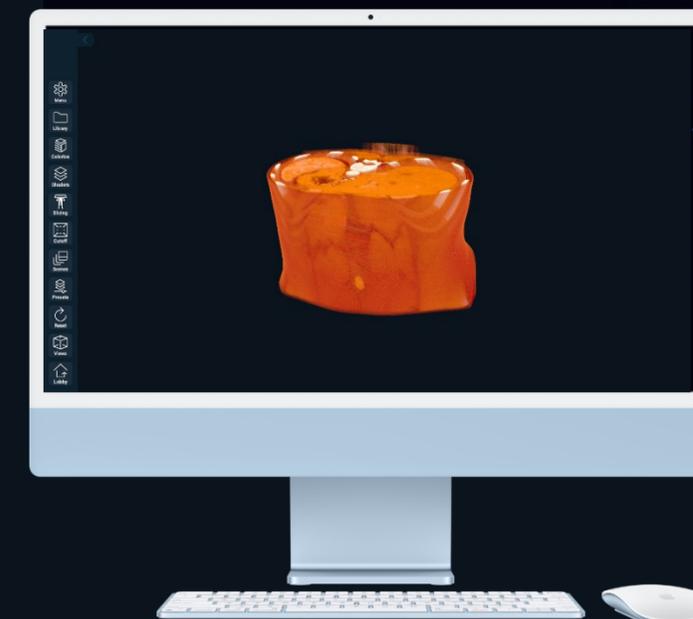
Windows

	MINIMUM	RECOMMENDED
OS	Windows 10/11	Windows 10/11
Processor	Intel Core i3 AMD FX-6100	Intel Core i5, Intel Core i7 AMD FX-6300 or higher
Memory	4 GB RAM	8 GB RAM
Graphics	DirectX 11 compatible card with a least 1.5 GB video RAM, Screen resolution 1280x900px	DirectX 11 compatible card with a least 2 GB video RAM, Screen resolution 1920x1080px
DirectX	Version 11	Version 11
Network	Broadband Internet connection	Broadband Internet connection
Storage	3500 MB available space	3500 MB available space
Sound Card	DirectX 11 compatible sound card	DirectX 11 compatible sound card
Additional Notes	2-button optical scroll mouse required	2-button optical scroll mouse required

A Dedicated graphics card (Nvidia – AMD) is required. Integrated graphics cards are not suitable.

Apple macOS

	MINIMUM	RECOMMENDED
OS	macOS 12	macOS 12 or higher
Processor	Quad-core Intel Core i5 processor 8 th gen	Quad-core Intel Core i5 processor or higher
Memory	4 GB RAM	8 GB RAM
Graphics	OpenGL 2.0 compatible 3D graphics card with at least 1536 MB of addressable memory	OpenGL 2.0 compatible 3D graphics card with at least 1536 MB of addressable memory
Network	Broadband Internet connection	Broadband Internet connection
Storage	3500 MB available space	3500 MB available space
Sound Card	Integrated sound card	Integrated sound card
Additional Notes	Secondary mouse click must be enabled within the customized Mouse settings under System Preferences	Secondary mouse click must be enabled within the customized Mouse settings under System Preferences



1-1 Requirements

- A strong PC capable of launching the application.
- 3D Organon installed via Steam.
- To log in, you must have an active **Trial** or **Subscription (Professional, Student)** which is provided to you with a License Key.

If you do not have a Trial or Subscription and you are:

An Individual user:

Create a 3D Organon account: [click here](#)

Get a license key from our webstore: [click here](#)

From an Institution:

Contact our Customer Development Team at prosupport@3dorganon.com

If you already have a Trial or Subscription then:

Activate your 3D Organon account from the **Welcome to 3D Organon** email you received.

Get your License key from the **Order confirmation | 3D Organon License key(s)** email you received.

If your institution provided you with a Seat License then get your Username, Password and License key from the **Welcome to 3D Organon** email you received.

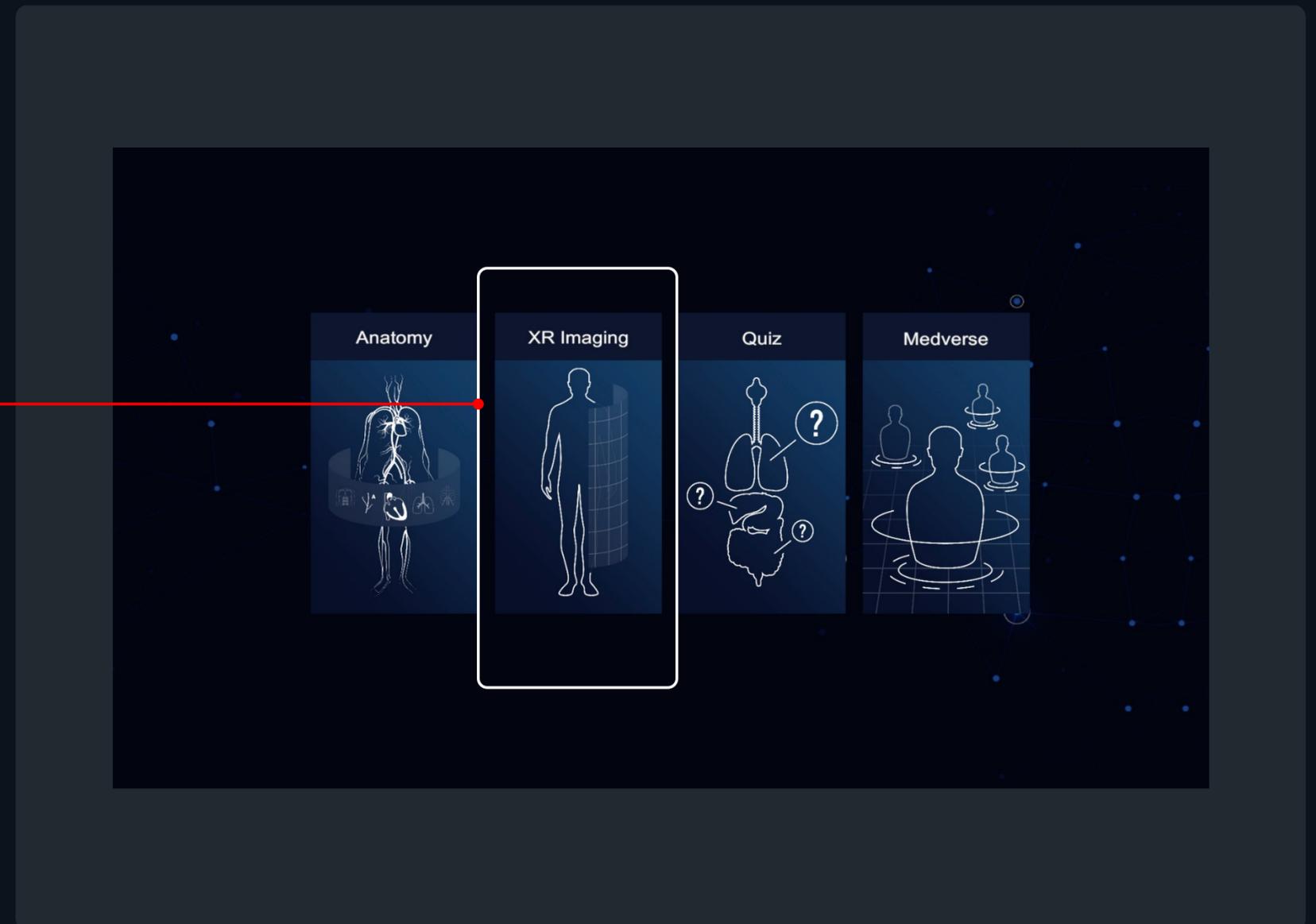
1-2 Installation Instructions

- Please find the installation instructions [here](#).

2 The Lobby features

Select from the following modules:

- XR Imaging



3 The DISCLAIMER NOTICE

*"Please acknowledge that this software is intended for educational and informational purposes **ONLY** and is not meant to be used for surgical planning or disease diagnosis medical purpose. You understand the importance of responsible use of this software and you are committed to using this software only for likely purposes.*

The software provides a user-friendly platform that allows to gain a better understanding of complex medical anatomy and concepts. This can be a crucial resource for medical students, healthcare professionals, and other interested individuals who are seeking to enhance their knowledge of medicine."

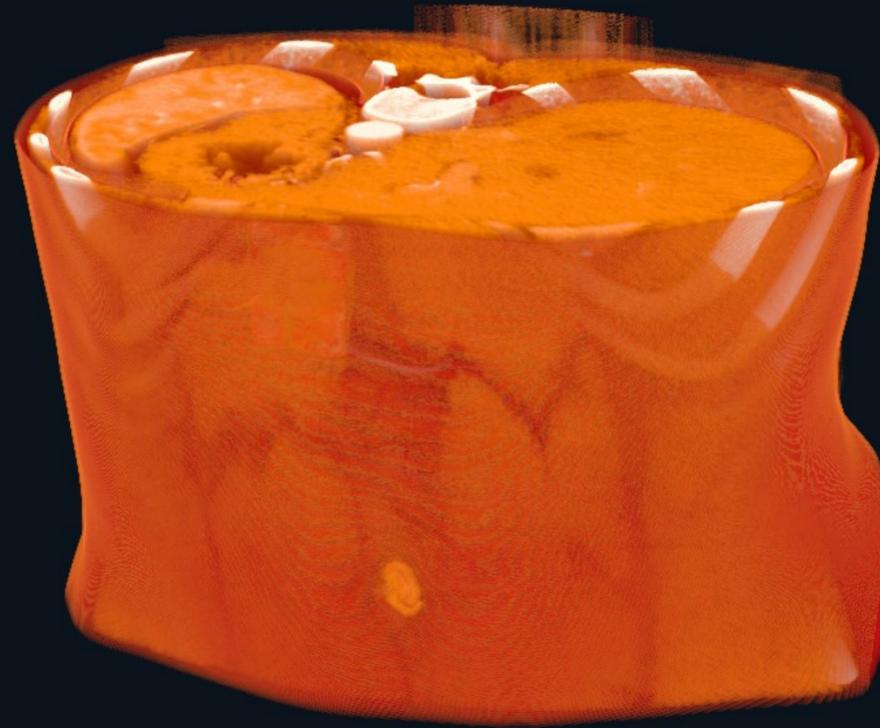
User Interface

ALT+ENTER Switches Between Window and Full Screen.

For easy viewing, click on the side Arrow icon to fold or unfold the Menu panel.

