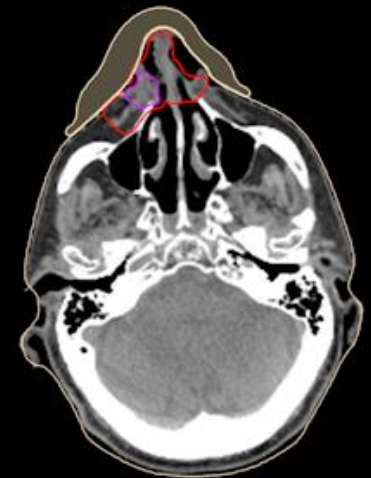
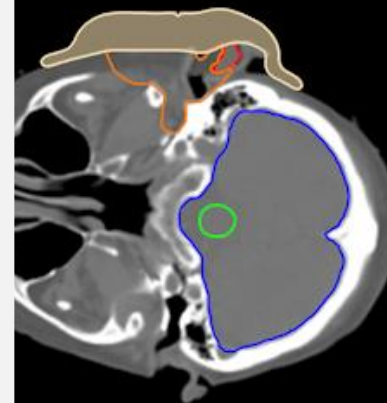
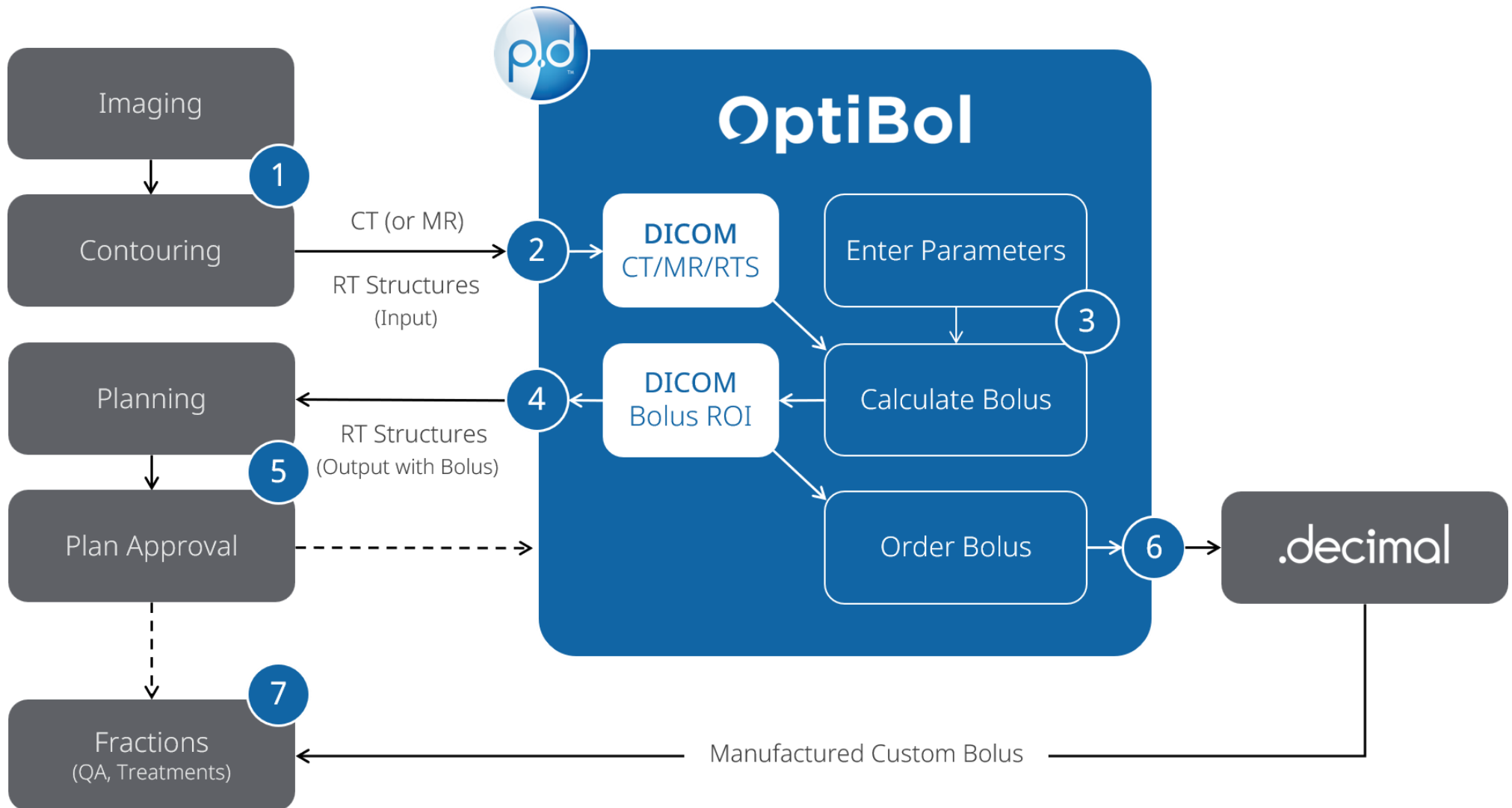


