



EORTC 22042 Dry Run Guidelines

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RTOG 3D QA CENTER

Following are the requirements/guidelines for successful completion of a patient data submission Dry Run test for EORTC 22042-26042 atypical meningioma protocol:

DIGITAL DATA (in DICOM RT or RTOG Data Exchange Format)

Using the format documented in *Specification for Tape/Network Format for Exchange of Treatment Planning Data, Version 3.20*, or later, the data in the following list must be submitted to the ITC ATC using a Secure FTP (SFTP). Instructional page for SFTP uploads on the ATC web site (<http://atc.wustl.edu/home/news/SFTP.html>) which includes instructions for configuring several SFTP client programs. Of note, the investigator may have to ask for an institutional authorization to his administrator to allow the local firewall for outgoing connections on port 22 (SSH2) in order to connect to the SFTP server (ITCsubmit.wustl.edu, IP address 128.252.17.87) for testing, uploading and downloading digital treatment planning data.

- 1) Protocol compliant CT scan series (i.e. a maximum CT slice thickness of 3 mm for a good quality of DRR and margin definition). (EORTC 22042-26042, 5.1.3 Treatment planning);
- 2) Protocol compliant contours for all critical normal structures and GTV/CTV and PTV (EORTC 22042-26042, 5.1.2 Definition of target volumes);
- 3) Beam geometry (one set only) and total doses (absolute) delivering a protocol compliant dose with doses calculated with heterogeneity corrections. Individual beam geometry and doses must be submitted for corrected dose calculations. (EORTC 22042-26042, 5.1.8 Dose calculation and reporting). Of note, the calculation grid size (voxel size) of the 3D dose distributions and the DVHs should be the same (2-5 mm³);
- 4) DVH's (see Dose-Volume Histogram Evaluation below) for the total dose for item 3 (summed fraction groups from item 3) for PTV and all critical normal structures (EORTC 22042-26042, 5.1.7 Normal tissue sparing & 5.1.8 Dose reporting). Of note, the calculation grid size (voxel size) of the 3D dose distributions and the DVHs should be the same (2-5 mm³). These DVH's should be sent by email (to itc@castor.wustl.edu) in a JPEG screen captures;

MULTIPLE GROUPS OF BEAMS

EORTC 22042-26042 requires that all fields be treated each (and every) day. The dry run treatment plans (as those for actual patients enrolled in this study) should reflect one set of beams for the entire course of therapy as intended by the protocol.

DOSE-VOLUME HISTOGRAM EVALUATION FOR OARs

It is imperative that there be reasonable agreement between the OAR-DVH computations from each participating institution and those of the ITC ATC Center. Therefore, any discrepancy (between submitting institution and RTOG 3D QA Center) in excess of $\pm 5\%$ in total volume or $+5\%$ (relative to the absolute structure volume) of the volume calculated to be at or above the appropriate TD 5/5 dose will need to be resolved prior to successfully completing the Dry Run Test.

NOTE:

1. **Please Email to itc@castor.wustl.edu** alerting the ITC staff that your data have been submitted.
 2. There is no requirement that the patient whose data is used for the Dry Run test be treated according to EORTC 22042-26042. This test set can be from a data set for a patient who was previously seen and/or treated (in some other fashion). The only requirement is that the CT scan, tumor/target volumes and critical normal structure contours be made compliant with 22042-26042 and that protocol compliant treatment plans be generated and the appropriate data submitted to the ITC ATC Center. The immobilization device requirement is waived for this test data set. All patient identifying data for the Dry Run test data must be removed before submission.
 3. Any corrections to previously submitted digital data should be discussed with the ITC prior to such submission.
 4. A reasonable number of isodose lines which can be used to determine that the digital dose and anatomy data are properly aligned relative to each other. The prescription dose for the high-dose PTV should be displayed. If the hard copy isodose lines are in percentage, the conversion factor to absolute dose (Gy or cGy) for all delivered fractions must be indicated
 5. No credentialing plan (dry run) will be approved that results in a Major Variation. Plans with No Variation or Minor Variations will be approved (assuming no other significant areas of protocol non-compliance).
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