On the **left-side panel**, you can find options such as the Menu, Library, Colorize, etc.

Scene View



Menu



Options:

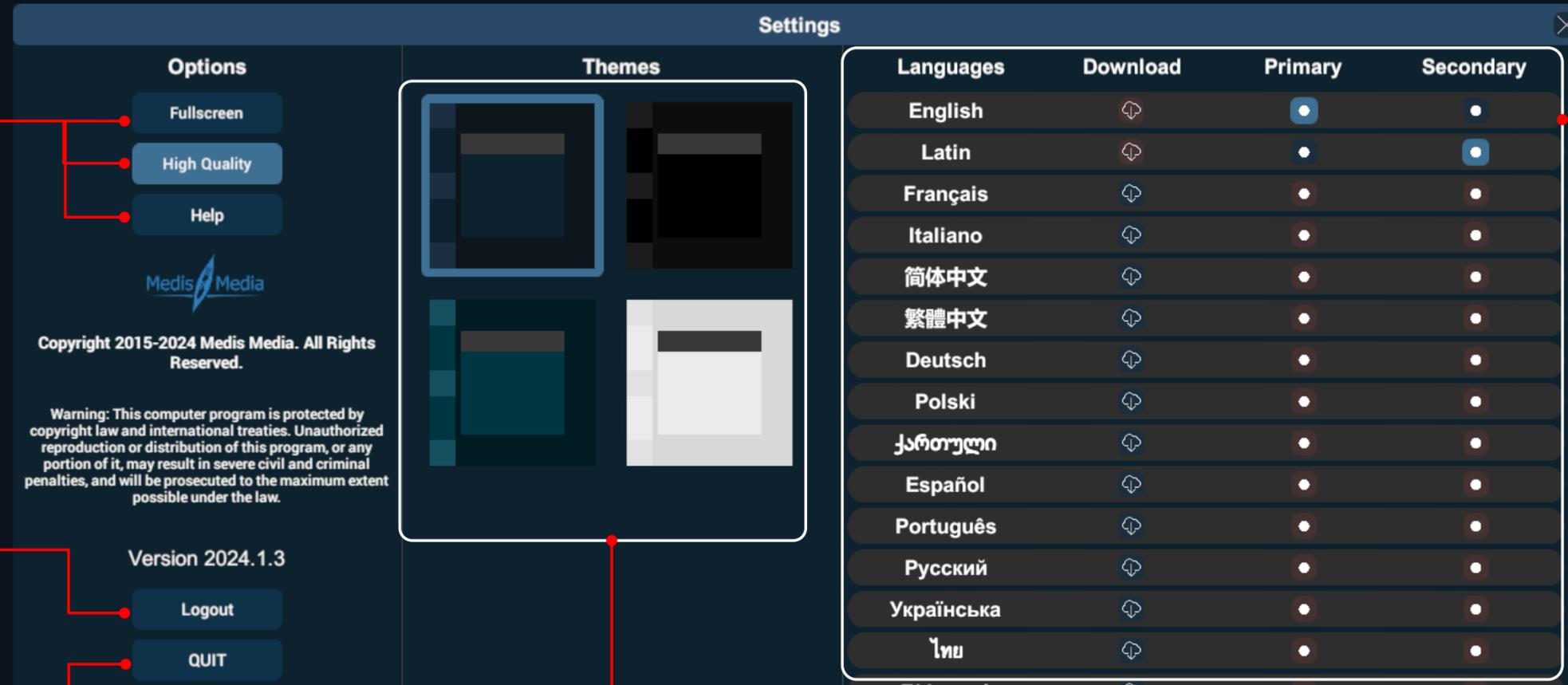
The 'Fullscreen mode' will occupy the entire computer screen. **ALT+ENTER** also switches between Window and Full Screen. Press the 'High Quality option' to get the best graphics possible. You can also access our user manuals and FAQs for more information by clicking on the 'Help' button.

Logout:

Press the 'Logout' button to shut down the app and remove your access credentials from autologin (recommended for public computers and libraries to avoid credentials from being stored in the device).

Quit:

Press the 'Quit' button to turn off the app (your credentials are stored locally. You do not have to insert them again when you log in the same device). Internet access at login is still required.



Users can download additional languages.

Themes:

Blue (default), Black, Green, White



Once a language has been downloaded, you can uninstall it by clicking on the Bin icon.

Rotating, Zooming and Panning

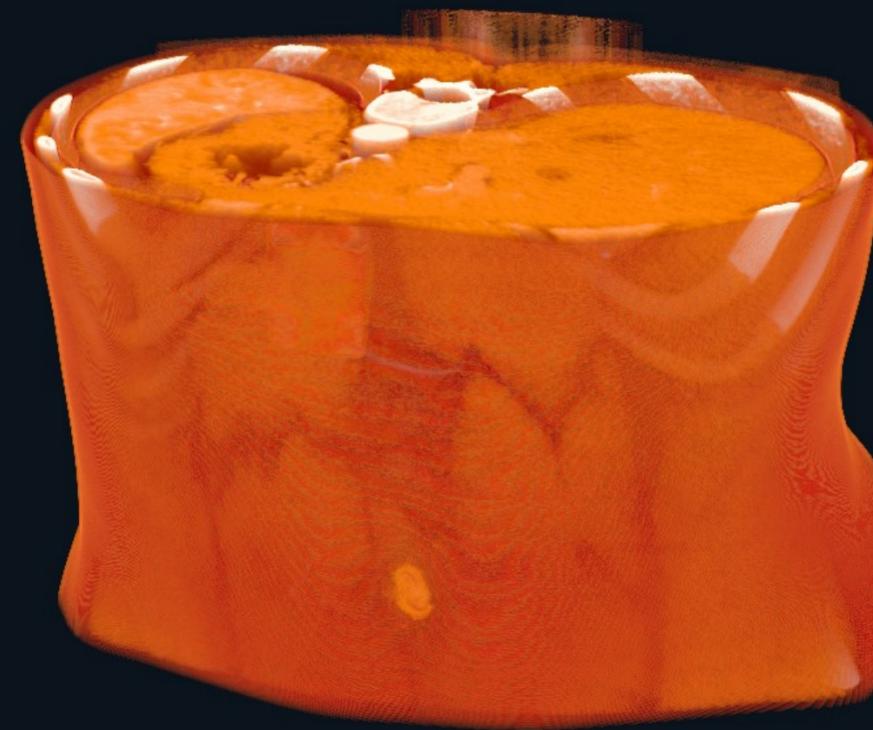
To **rotate** the model, press and hold down the left mouse button and move the pointer along any axis. The rotation center is based on the position of your mouse pointer in relation to the model.



To **zoom** in and out, use the mouse scroll wheel. A high-quality mouse will result in finer zooming control.



To **pan** around the scene view, press and hold down the right mouse button and move the pointer to the desired direction.



Library

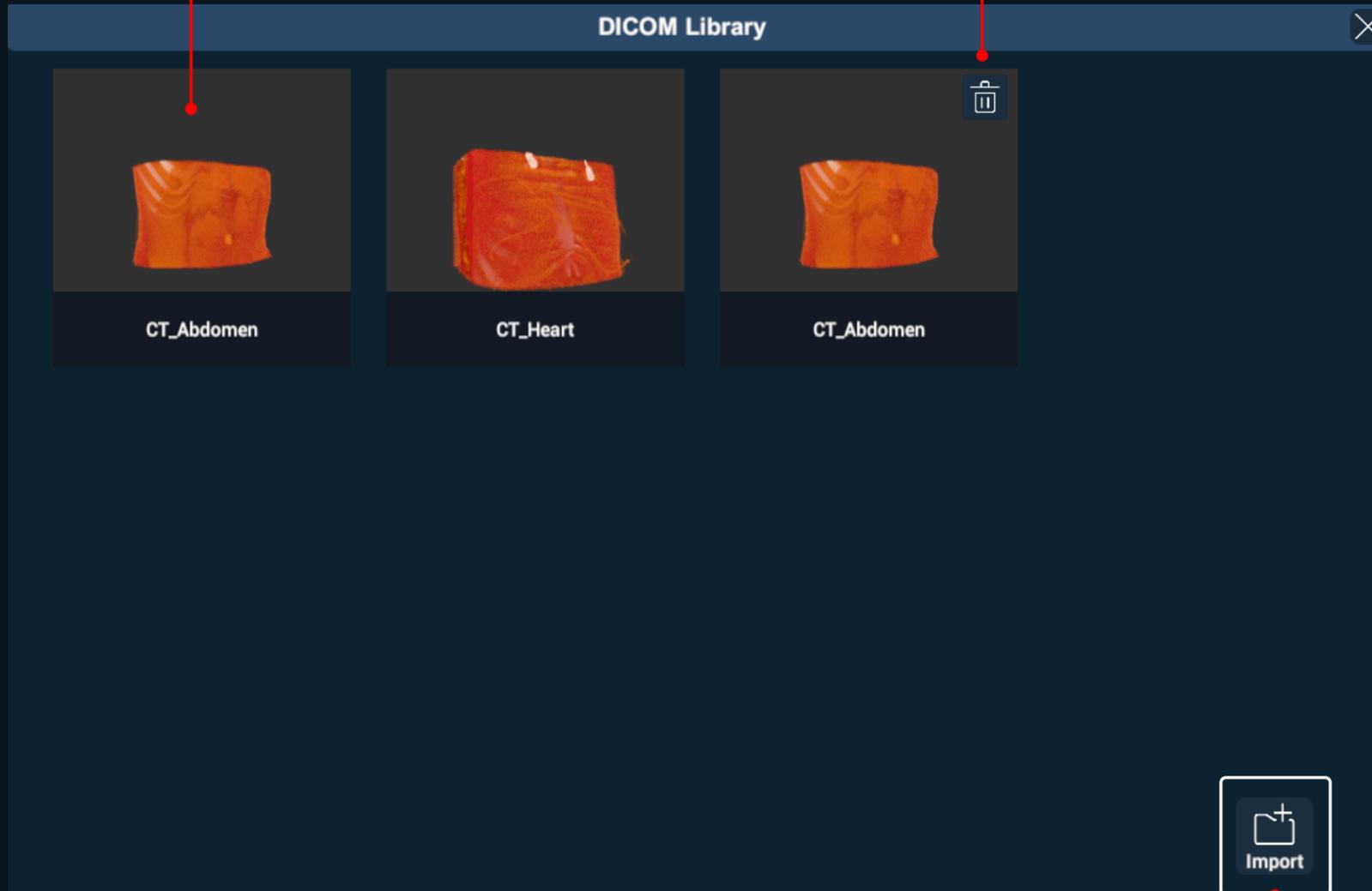
Open, Import DICOM files.