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OVERVIEW OF WORKFLOW



(1.1) PREPARE INPUTS: IMAGES AND STRUCTURES

Image Requirements

- Axial CT image series (or MR image series)

Structure Requirements

- **External (body) contours**
 - The shape of the external contour will drive the design of the inner (patient-side) of the bolus, so make sure that contour is accurate and includes any non-patient material that you intend to be between the patient and the bolus during treatments.
- **Target(s) contours**
 - If you have multiple nearby targets for which you want/need a bolus, create a union of those targets so that all target volumes are captured in one ROI for the bolus design. For example, if you have abutting PTV1 and PTV2 on/near the skin, create a union as “PTV Union” or “PTV1 + PTV2”.
 - Ensure the target contour used for bolus design does not go outside the external contour. Crop at the patient surface if necessary.
 - If the physician has not completed target contouring but has identified regions of the skin to be bolused, you can create a simplified bolus design using the OptiBol tools. First, contour the skin regions requiring coverage, then crop this "bolus coverage" contour at the patient surface. This approach creates an OptiBol similar to a uniform-thickness bolus, but with smoother quality, tapered edges, plus the option for lateral (outside) margins and alignment guides.
- For OptiBol design, ***you do not need the organ-at-risk (OAR) contours completed yet.***
 - If you have defined all/some of the OARs, that's fine, but they will not be needed for bolus design.
 - You can continue to work on the OAR contouring after you have created your bolus structure.

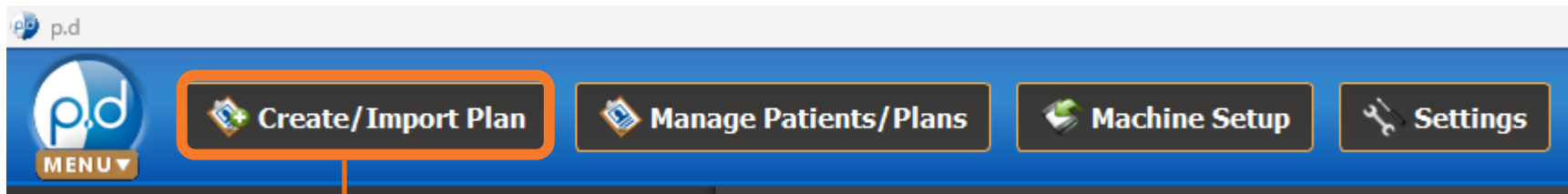


(1.2) PREPARE INPUTS: EXPORT AS DICOM

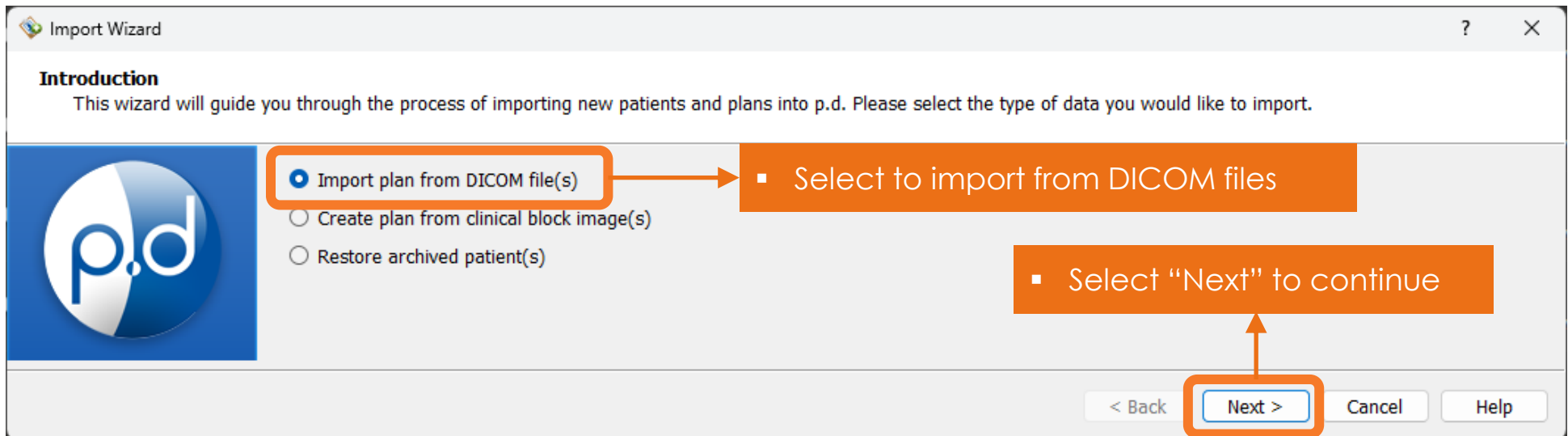
Export and Store as DICOM

- Use the TPS (or contouring system) DICOM export method to save the DICOM CT (or MR) images and the DICOM RT Structure Set to a specified folder.
- This DICOM storage folder needs to be accessible to the p.d software to read the image and structure set files.

