

6. To work with a previously defined vessel, select the vessel from the **Vessel** list.
7. To delete a vessel, select the vessel from the **Vessel** list, then select **Delete**.

## Adjust the centerline and wall

NilRead identifies the vessel centerline and lumen wall based on the seed points you have defined. The user is responsible for reviewing and editing the results shown in the vessel tool. A convenient way to view a vessel is to press the middle mouse button and drag in the cross-section viewport. The centerline is shown in the ribbon and curved reformat views. The wall is shown in the ribbon, curved reformat and cross-section views. For example:



To adjust the centerline:

1. In the Vessel Tracer tools panel, select **Edit Centerline**.
2. In the ribbon view, drag to draw a new approximation of the centerline.

3. NilRead uses the new centerline to adjust the vessel visualization. NilRead may add more seed points to accommodate the new centerline.
4. In the Vessel Tracer tools panel, select **Save**.

To adjust the wall:

1. In the Vessel Tracer tools panel, select **Edit Wall**.
2. In the ribbon view, drag to draw a new approximation of the wall.
3. In the cross-section view, click (or tap) within the boundaries of the wall. A dotted line appears. Drag the dotted line to draw a new approximation of the wall.
4. NilRead uses the new wall to adjust the vessel visualization.
5. In the Vessel Tracer tools panel, select **Save**.

To hide the centerline or wall:

- In the Vessel Tracer tools panel, deselect the **Show Centerline** or **Show Wall** option.

To use the clipper tools in the **Vessel Tracer** view:

- In the Vessel Tracer tools panel, select the arrow beside the **Vessel Tracer** title, then select **Clipper**. The Clipper tools panel appears. To return to the vessel tracer tools, select the arrow, then select **Vessel Tracer**.

## View radiation therapy (RT) plans

### Using the RT Plan panel

When you load a study containing RT plans, when you select a series containing RT plans, **RT Plan** options are available in the side panel.

Studies that contain RT plans are marked with an **RT** icon in their thumbnails.



RT plan options allow you to choose the plan details you want to view.

If the image viewer contains multiple viewports, enable **Link** (toolbar) to apply the RT Plan options to all viewports. If Link is not enabled, the options will be applied to the currently selected viewport only.

#### Note

You can use RT templates to control how information is displayed. For details, see [Manage RT templates](#).

1. Select **RT Plan** (side panel). The RT Plan options appear below the side panel.



The **RT Plan** panel allows you to select RT Objects associated with the series.

2. Select a **StructureSet**. The list contains the structure sets associated with the current image series. After you select the structure set, the list of plans is populated with the RT plans that reference the selected structure set.



3. Select a **Plan**. After you select a plan, the list of doses is populated with the doses that reference the selected plan.



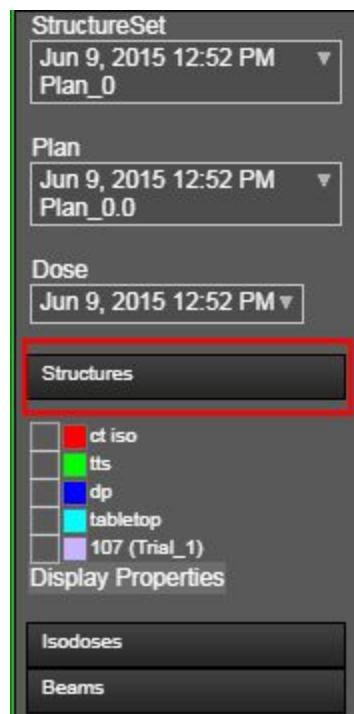
4. Select a **Dose**. Doses can be one of several Summation Types. If the Summation Type of a dose is BEAM, a composite dose is computed from all available BEAM type doses and added to the list of selectable doses. The Summation Type for this composite dose is PLAN.



5. With a dose selected, you can view the following categories: **Structures**, **Isodoses**, and **Beams**.

## Structures

To view options related to structures, click **Structures** to expand the **Structures** section.



Select the checkbox beside the structures you want to target. The selected structures are contoured.