The app comes with no pre-loaded DICOM Files.

Click a thumbnail image to open it.

Delete a Dicom from your Library

Close the Library

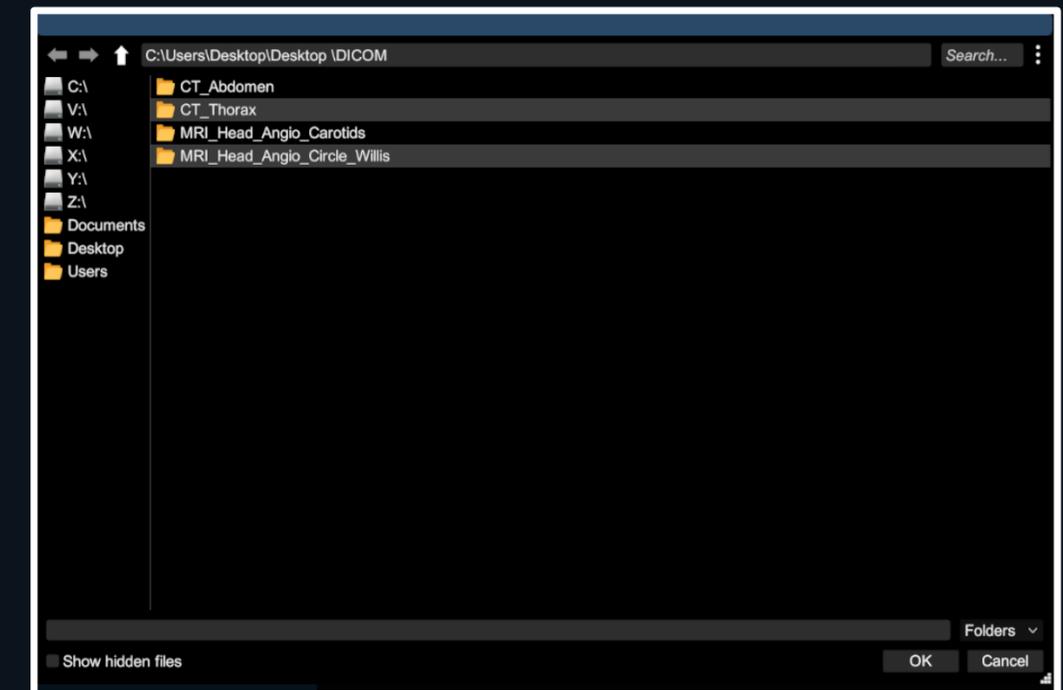


How to Import a new DICOM

Click on Import and select the folder that contains the DICOM dataset.

You don't need to select a single file. The DICOM File is an array of files (.dcm, .dicm, .dicom) stored in parent folder.

The files may be a CT or MRI medical imaging modality.

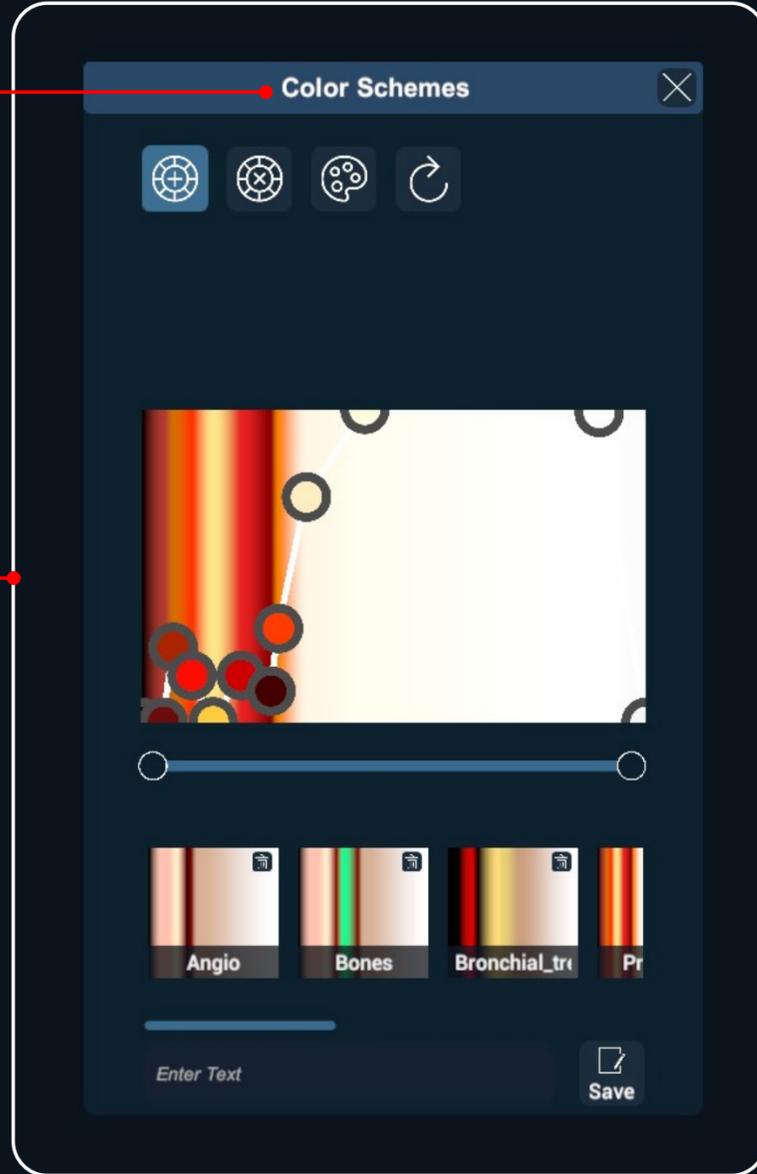


Colorize

You may Colorize tissues based on their medical imaging grayscale density characteristics.

By holding the left or right mouse button, you will be able to move the whole table to your desired position.

Colorize menu



Colorize



Color Schemes

Enter Text Save

Select a Coloring Scheme

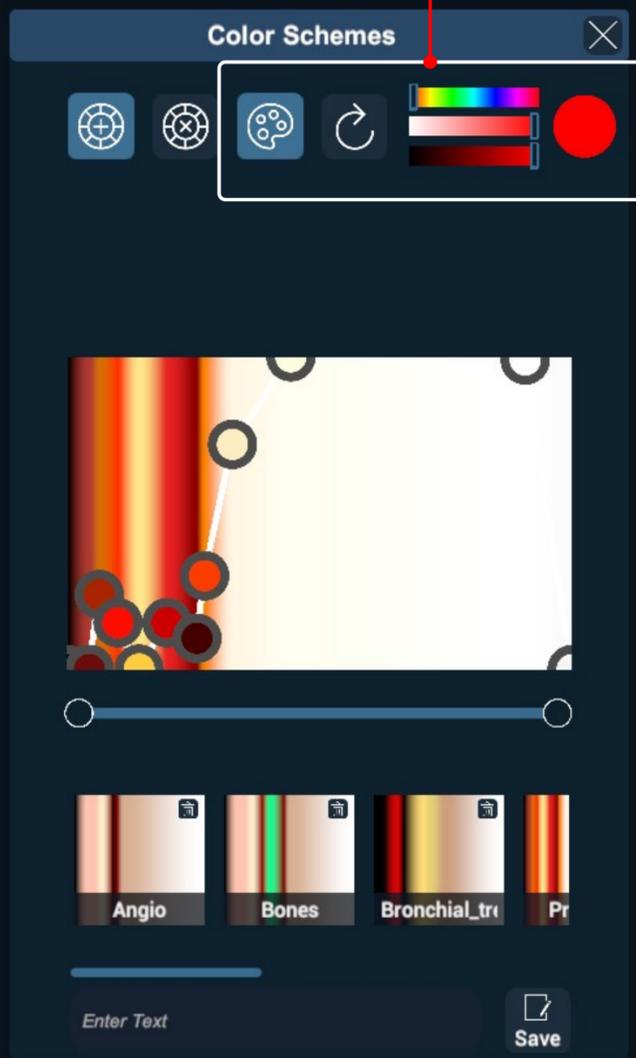


- 1: Angio
- 2: Bones
- 3: Bronchial_Tree_Lungs
- 4: Profile_1
- 5: Profile_2
- 6: Profile_3
- 7: Profile_4
- 8: Profile_5
- 9: Profile_6

Colorize

Click on the Palette icon to open the Coloring Palette.