(2.1) IMPORT DICOM FILES INTO P.D



- Select the "Create/Import Plan" tool



- Select to import from DICOM files

- Select "Next" to continue

(2.2) IMPORT DICOM FILES INTO P.D

Import Wizard

Import DICOM Files
Please select the DICOM plan, structure set, and image files or location you wish to import.

Select file(s):

Select directory:

Import Recursively

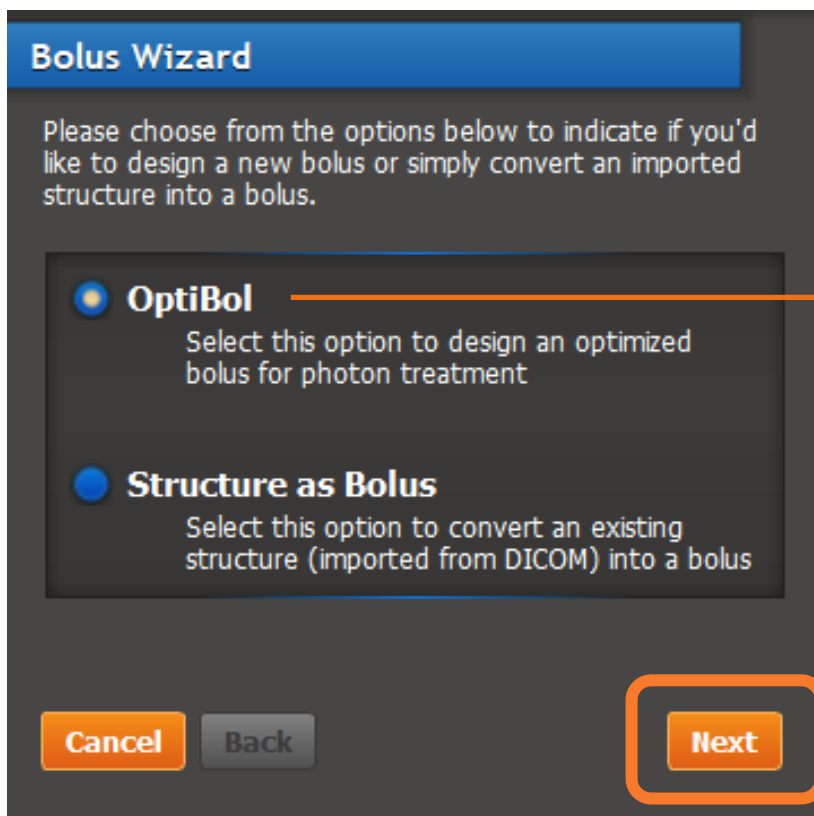
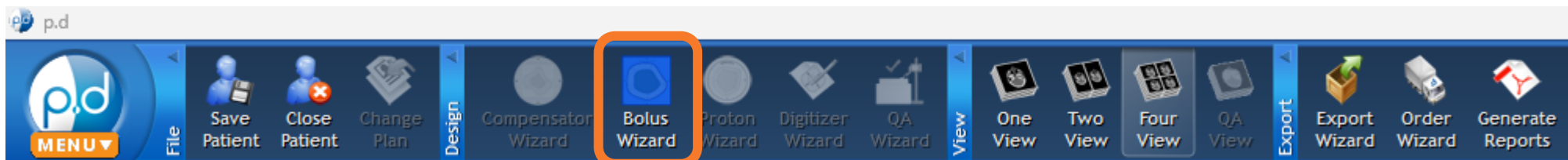
Files:

<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654927.2900.28626.dcm	8:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654928.2910.83657.dcm	8:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654930.2920.53265.dcm	8:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654931.2930.88573.dcm	8:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654932.2940.12717.dcm	8:59 am
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<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654937.2980.10787.dcm	2026-05-06 08:59 am
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<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654946.3050.84820.dcm	8:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654947.3060.70744.dcm	8:59 am
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<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654950.3080.57165.dcm	8:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654951.3090.31552.dcm	8:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654952.3100.85766.dcm	8:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654953.3110.68755.dcm	2026-05-06 08:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654955.3120.31238.dcm	2026-05-06 08:59 am
<input checked="" type="checkbox"/>	CT.1.2.752.243.1.1.20231228083654956.3130.68360.dcm	2026-05-06 08:59 am
<input checked="" type="checkbox"/>	RS.AAMD.FacialSCC.Original.dcm	2026-05-06 10:14 am

