

Quick Tip: Auto ROI

Prerequisites:

- Auto ROI subscription enabled

Auto ROI Introduction

Auto ROI is a subscription-based feature which will automatically generate an ROI when a Treatment Protocol supporting Auto ROI is selected during patient import.

Protocols Supporting Auto ROI

[Table 1](#) shows treatment Protocols that support Auto ROIs and how many variations of ROI for that Protocol. [Table 2](#) shows treatment Protocols that do not support Auto ROI.

Auto ROIs cannot be customized in Settings but can be edited once generated on a CT Sim surface. New Auto ROIs cannot be added to any Treatment Protocols.

Protocol	Auto ROI	Number of Auto ROIs		Protocol	Auto ROI	Number of Auto ROIs
Abdomen (Lower)	Yes	4		Chest	Yes	3
Abdomen (Upper)	Yes	3		Chest Wall	Yes	3
Brain	Yes	2		Chest Wall DIBH	Yes	3
Breast (Left)	Yes	6		Intracranial SRS	Yes	2
Breast (Right)	Yes	6		Pelvis	Yes	4
Breast DIBH (Left)	Yes	6		4D Gated	Yes	3
Breast DIBH (Right)	Yes	6				

Table 1– Treatment Protocols and Auto ROI Details for Protocols which Support Auto ROI

Protocol	Auto ROI	Number of Auto ROIs
Extremities	No	0
Head and Neck	No	0
Other	No	0
SBRT	No	0
SCF	No	0
Spine	No	0

Table 2 – Protocols which do not Support Auto ROI

Defining Default Auto ROIs per Protocol

Upon installation, all Protocols with an Auto ROI will have **None** selected as the Default Auto ROI option. To select a new Default Auto ROI, log into AlignRT with proper user rights,

1. Open Settings / System Configuration / Clinical / Treatment Protocols
2. Select a Protocol (red box in [Figure 1](#)) which supports Auto ROIs
3. Assign a default Auto ROI from the Auto ROI Models / Default Auto ROI (green box in [Figure 1](#)) menu
 - a. Hover over each option to see an example of the Auto ROI
4. Save any changes
5. Repeat these steps for all Protocols you use which support Auto ROI

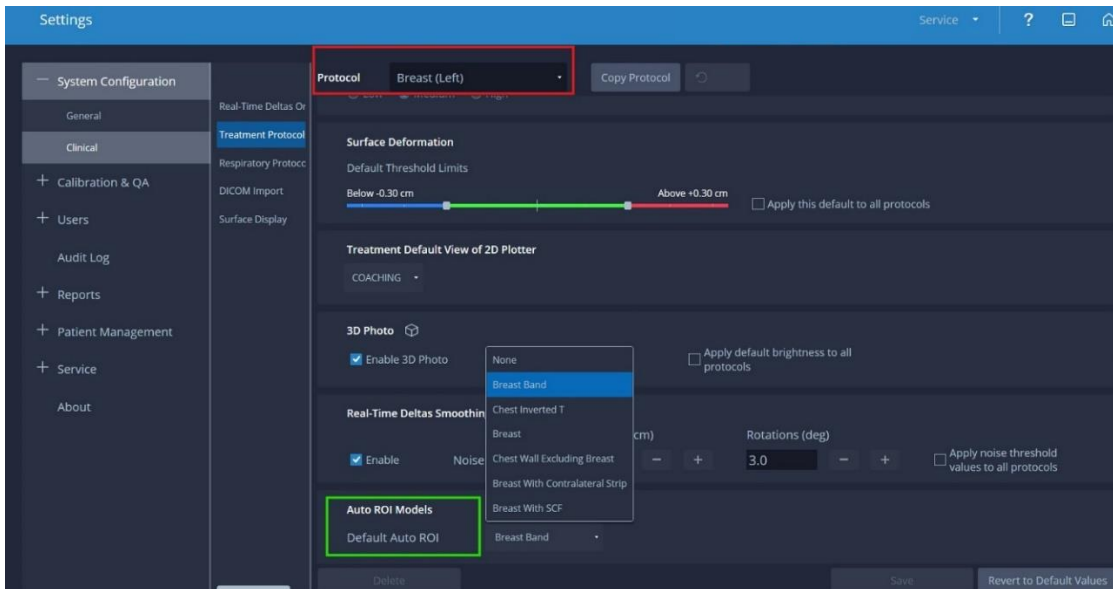


Figure 1 – Protocol Settings

When Copy Protocol is used to create a custom protocol, the Default Auto ROI is copied but can be updated if needed.