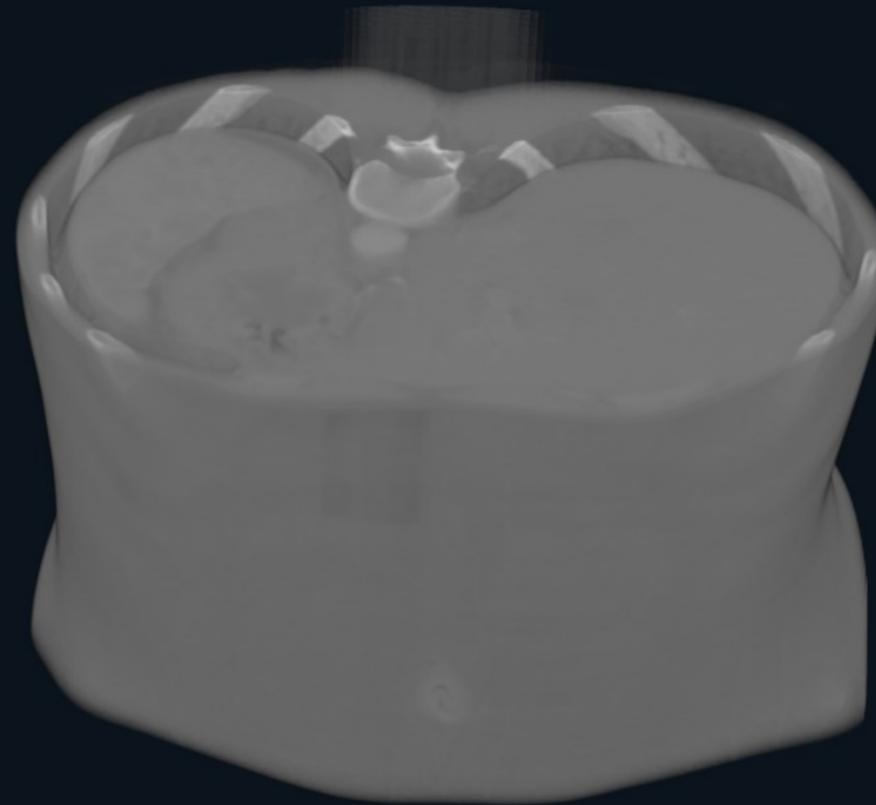
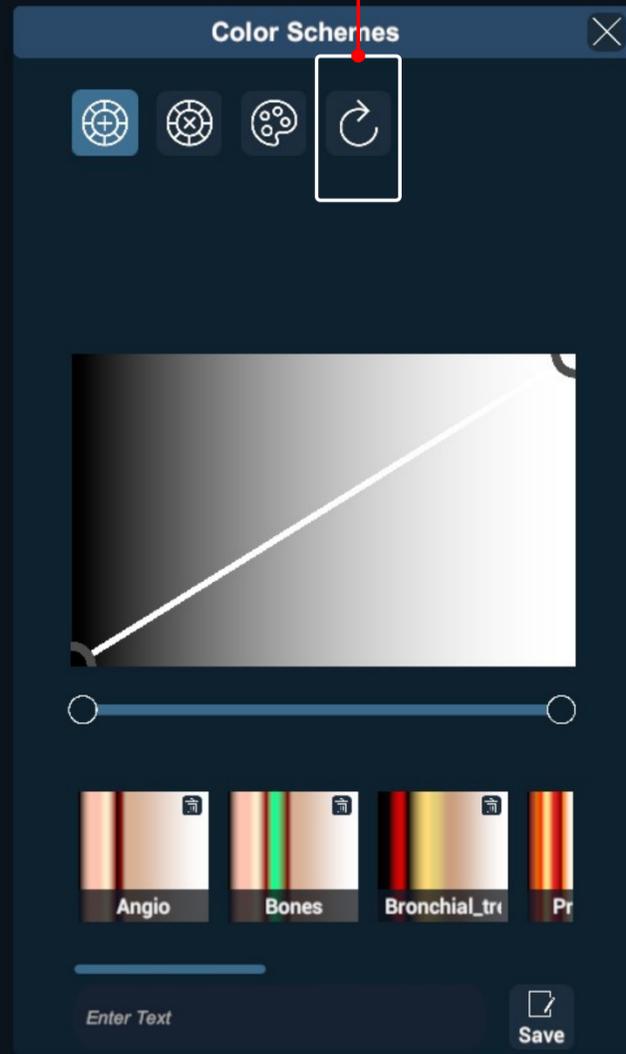
The Coloring Palette



Colorize

To reset the coloring scheme just click on the reset icon. You will then be able to add new Nodes.

Start a new Coloring Scheme



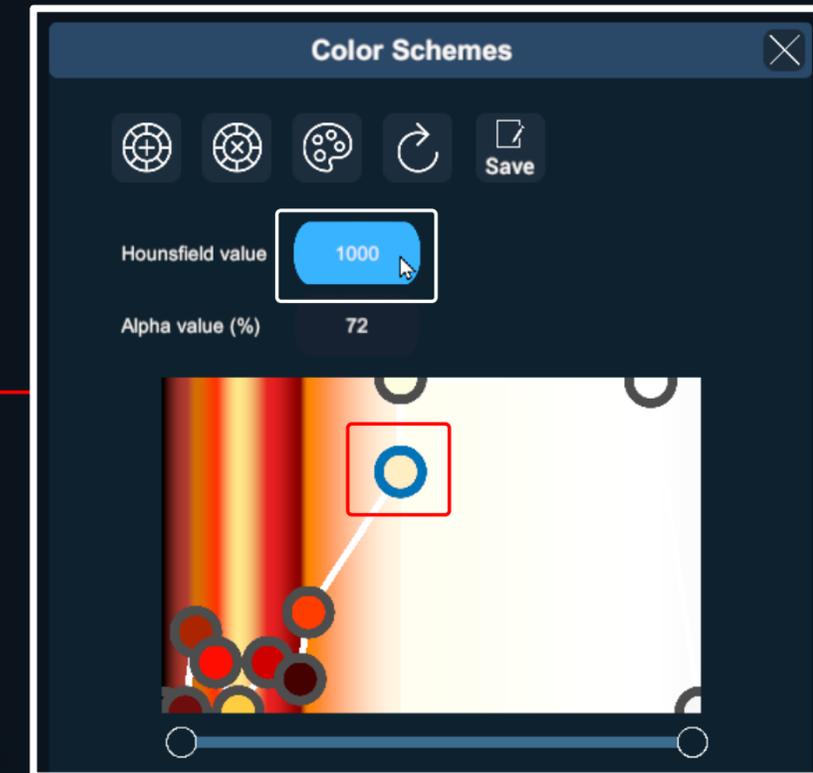
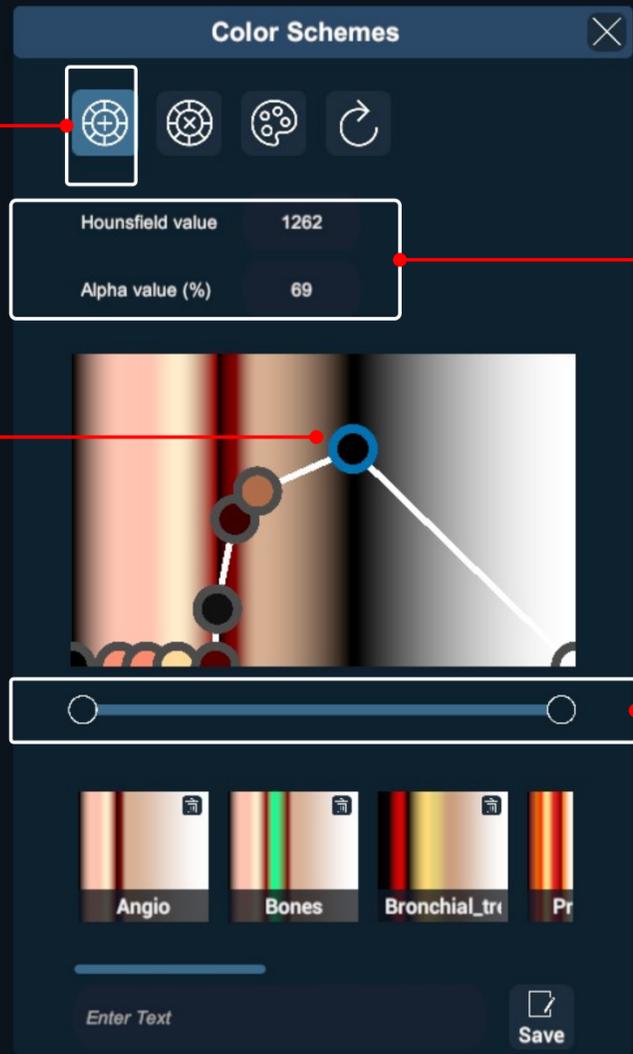
Colorize

First select a Coloring Scheme and then add new Nodes.

1) Enable Node Addition mode

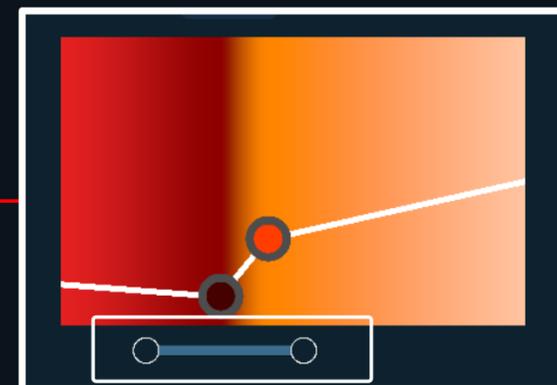
Add a Node to a desired location by clicking the left mouse button.

Click and hold the Node to move it around.



- First click on a Node
- The Hounsfield Value and Alpha value (%) will appear.
- In order to modify the values, click on them.

2) Disable Node Addition when finished

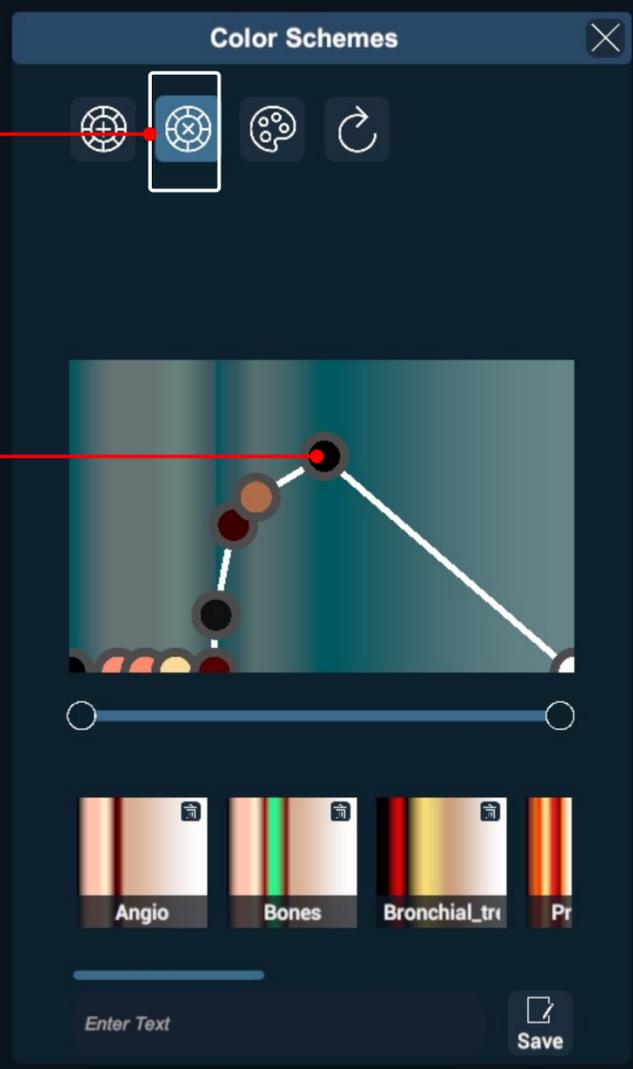


Narrow down the spectrum of presented Hounsfield units for fine tuning.

Move these nodes accordingly to focus on specific bands of values. Lookup on books and online about tissue-characteristic values.