File Counts
Plan: 0
Structure: 1
CTs: 309



(3.1) CREATE OPTIBOL: BOLUS WIZARD

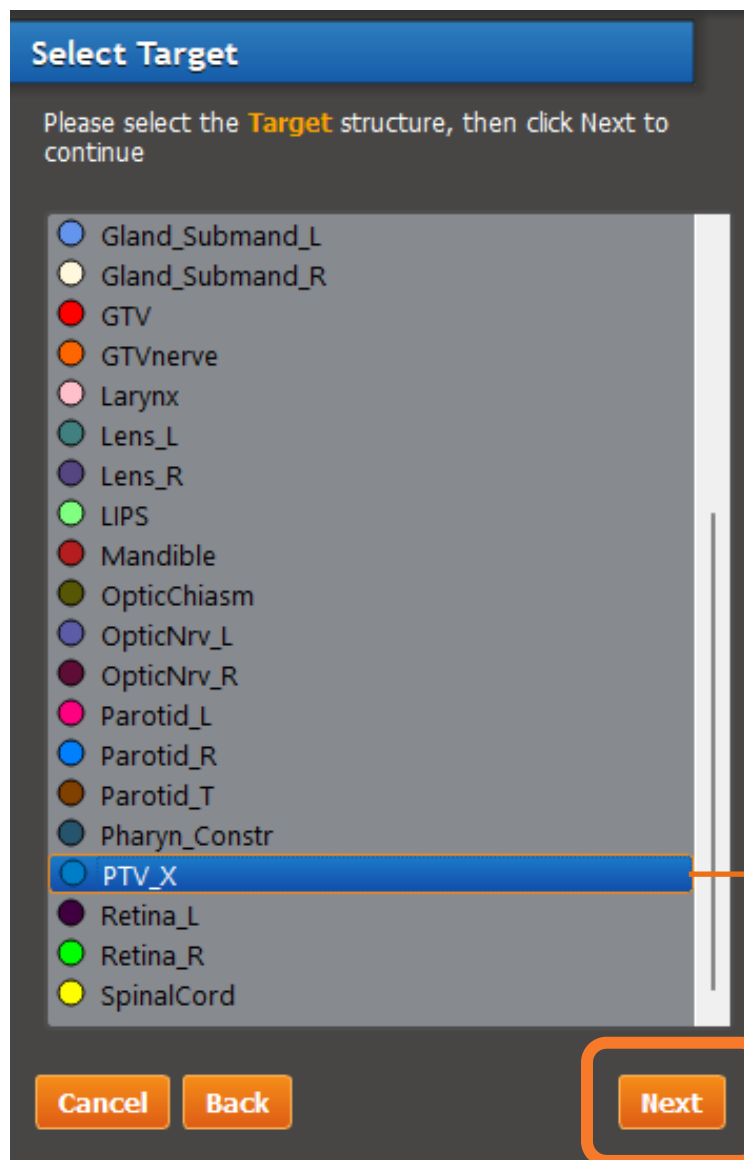


- Select the "Bolus Wizard"

- Select the "OptiBol" option to design an automated, variable-thickness bolus with user defined
 - Target structure(s)
 - External structure
 - Goal buildup (mm)
 - Outer margin (mm)
 - Alignment guides (optional)

- "Next" to continue

(3.2) CREATE OPTIBOL: SELECT TARGET



▪ Select the target structure

▪ "Next" to continue

(3.3) CREATE OPTIBOL: SELECT BODY (EXTERNAL)

Select Body

Please select the structure that defines the **Patient Body**, then click Next to continue

- Brain
- Brainstem
- Cavity_Oral
- Cochlea_L
- Cochlea_R
- CTV
- External**
- Eye_L
- Eye_R
- Gland_Lacrimal_L
- Gland_Lacrimal_R
- Gland_Submand_L
- Gland_Submand_R
- GTV
- GTVnerve
- Larynx
- Lens_L
- Lens_R
- UCC

Please select the structure that defines the actual body of the patient. This is the structure used when for the patient-side surface of the OptiBol. Please ensure it accurately represents the true patient shape.

Cancel **Back** **Next**

▪ Select the body (external) structure

▪ "Next" to continue

(3.4) CREATE OPTIBOL: DESIGN PARAMETERS

OptiBol Settings

Please specify your bolus design parameters

ROI Name*:

Primary Purpose:

*For HIPAA compliance do not enter PHI

Goal Buildup Distance
 mm
Min/Max [5.0, 30.0]

Lateral (Outside) Margin
 mm
Min/Max [0.0, 30.0]

- Enter a bolus name suffix (text to appear after “OptiBol” prefix)

- Enter the primary purpose
 - **Target Buildup.** The most common method; this will design a bolus with adequate buildup material added around your target, applicable from any/all potential beam angles
 - **Surface Simplification.** This method will also be target-based; but it will yield a simpler/lower gradient outer bolus surface, e.g., to anonymize sensitive or private anatomical surfaces.

- Enter the **goal dosimetric buildup distance (mm)** to use to design the bolus based on the input target with respect to the external (body) surface

- Enter a **lateral (outside) margin (mm)** to add at the bolus edges; this region will taper to a nominal (3 mm) thickness. *NOTE: This can be set to 0 mm.*

- “Next” to continue

(3.5) CREATE OPTIBOL: ALIGNMENT GUIDES

OptiBol Alignment Guides

An OptiBol can include small "channels" parallel to the Sagittal and Coronal coordinate planes facilitating increased alignment precision during patient setup and treatment

Alignment Guide Size: Small ▼

Select a point to define the Alignment Guides

- Alignment point 1 (POI)
- Alignment point 2 (POI)