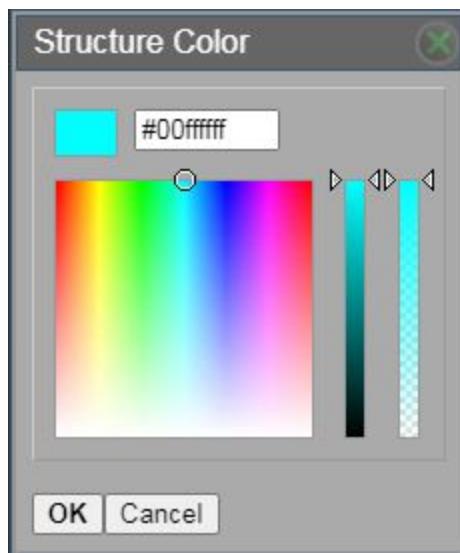


To focus on a structure, select the structure label. (This will also select the structure if it is not already selected.) For 2D views, the viewport is updated to show the first image containing the structure. For slab images, the viewport is updated to show the first location where the structure is visible.



## Changing Structure Colors

To change the color of a structure, click the color box beside the structure label. The **Structure Color** dialog is displayed.

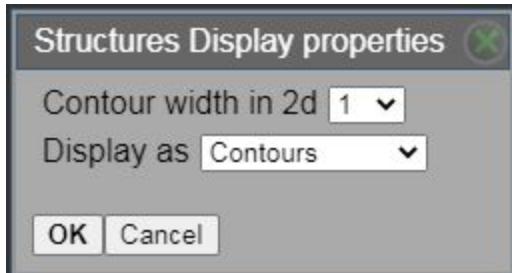


Choose a color by entering the hexadecimal color value or using the color picker. Click **OK** when finished.

### Structure Display properties

You can change the way structures are shown. These changes will last until you close the study. To permanently change the display properties, use an RT template (see [Manage RT templates](#)).

1. To change the display properties of a structure, click **Display Properties**. The **Structures Display properties** is displayed.



2. You can change the following options.

- **Contour width in 2d** Select the width of the contour outline. Note that you cannot change the contour width for MPR images.
- **Display as** Select the type of contour: **Contours** (outline) or **Filled Contours** (shaded).

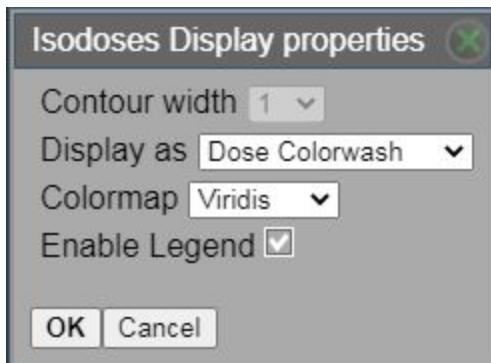
3. Select **OK**.

## Isodoses

### Display properties

You can change the way isodoses are shown. These changes will last until you close the study. To permanently change the display properties, use an RT template (see [Manage RT templates](#)).

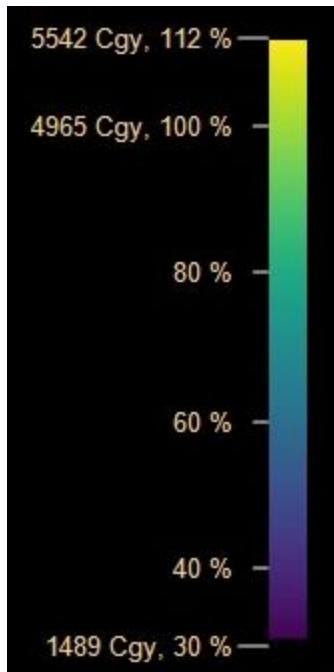
1. Select **Isodoses**, then select **Display Properties**. The **Isodoses Display properties** dialog is displayed.



2. You can change the following options.

- **Contour width** Select the width of the contour outline. Note that you cannot change the contour width for MPR images.
- **Display as** Select the type of display: **Contours** (outline), **Filled Contours** (shaded), **Dose Colorwash**, or **Isodose Colorwash**.
- **Colormap** Select the type of colormap: **Rainbow**, **Plasma**, or **Viridis**.

- **Enable Legend** If this option is selected, the colormap legend is displayed in the viewport.



3. Select **OK**.

### Contours and Filled Contours

Isodose levels are shown as a percentage of the prescription dose. The first item in the isodose list is the Maximum isodose level, which represents isodose levels that are above the maximum level. You cannot modify the Maximum isodose level except to change the color.

Select the checkbox beside the isodose levels you want to target. The selected levels are contoured.