Colorize

Enable the Node Delete mode



The screenshot shows the 'Color Schemes' panel with a toolbar at the top containing icons for a globe, a globe with a crosshair, a brain, and a refresh symbol. The globe with a crosshair icon is highlighted with a red box. Below the toolbar is a node graph with several nodes connected by lines. One node is highlighted with a red circle. Below the graph is a horizontal slider. At the bottom, there are four color scheme thumbnails labeled 'Angio', 'Bones', 'Bronchial_tri', and 'Pr'. A 'Save' button is located at the bottom right of the panel.

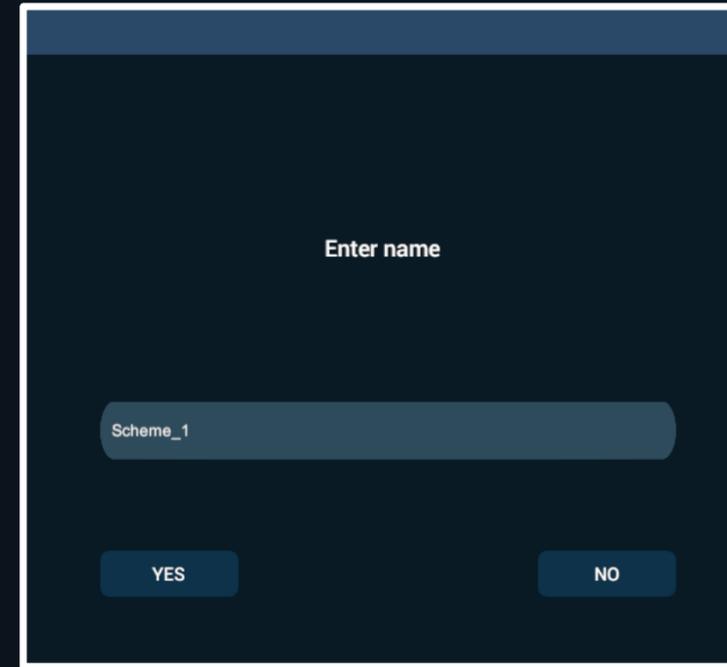
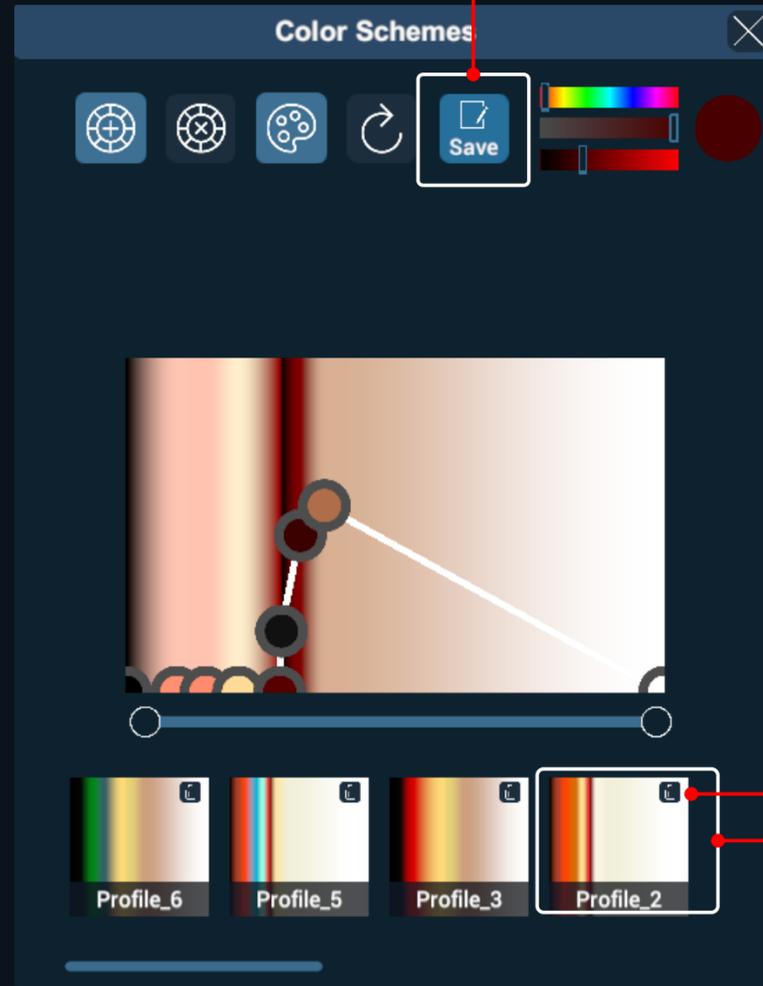
Just click on a Node to delete it.



Colorize

Save a preset with your custom Coloring Scheme

Type a name for your file. Click on Save.



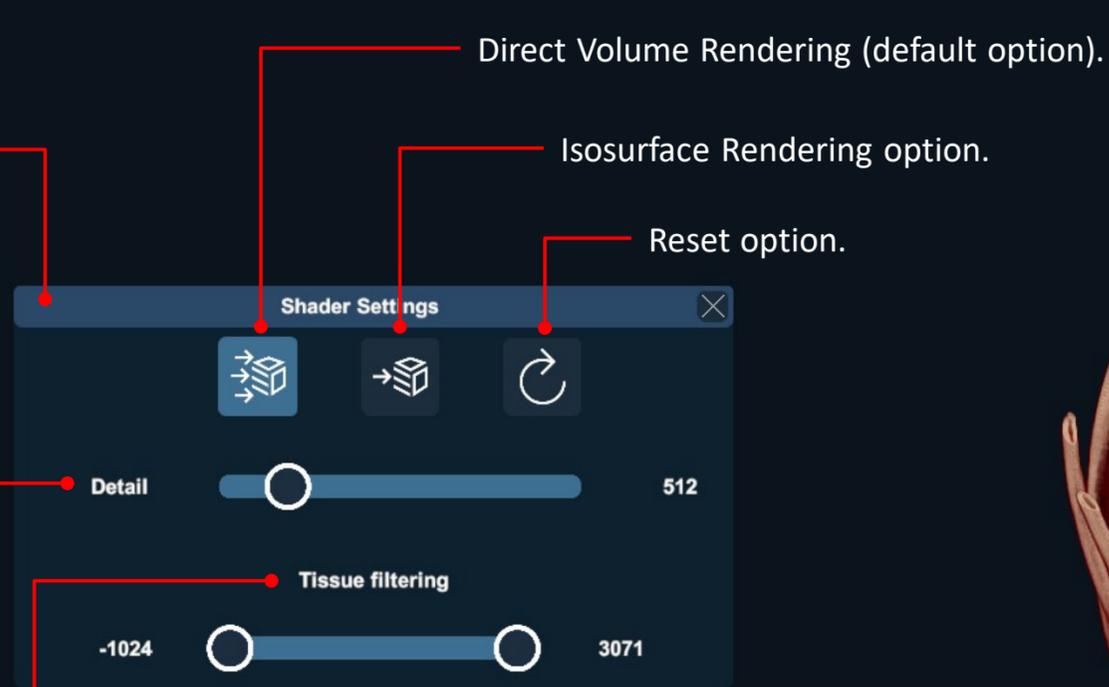
Delete current Coloring Scheme

The Coloring Scheme will be saved under your Coloring Schemes.

Shaders

Modify how 3D DICOM models are visualized and rendered.

The Shaders Menu



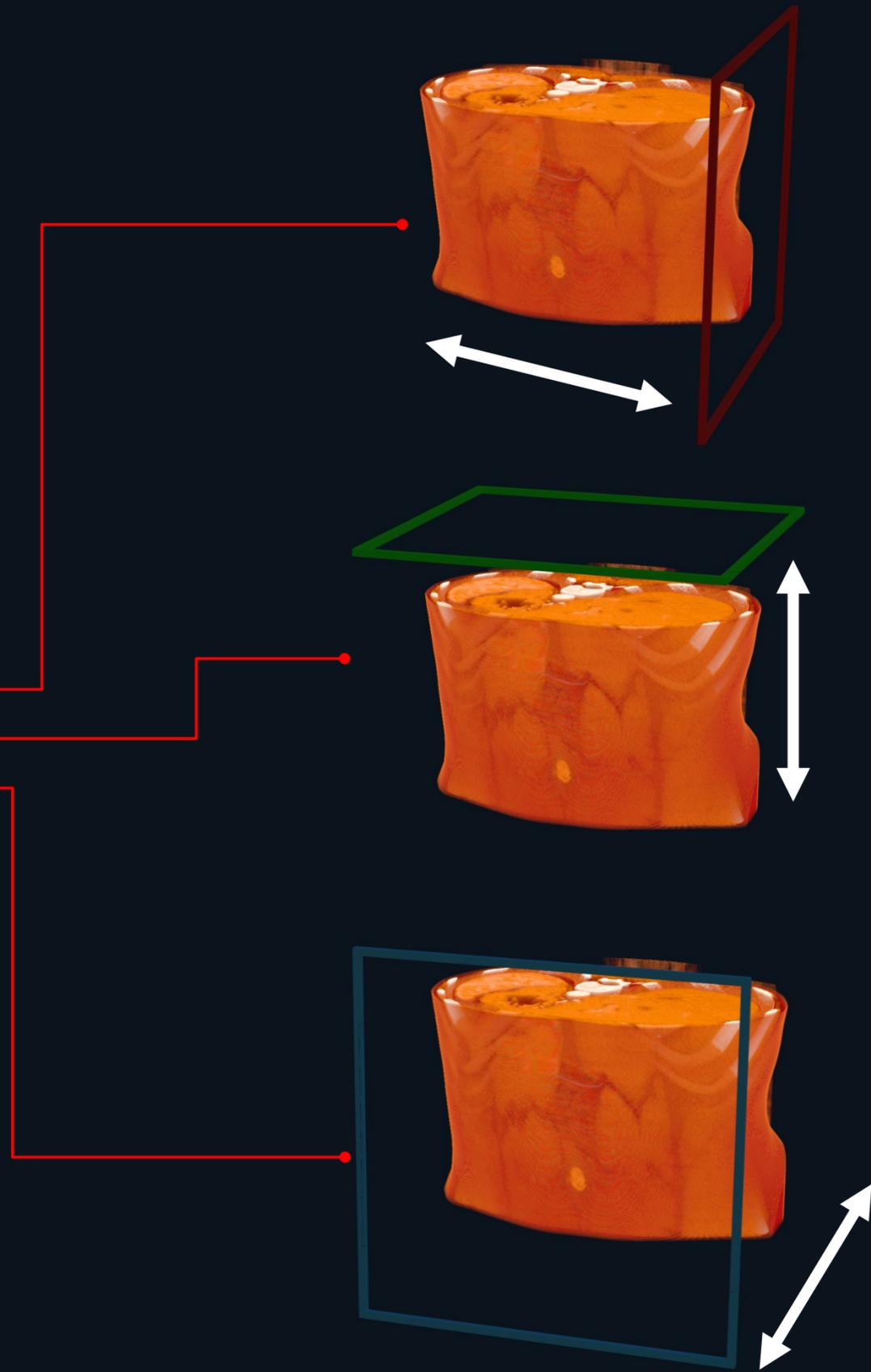
3D DICOM Detail Level
(will affect performance too).