Or

Manually specify each position

Coronal (mm) 111.0 ▼

Sagittal (mm) -40.0 ▼

Cancel
Back
Next

- Enter an alignment guide size / type
 - **None.** No alignment guides
 - **Small.** ~1 mm radius groove
 - **Medium.** ~1.5 mm radius groove
 - **Large.** ~2 mm radius groove

- You can automatically register the coronal and sagittal alignment planes to intersect with a specified point-of-interest (POI) defined in the RT structure set

- Or you can define the alignment plane positions manually
- Use up/down arrows or type location (mm)
- Review the positions graphically in the planar and 3D views

- "Next" to continue



(3.6) CREATE OPTIBOL: GENERATE DESIGN

OptiBol Review

Please review your target and body selections and confirm the generated OptiBol meets your needs:

Check this box to affirm you selected the correct TARGET structure

PTV_X

Check this box to affirm you selected the correct BODY structure

External

OptiBol Generation Complete

Bolus Size Estimates
 Volume : 102 cc
 Surface Area : 238 cm²
 Overall Length : 11 cm

Bolus Price Estimate
S : \$450.00 (+S/H)

Cancel
Back
Finish and Export
Finish

- These check boxes allow you to review the target and body contours that you chose.
- If you see on this screen that you accidentally chose an incorrect ROI, you can cancel the calculation, then easily go back to correct.

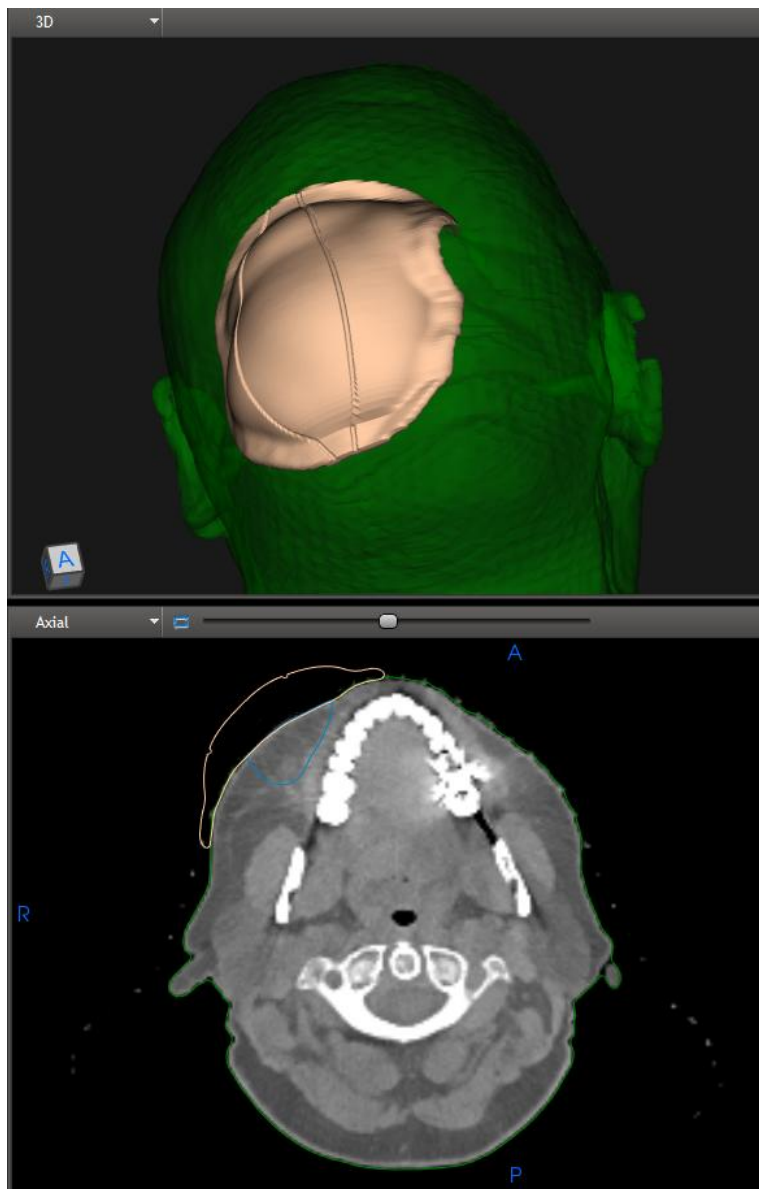
- This progress bar will update during OptiBol calculation.
- The OptiBol generation time is very fast and depends largely on the size and shape of the target as well as the complexity of the body contours.
- ***You should expect your bolus design to be calculated in the range of 5 to 30 seconds.***

- The price estimate for the bolus is given at this stage.

- "Finish" to review/save your progress for "Export" later.
- Or, you can "Finish and Export" to start the export process.