Auto ROI in Preparation

Select a patient for import and proceed to Preparation

1. On the Import DICOM screen, select the plan(s), Protocol, and Structure Sets required for import and click Save

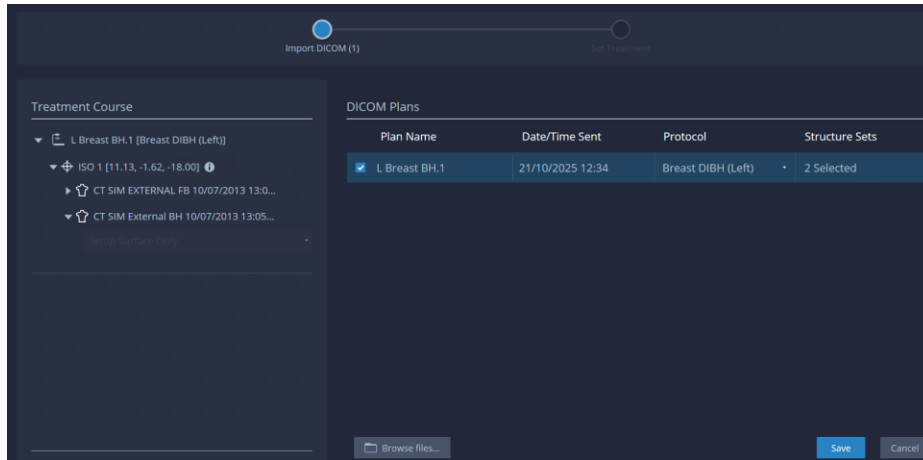


Figure 2 – Import DICOM Screen

2. When a protocol supporting Auto ROI is chosen, the default Auto ROI is generated and shown on the surface in the Set Treatment screen.
3. Review the ROI
 - a. Using the ROI tools, edit the ROI as needed
 - b. Alternatively, select a new Auto ROI from the Auto ROI dropdown in the ROI Tools window (red box in [Figure 3](#))

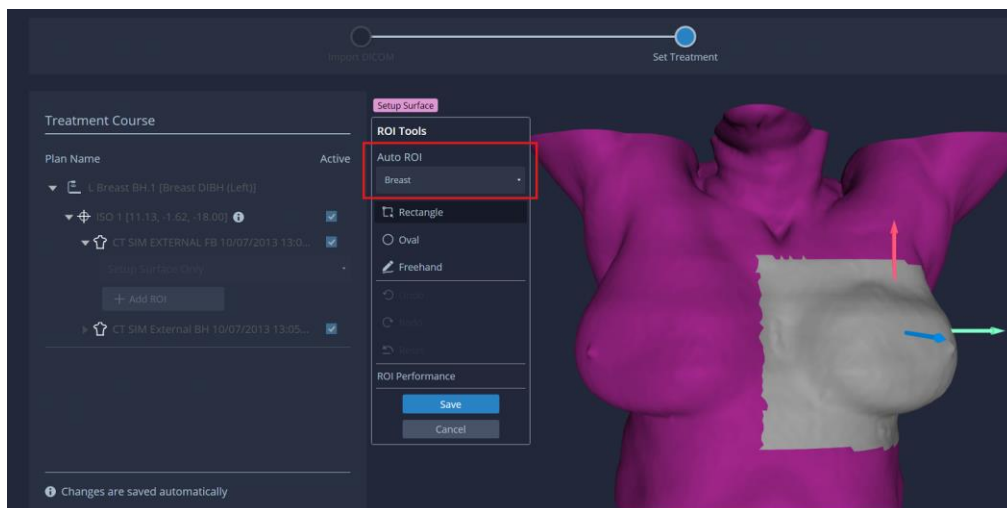


Figure 3 – Set Treatment Screen with ROI Tools Window Open

4. When satisfied with the ROI, review it to ensure it is adequate for treatment needs then click Save
5. Edit the ROI at any time by right clicking on the ROI in the Treatment Course and clicking Edit
6. Continue any other steps as needed for Preparation such as setting Beam Control status and adding additional ROIs for the same or additional surfaces
7. When done with patient preparation, you can exit the Preparation screen

Auto ROI Generation Information

Auto ROIs will be generated under the following conditions:

- Proper Treatment Protocol supporting Auto ROI is selected during import
- Surface is a CT Sim surface
- Patient orientation is head first, supine

It is possible that even when a Protocol with an Auto ROI is selected, the Auto ROI may not be generated. This can happen if the wrong protocol is selected, such as selecting the wrong side when importing a breast patient. Additionally, factors related to patient anatomy or setup may prevent proper Auto ROI generation. In any of these scenarios, if the Auto ROI is not generated, it should be drawn manually.

When a patient is imported using a Protocol without Auto ROI, the Auto ROI dropdown is disabled. The ROI must be drawn manually.

In Preparation, the Auto ROI dropdown will be disabled for SGRT surfaces. You can manually edit the ROI or create a new one.

Edit ROI in the Treatment Screen does not support selecting an Auto ROI even for CT Sim surfaces. Manually edit the ROI as needed or select a new Auto ROI in Preparation.