Hounsfield units cutoff range. This is a measurement of density based from the source DICOM dataset.



Slicing

Realtime sectioning of the 3D DICOM model
For Coronal, Transverse and Sagittal sectioning.



Cutoff

Define an **Exclusion** or **Inclusion** box area of tissue removal (to determine or focus on deep cavities).

Exclusive

Inclusive

Cutoff Settings [X]

Reset

Scale

[Slider]

[Slider]

[Slider]

Cutoff Settings [X]

Reset

Scale

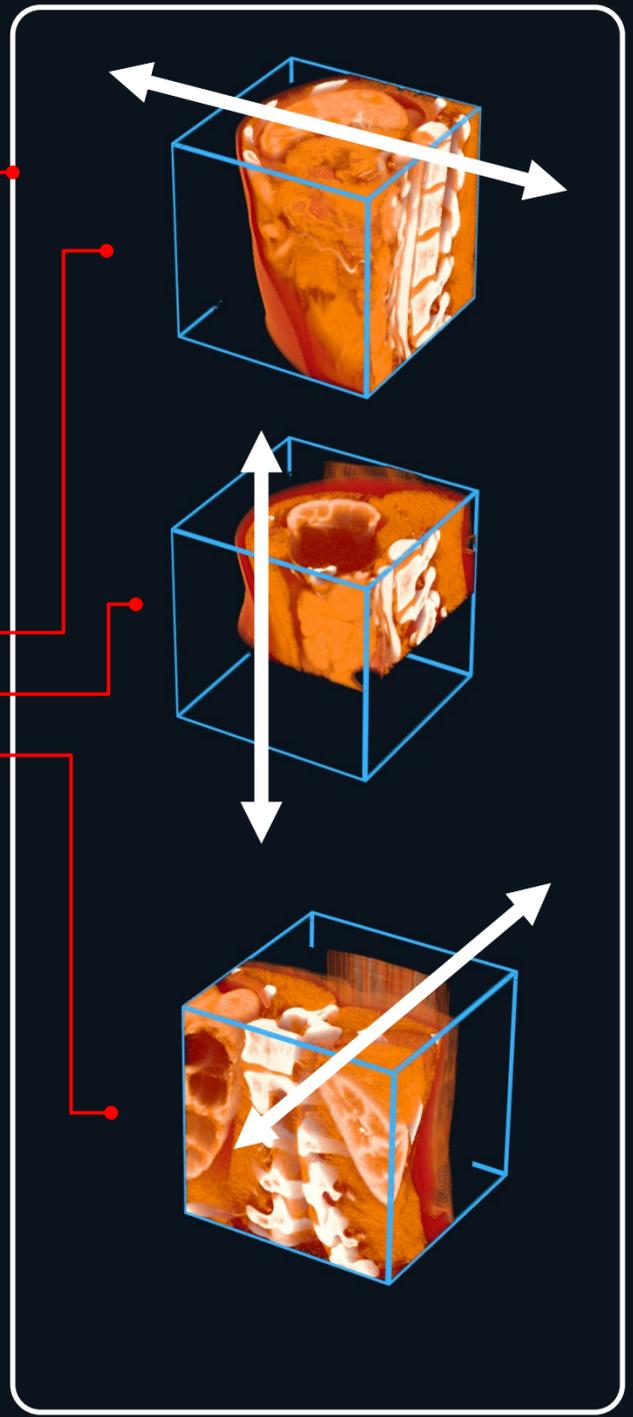
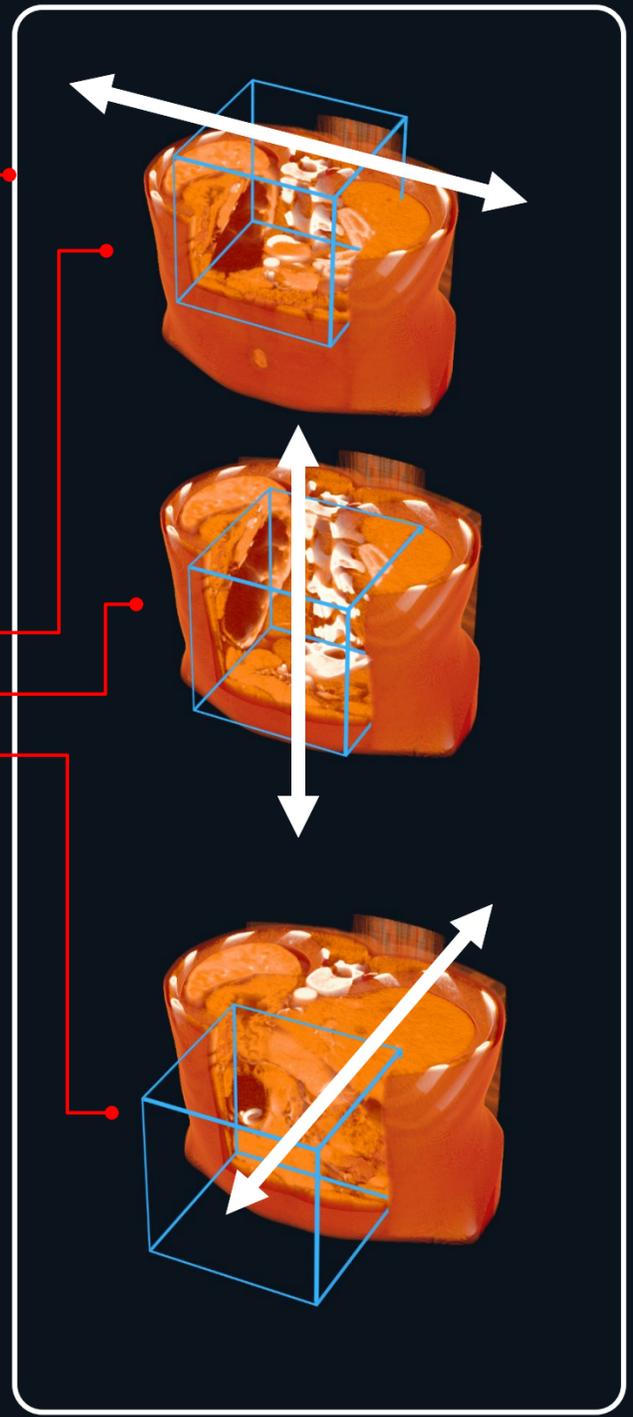
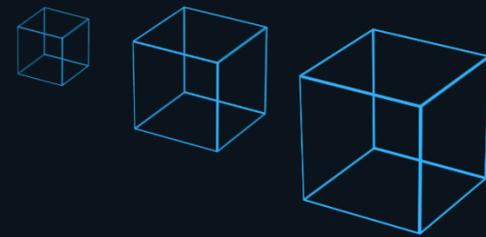
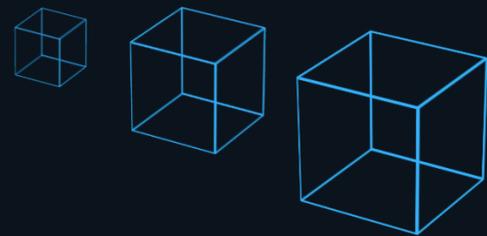
[Slider]

[Slider]

[Slider]

Scale the Cutoff box.

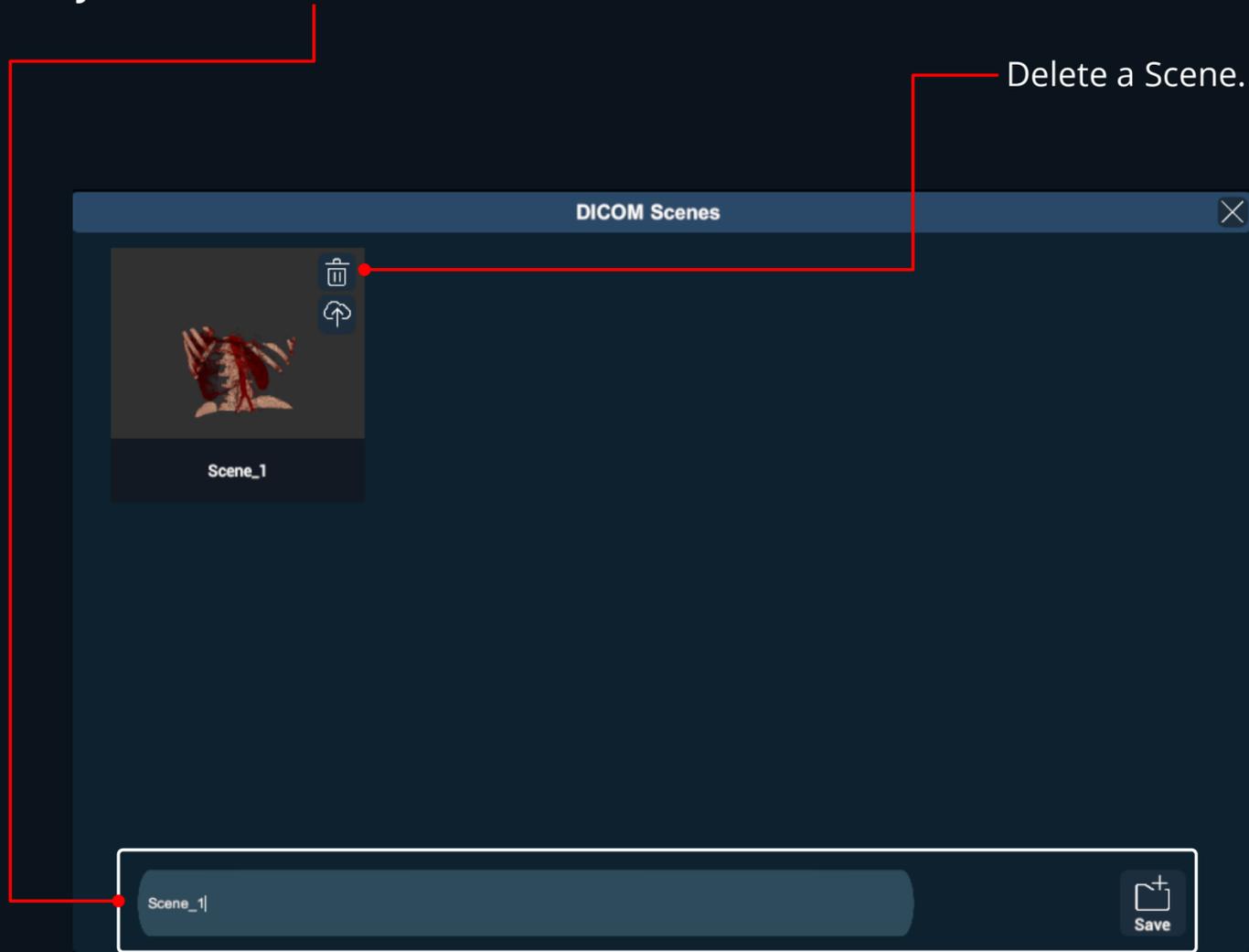
Scale the Cutoff box.