(3.7) CREATE OPTIBOL: REVIEW



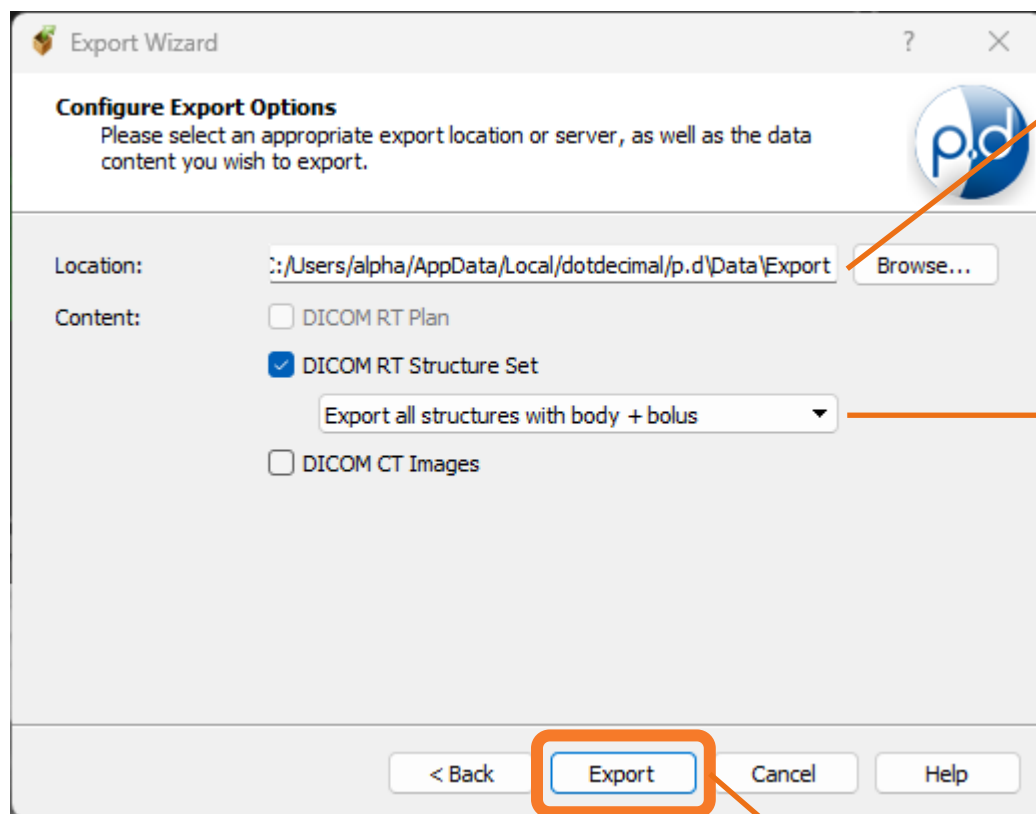
- **View in 3D**
 - Rotate, pan, zoom
 - 3D views are the best way to review alignment guides, if you designed those.
- **View in planar views**
 - Axial
 - Sagittal
 - Coronal
 - Pan, zoom, etc.
- **To create other designs with different design parameters**
 - You can click “Back” in the bolus wizard to replace the design you made,
 - or you can create separate OptiBol designs (e.g., different buildup distances) as separate bolus structures by running the bolus wizard multiple times to produce difference bolus structures.

(4.1) EXPORT OPTIBOL DESIGN FOR PLANNING

The screenshot shows the OptiBol software interface. The top toolbar contains various icons, with the 'Export Wizard' icon highlighted by an orange box. Below the toolbar, the 'Export Wizard' dialog box is open. The dialog box has a title bar with a question mark and a close button. The main content area is titled 'Introduction' and contains the text: 'This wizard will guide you through exporting data to your treatment planning system. Please select how you would like to export the current plan.' Below this text are four radio button options: 'Export plan to treatment planning system via DICOM', 'Export plan to DICOM file(s)', 'Export plan to Pinnacle treatment planning system via FTP', and 'Export an item to STL file(s)'. The 'Export plan to DICOM file(s)' option is selected and highlighted with an orange box. At the bottom of the dialog box, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'. The 'Next >' button is highlighted with an orange box. Arrows point from the highlighted 'Export Wizard' button in the toolbar to the first callout box, from the selected radio button to the second callout box, and from the highlighted 'Next >' button to the third callout box.

- Select the “Export Wizard”
- Select “Export plan to DICOM file(s)”
 - Note: Despite the generic nomenclature here, you will not be exporting a plan file, but a DICOM RT Structure Set file
- “Next” to continue

(4.2) EXPORT OPTIBOL DESIGN FOR PLANNING



- Specify the output (export) directory

▪ DICOM RT Structure Set content options

- **Export all structures.** The contents will be all the original (imported) structures, plus the new OptiBol bolus structure(s)
- **Export bolus structures only.** The contents will be the OptiBol bolus structures only, which can be merged into a structure set in the TPS (Note: Depends on TPS make/model and if they have a merge feature)
- **Export all structures with body + bolus.** This will include all the original structures, the added OptiBol structure(s), plus an additional structure that will be the union of the body ROI and the bolus ROI(s), which will be given a name of default ROI name of "patient" and tagged as the external contour in the DICOM file.

