

DVH to EXCEL script

PURPOSE:

To create an EXCEL workbook that contains the DVH graph and Clinical Goals table for either Plan dose or a Composite dose.

SETUP INSTRUCTIONS:

- The script is validated for RS-6. Some minor changes are needed to run on RS-5.
- Place the “RS_DVH” folder and its contents in a drive location accessible to RayStation.
- Edit the file “RS_DVH_START.py” to change the line that defines the “SCRIPT_DIRECTORY”, to point to the full path to “RS_DVH” on your system.
- Load the RS_DVH_START.py script in RayStation.

BRIEF USE INSTRUCTIONS:

1. Open a plan (a plan must be loaded).
2. Click the “RS_DVH_START” script button.
3. Select what you want to print: the Plan or Composite Dose are most typical. The “Beam Set” is for special cases.
4. Select if you want to apply a different Clinical Goals Template. If you do, those goals are added to whatever is already in your goal sheet, so delete anything you don’t want first.
5. Click OK.
6. Review the results.
7. Select the Chart and “Save as” PDF or Print as PDF.
8. Select the Clinical Goals and do the same.

Select type of printout that you want

If you want a composite dose, select the "Radio Button", and then select the name of the dose.

The image shows a screenshot of a software dialog box titled "Export DVH data to MS Excel". The dialog box has a standard Windows-style title bar with a close button (X) in the top right corner. Inside the dialog, there are two main sections. The first section is labeled "Select dose source:" and contains three radio button options: "Plan dose" (which is selected), "Beam set dose: 1A Bladder", and "Evaluation Sum Dose: Composite". Below these radio buttons is a dropdown menu currently showing "None". The second section is labeled "Select clinical goals template:" and contains a dropdown menu currently showing "Plan". At the bottom of the dialog are two buttons: "OK" and "Cancel". Three black arrows point from external text boxes to specific elements in the dialog: one points to the "Plan dose" radio button, another points to the "Evaluation Sum Dose: Composite" radio button, and a third points to the "Select clinical goals template:" dropdown menu.

Export DVH data to MS Excel

Select dose source:

- ☒ Plan dose
- ☐ Beam set dose: 1A Bladder
- ☐ Evaluation Sum Dose: Composite

None

Select clinical goals template:

Plan

OK Cancel

Optionally select a different template to ADD to what you already have.

Select the ROI's for the DVH chart.

The ROI's you select for the DVH chart do not have to be the same as the clinical goals. The Clinical Goals spreadsheet will use what is in your RayStation plan.

SELECT THE ROI's YOU WANT TO EVALUATE

Patient Name:

Plan Name : 1C Prostate

Index	ROI NAME	ROI TYPE
1	External	External
4	Prostate	Ctv
5	1A Old_PTV	Ptv
6	1A Old_CTV	Ctv
7	Seminal Vesicles	Ctv
8	Nodes	Ctv
9	Bladder	Organ
10	Rectum	Organ
11	Bowel Small	Organ
12	Bowel Large	Organ
13	Bowel Region	Organ
14	Femoral Head Right	Organ
15	Femoral Head Left	Organ
16	Femoral Heads + 5mm	Organ
20	Penile Bulb	Organ
22	spaceoar	Organ
23	1A Old Planning PTV	Ptv
43	1B_CTV	Ctv
44	1C_CTV	Ctv

Cancel

Return Selected ROI's

The “Chart” and the “Dose Objectives Worksheet” use only the ROI's you select here.

GOALs sheet

The clinical goals results are loaded automatically, along with patient and plan information. You can “save as” or “print to” PDF.

Clinical Goals Worksheet								
Protocol:				Attending:				
PLAN IDENTIFICATION								
Patient Name:				Plan Name:	1C Prostate			
MRN:				Plan Label:	1C1			
Date of Birth:				Plan Date/Time:				
Plan Site:				Plan Rx (cGy):				
TPS Name:	RayStation			TPS Version:				
CLINICAL GOALS								
PLAN STRUCTURE	TYPE	CRITERIA	LEVEL	UNIT 1	VALUE	UNIT 2	ACTUAL	RESULT
External	D@%V	At Most	8910	cGy at	0.0%	%V	1890.0	PASS
Rectum	D@%V	At Most	8100	cGy at	5.0%	%V	1470.1	PASS
Rectum	D@%V	At Most	7500	cGy at	15.0%	%V	770.5	PASS
Rectum	D@%V	At Most	7000	cGy at	25.0%	%V	279.9	PASS
Rectum	D@%V	At Most	6750	cGy at	30.0%	%V	166.3	PASS
Rectum	D@%V	At Most	6500	cGy at	35.0%	%V	104.5	PASS
Rectum	D@%V	At Most	6000	cGy at	50.0%	%V	35.1	PASS
Bladder	D@%V	At Most	8000	cGy at	15.0%	%V	162.9	PASS
Bladder	D@%V	At Most	7500	cGy at	25.0%	%V	33.7	PASS
Bladder	D@%V	At Most	7000	cGy at	35.0%	%V	13.2	PASS
Bladder	D@%V	At Most	6500	cGy at	50.0%	%V	2.9	PASS
Femoral Head Left	D@%V	At Most	5000	cGy at	5.0%	%V	750.0	PASS
Femoral Head Right	D@%V	At Most	5000	cGy at	5.0%	%V	747.3	PASS
Bowel Small	D@V	At Most	4500	cGy at	195.0	cc	0.0	PASS

CHART sheet

Click on the Chart to select it, and then you can “save as” or “print to” PDF, your choice.