Scenes

Save the current custom Colorization view or Load and apply a preset on the current scene.

Enter a name for your new Scene and then click on Save.



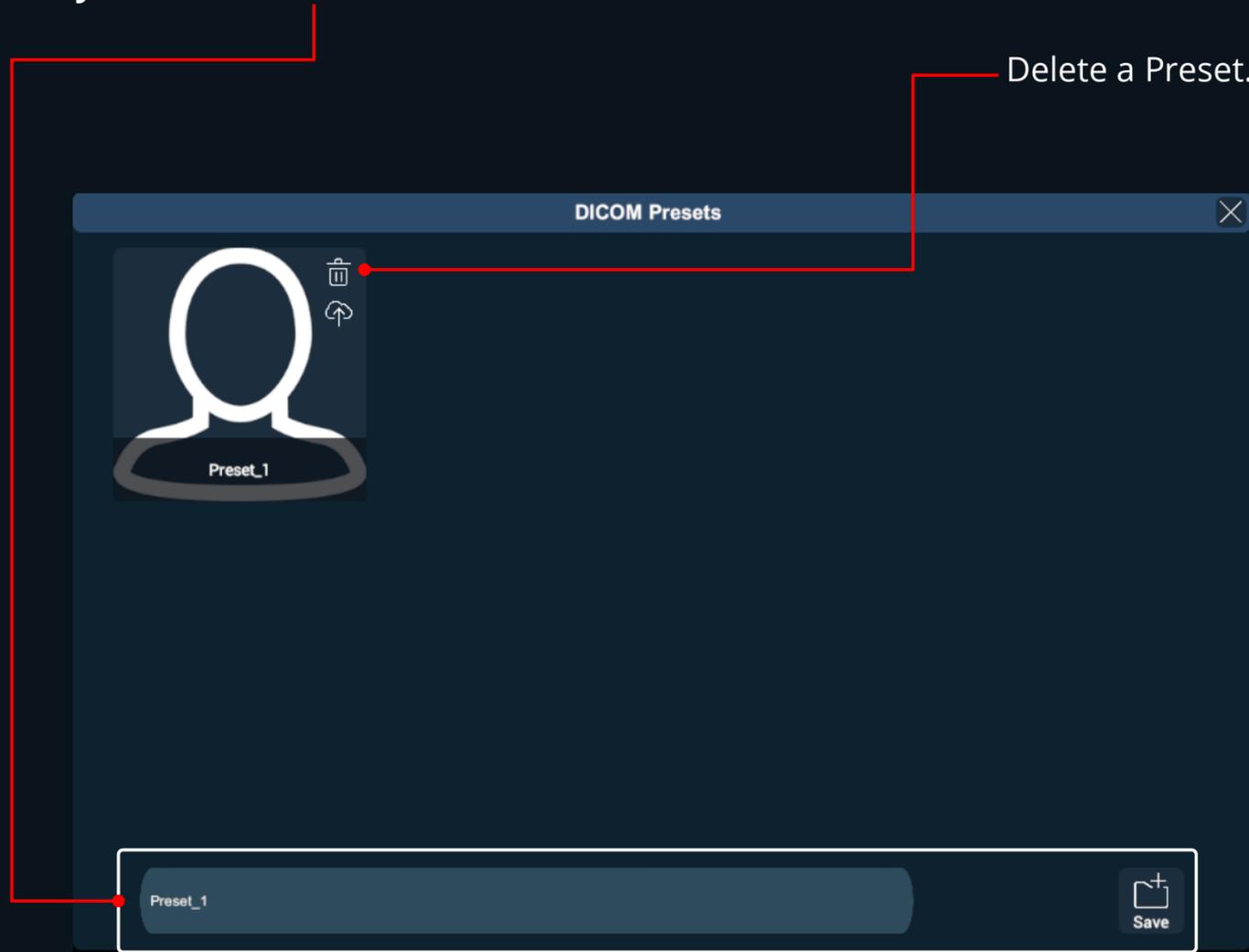
Delete a Scene.



Presets

Save the current Rendering mode as a Preset or Load a previous set to apply on the current scene.

Enter a name for your new Preset and then click on Save.



Reset

By clicking on the 'Reset' icon on the left side panel, you can reset the Dicom file in the main scene view.