- "Export" to save DICOM RT Structure Set

(5) DESIGN TREATMENT PLAN

Import OptiBol design to your treatment planning system (TPS)

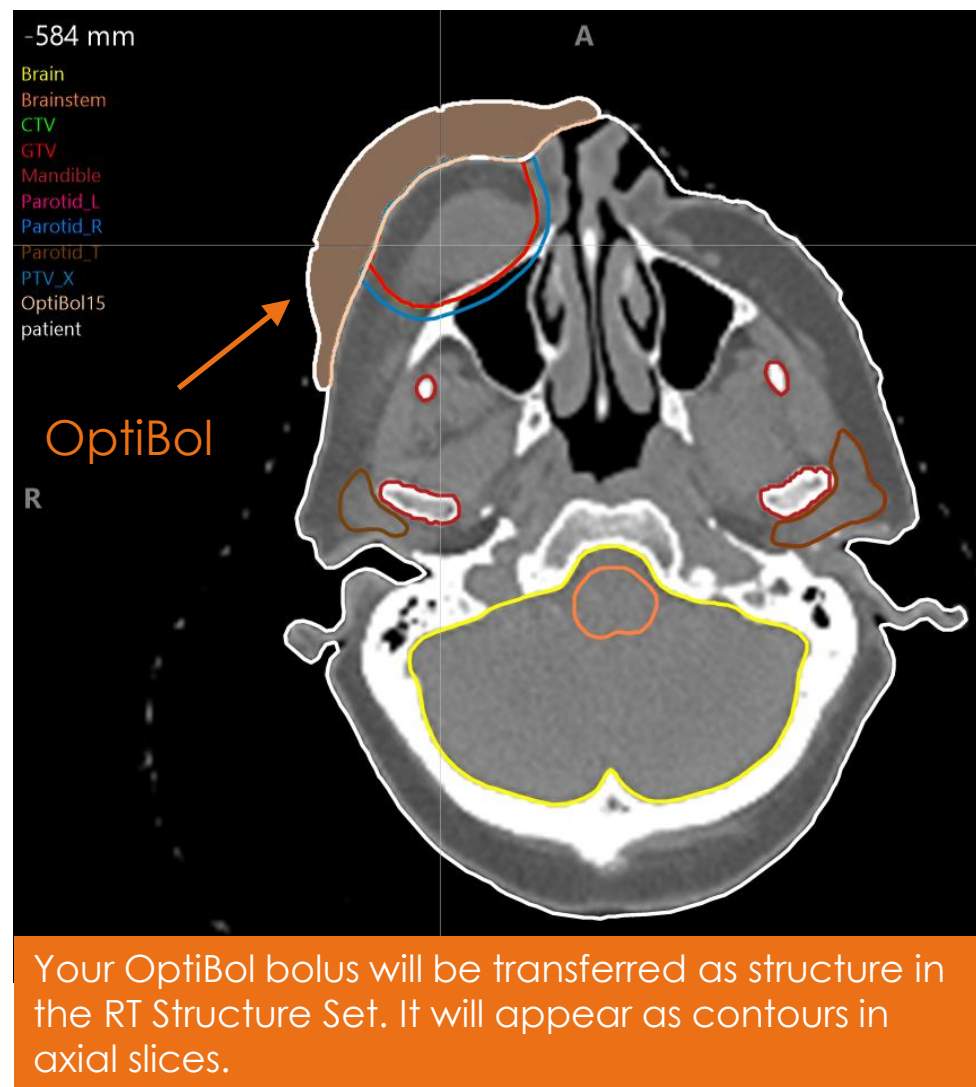
- Transfer your OptiBol design to your TPS by importing the DICOM RT Structure Set that was exported from the P.D software.
- When imported, assign the appropriate electron density (or, depending on the TPS, an equivalent pixel value) to the bolus region-of-interest (ROI). The value should correspond to the FlexiBol silicone material.

Optimize your VMAT (or IMRT, or 3D conformal) plan

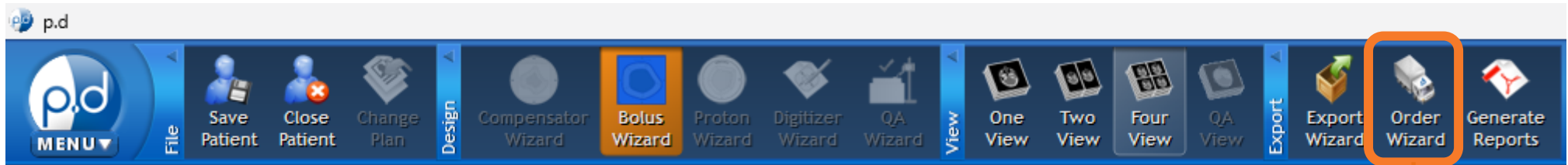
- The OptiBol has been designed to provide the user-defined buildup from any potential beam direction (including all gantry and couch angles), so you have full flexibility in beam geometries.

Order your OptiBol

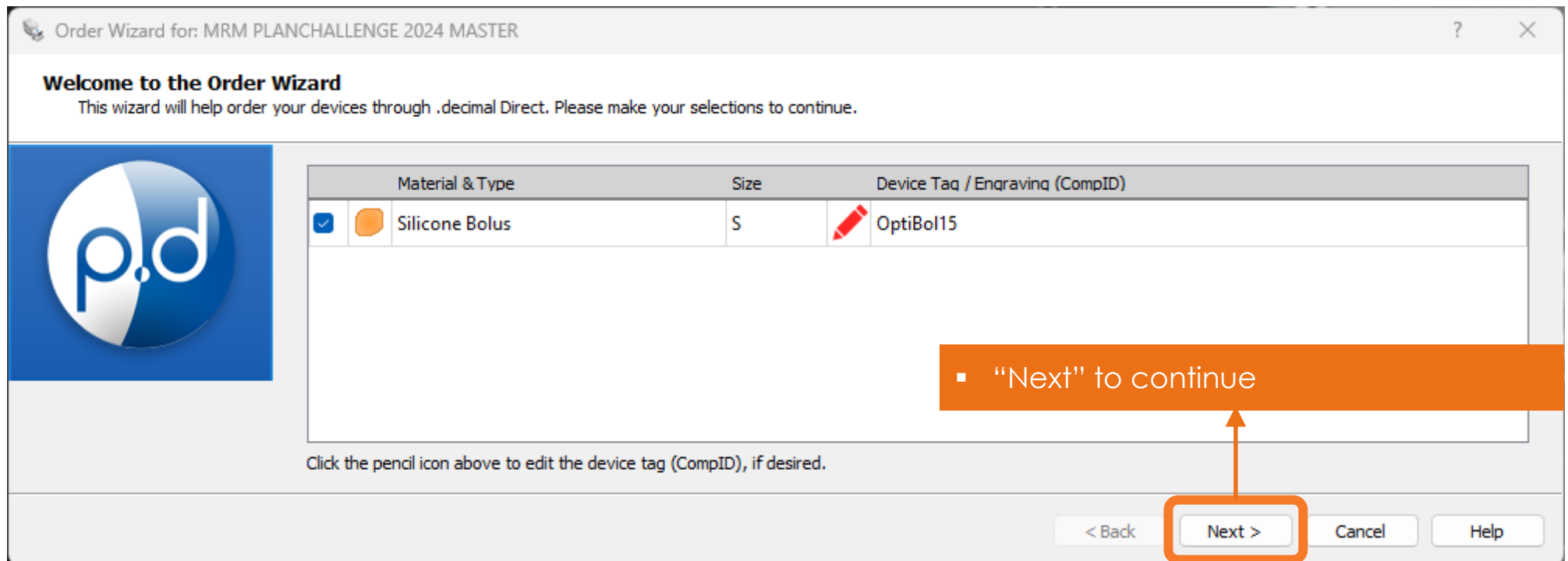
- When you are ready, you can return to p.d to order the OptiBol bolus for manufacturing and delivery.



(6.1) ORDER THE BOLUS: ORDER WIZARD



- Select the "Order Wizard"



- "Next" to continue

(6.2) ORDER THE BOLUS: SHIPPING AND BILLING

Shipping Information

Please verify the shipping information below (* indicates a required field).



Account# (SiteID):

Institution Name*:

Address Line 1*:

Address Line 2:

City*:

State/Province*:

Zip/Postal Code*:

The default address shown above is shared with all users at your site and can be managed through the Machine Setup page. Click [here](#) for more information.

- You will now see the **shipping information screen** where you will fill out and/or verify the address where the device will be shipped.
- Note: See the software **Help Menu** for more information on how to set shipping addresses.

▪ "Next" to continue

Billing Information

Please enter PO Number for billing below (optional).



P.O. Number (optional):

The provided PO# will appear on the invoices that .decimal sends for this order. This information is optional, but may be required by your finance department in order to remit payment. Please check the policy with your local finance dept.

▪ Enter P.O. Number (optional)

▪ "Next" to continue



(6.3) ORDER THE BOLUS: ORDER PRIORITY

Order Wizard for: MRM PLANCHALLENGE 2024 MASTER

Order Priority

Please select an order priority.

Standard

RUSH

Estimated Ship Date: Monday Jun 29th 2026
(if ordered within the next 17 hours and 0 minutes)

Estimated Delivery Date: Tuesday Jun 30th 2026 by 05:00 pm
(as provided by the shipping carrier)

Next >

- "Next" to continue

(6.4) ORDER THE BOLUS: PLACE ORDER

Order Wizard for: MRM PLANCHALLENGE 2024 MASTER

Place Order

Please review your order information and submit your order.

I agree to the [Terms and Conditions](#) and [Processing Agreement](#)

I agree to test each device prior to use on a human

I understand that production begins immediately and cancellation requests can only be made by calling .decimal at 1.800.255.1613
(cancellation cannot be guaranteed and may require partial or full payment)

Order Summary:
Silicone Bolus (Size: S, \$450)

Order Priority: Standard
Est Arrival Jun 30, 2026

Shipping to:
Your Institution
Your Address
City, State #####

< Back **Place Order** Cancel Help

▪ Select the required to enable the "Place Order" button.

▪ "Place Order" to finalize order