Menu



Library



Colorize



Shaders



Slicing



Cutoff



Scenes



Presets



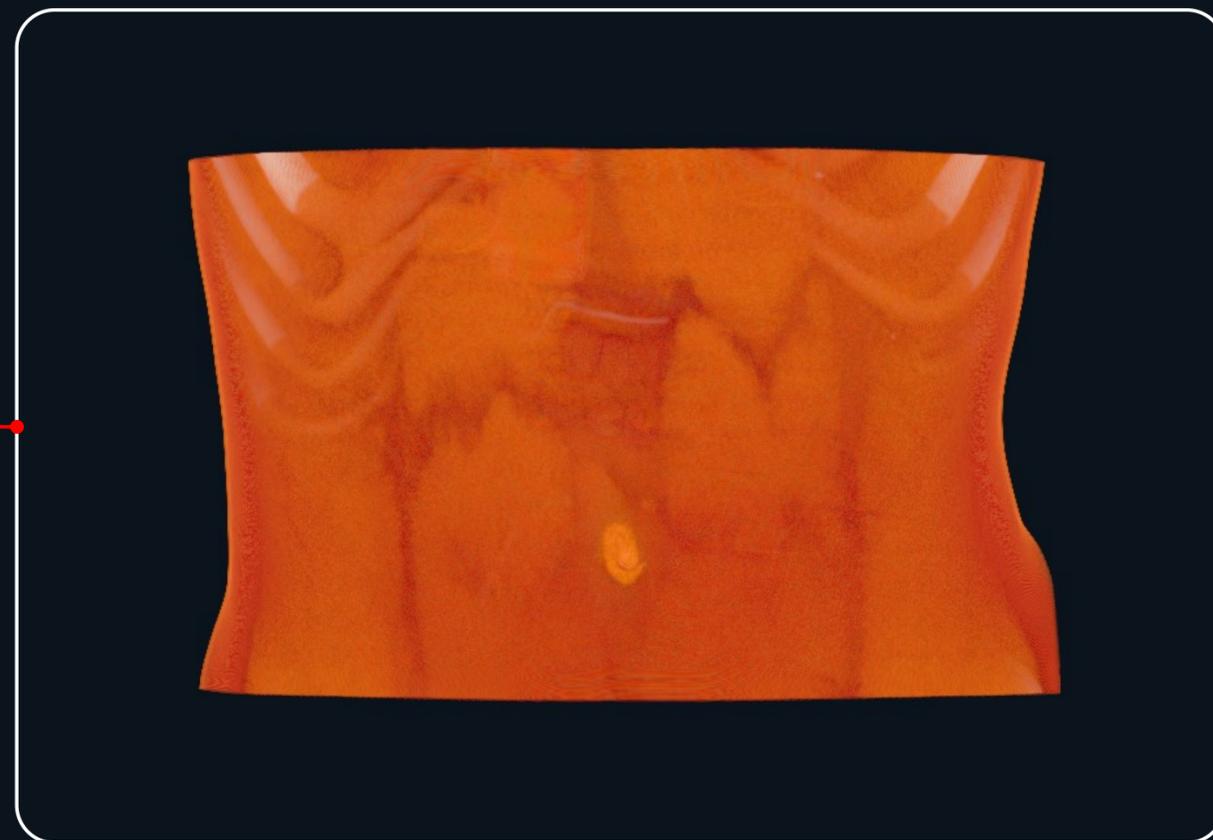
Reset



Views

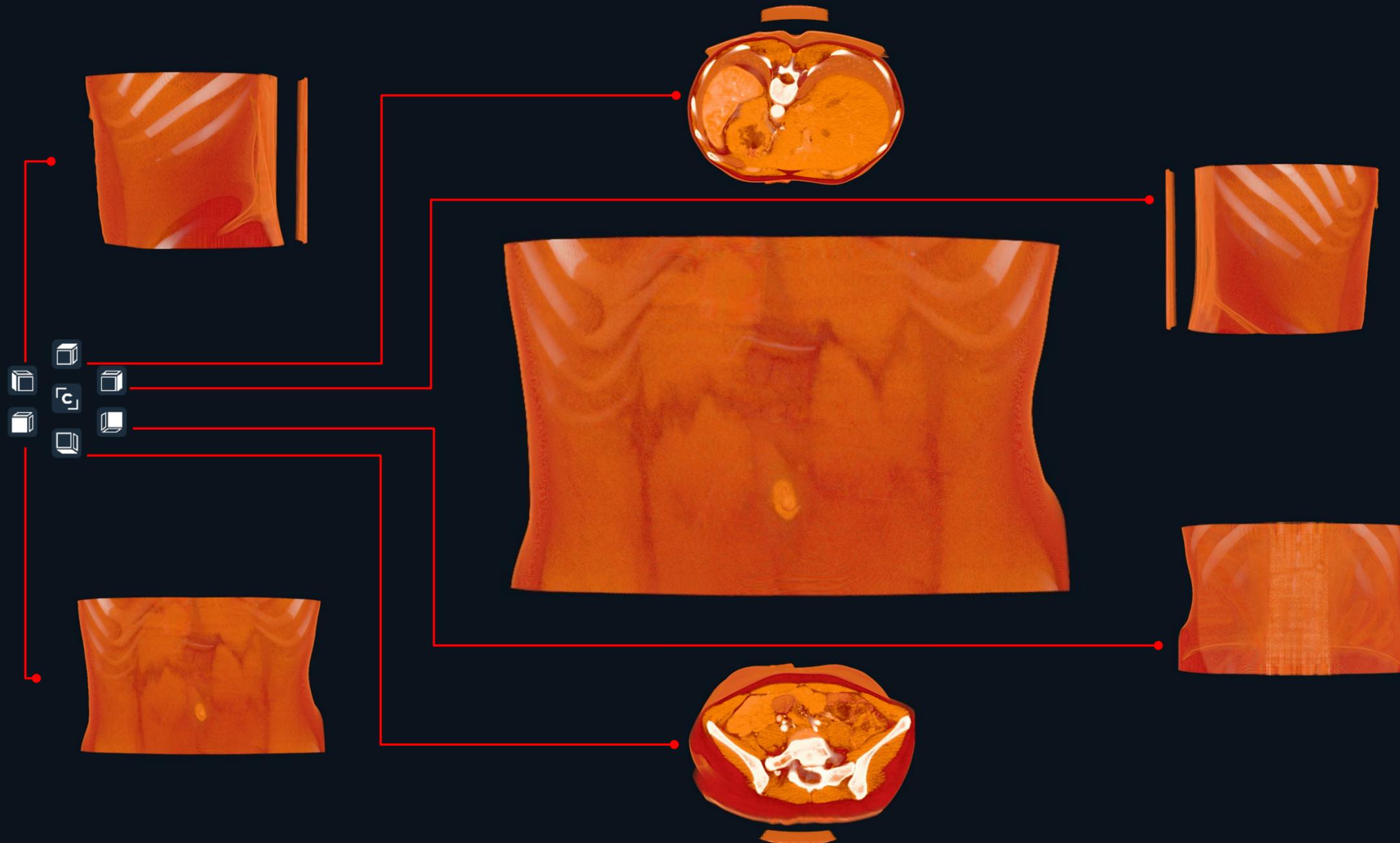


Lobby



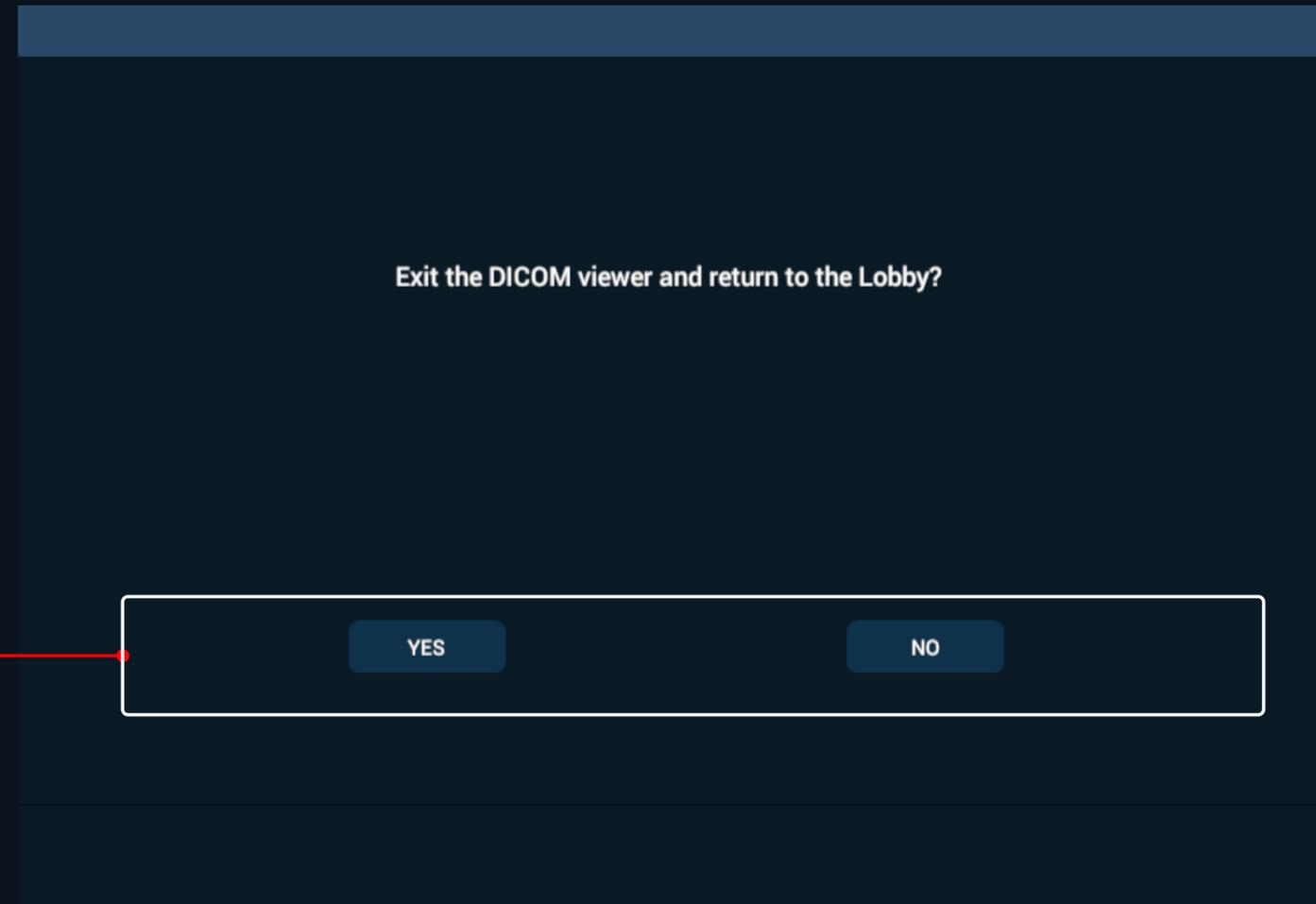
Views

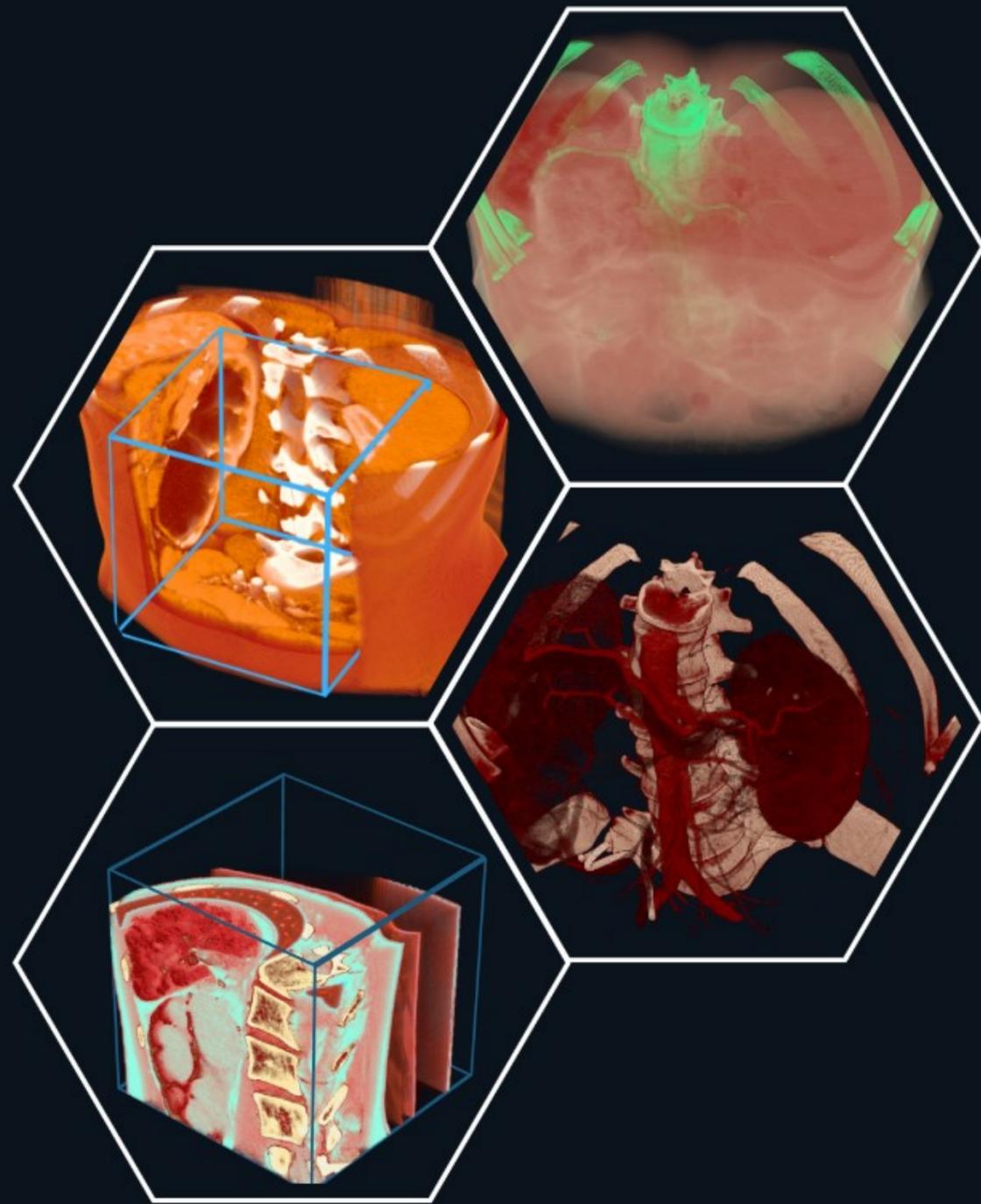
You can center the model in the scene view by actuating the 'C' button option. Select from the other available options to modify the view perspective of the model, e.g. superior, inferior, anterior, posterior, right lateral, and left lateral. By clicking and holding the right or the left mouse buttons, you can reposition the "Views" icon to a desired location.



Returning to Lobby

Click on the Lobby icon to exit XR Imaging.





For any questions or feedback, please contact our Local Distributor
or reach us at: support@3dorganon.com

Check out our **Help Center** for more information about 3D Organon, at any time!